

# UNITED STATES INTERNATIONAL TRADE COMMISSION

In the Matter of:

FLUID END BLOCKS FROM CHINA, GERMANY,  
INDIA, AND ITALY

) Investigation Nos.:

) 701-TA-632-635 and 731-TA-1466-1468  
) (PRELIMINARY)

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2 In the Matter of: ) Investigation Nos.:  
3 FLUID END BLOCKS FROM CHINA, ) 701-TA-632-635 and  
4 GERMANY, INDIA, AND ITALY ) 731-TA-1466-1468  
5 (Preliminary)

6

7 Thursday, January 9, 2020  
8 Main Hearing Room (Room 101)  
9 U.S. International Trade Commission  
10 500 E Street, S.W.  
11 Washington, D.C.

12 The meeting commenced, pursuant to notice, at  
13 9:30 a.m., before the Investigative Staff of the United  
14 States International Trade Commission, Douglas Corkran  
15 presiding.

16 STAFF:

17 William R. Bishop, Supervisory Hearings and Information  
18 Officer  
19 Tyrell T. Burch, Management Analyst  
20 Douglas Corkran, Supervisory Investigator  
21 Kristina Lara, Investigator  
22 James Stamps, International Trade Analyst  
23 John Benedetto, International Economist  
24 Samuel Varela-Molina, Accountant/Auditor  
25 Brian Allen, Attorney/Advisor

1 OPENING REMARKS:

2 In Support of Imposition (Thomas M. Beline, Cassidy Levy

3 Kent (USA) LLP)

4 In Opposition to Imposition (Brittney R. Powell, Fox

5 Rothschild LLP)

6

7 In Support of the Imposition of Antidumping and

8 Countervailing Duty Orders:

9 Cassidy Levy Kent (USA) LLP

10 Washington, DC

11 on behalf of

12 FEB Fair Trade Coalition

13 Ellwood Group

14 Finkl Steel

15 Scott Boyd, President, Ellwood City Forge

16 Kathy Saunders, Director of Marketing, Ellwood City

17 Forge

18 Mark Shirley, Chief Executive Officer, Finkl Steel

19 Thomas M. Beline, Jack A. Levy, Mary Jane Alves,

20 Myles S. Getlan - Of Counsel

21

22

23

24

25

1 In Opposition to the Imposition of Antidumping and  
2 Countervailing Duty Orders:

3 Alston & Bird LLP

4 Washington, DC

5 on behalf of

6 Schmiedewerke Groditz GmbH ("Schmiederwerke")

7 Groditz Steel North America ("GSNA")

8 Layne Brower, Director of Sales, GSNA North America

9 Lian Yang - Of Counsel

10

11 Fox Rothschild LLP

12 Washington, DC

13 on behalf of

14 Bharat Forge Limited

15 Brittney R. Powell, Ronald M. Wisla - Of Counsel

16

17 deKieffer & Horgan, PLLC

18 Washington, DC

19 on behalf of

20 BGH Edelstahl Siegen GmbH

21 Kevin Horgan - Of Counsel

22

23

24

25

1 INTERESTED PARTIES IN OPPOSITION:

2 Galtway Industries

3 Houston, TX

4 Josh Lowrey, President

5 Greg Gilbert, Vice President

6

7 ST9 Gas + Oil

8 Magnolia, TX

9 Nick Poradek, Vice President, Finance

10 Chris Buckley, President & Founder

11

12 REBUTTAL/CLOSING REMARKS:

13 In Support of Imposition (Myles S. Getlan, Cassidy Levy

14 Kent (USA) LLP)

15 In Opposition to Imposition (Brittney R. Powell, Fox

16 Rothschild LLP; Lian Yang, Austin & Bird LLP)

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## 1 P R O C E E D I N G S

2 (9:30 a.m.)

3 MR. BISHOP: Will the room please come to order.

4 MR. CORKRAN: Good morning, and welcome to the  
5 United States International Trade Commission's conference in  
6 connection with the Preliminary Phase of Antidumping and  
7 Countervailing Duty Investigation Numbers 701-TA-632-635 and  
8 731-TA-1466-1468 (Preliminary), concerning Fluid End Blocks  
9 from China, Germany, India, and Italy.

10 My name is Douglas Corkran. I am the Supervisory  
11 Investigator in these investigations, and I will preside at  
12 this conference.

13 Among those present from the Commission's staff  
14 are, to my right, Kristina Lara, the Investigator; John  
15 Benedetto, acting Economist; Samuel Varela-Molina,  
16 Accountant/Auditor; James Stamps, acting Industry Analyst;  
17 and Brian Allen, Attorney/Advisor.

18 I understand that parties are aware of the time  
19 allocations. Any questions regarding time allocations  
20 should be addressed with the Secretary. I would remind  
21 speakers not to refer in your remarks to business  
22 proprietary information, and to speak directly into the  
23 microphones. We also ask that you state your name and  
24 affiliation for the record before beginning your  
25 presentation, or when answering questions for the benefit

1 of the Court Reporter.

2 All witnesses must be sworn in before presenting  
3 testimony.

4 Are there any questions?

5 (No response.)

6 MR. CORKRAN: Mr. Secretary, are there any  
7 preliminary matters?

8 MR. BISHOP: Mr. Chairman, I would note that all  
9 witnesses for today's hearing have been sworn in. There are  
10 no other preliminary matters.

11 MR. CORKRAN: Very well. Let us begin with  
12 opening remarks.

13 MR. BISHOP: Opening remarks on behalf of those  
14 in Support of Imposition will be given by Thomas M. Beline  
15 of Cassidy Levy Kent. Mr. Beline, you have five minutes.

16 OPENING STATEMENT OF THOMAS M. BELINE

17 MR. BELINE: Good morning. Happy New Year. For  
18 the record, my name is Tom Beline. I'm a partner with the  
19 Law Firm Cassidy Levy Kent. I am appearing today on behalf  
20 of the Petitioners, including the FEB Fair Trade Coalition,  
21 Ellwood Group, and Finkl Steel.

22 We are here today because U.S. producers of fluid  
23 end blocks have been materially injured by reason of dumped  
24 imports from Germany, India, and Italy, as well as  
25 subsidized imports from China, Germany, India, and Italy.



1           Fluid end blocks, or FEBs, are forged steel  
2 blocks used in the manufacture or service of hydraulic pumps  
3 for drilling or fracking in the oil and gas sector. As you  
4 will hear from our industry witnesses, the domestic industry  
5 used to be quite healthy. Building on their success,  
6 domestic producers like Ellwood and Finkl reinvested in  
7 their FEB businesses to support additional growth and  
8 product innovation.

9           But unfortunately the U.S. market has recently  
10 been under assault. During the Period of Investigation,  
11 there has been a significant increase of subject imports  
12 aided by illegal dumping and government subsidization, and  
13 the result has been material injury to American producers  
14 and their workers.

15           This dumping and subsidization allowed subject  
16 import volumes to increase by no less than 600 percent from  
17 2016 to 2018. This increase came at the expense of the  
18 domestic industry at a time when demand was increasing, and  
19 domestic producers should have been prospering. But  
20 instead, the condition of domestic producers deteriorated.  
21 And as demand began to soften in 2019, domestic industry's  
22 share loses continued, making a bad situation even worse.

23           As presented in the Petition, and we believe the  
24 record will show, from the beginning to the end of the  
25 Period of Investigation you will see a steady trend within

1 the domestic industry. FEB production is down. Sales are  
2 down. Capacity utilization is down. Operating income is  
3 down. Employment is down. And make no mistake, subject  
4 imports are to blame here.

5 As alleged in the Petition, subject imports have  
6 consistently undersold the domestic industry across a range  
7 of FEBs. And as our witnesses will testify today, the  
8 result is a near daily choice between reducing prices and  
9 sacrificing profitability, or holding firm on price and  
10 losing sales volume.

11 We believe the record will also evidence that  
12 subject imports suppressed domestic industry prices,  
13 resulting in a cost/price squeeze.

14 Given the facts as they are in this record, we  
15 expect Respondents will try some familiar arguments. First,  
16 we expect to hear the recent downturn in demand due to the  
17 softening of the oil and gas market is the sole cause of  
18 injury. However, softening demand in 2019 cannot explain  
19 away what's happened from 2016 to 2018. Nor can it explain  
20 away the domestic industry's continued share losses in 2019  
21 due to subject import under-selling.

22 Similarly, we might hear the common refrain about  
23 quality differences between U.S. FEBs and foreign sources.  
24 As you will hear from our witnesses this morning, there are  
25 no quality or operational shortcomings from domestic

1 suppliers.

2 At the end of the day, all suppliers, domestic  
3 and foreign, produce to the same customer specifications.  
4 And because everyone has a quality product, the negotiation  
5 typically centers around price, with the lowest price  
6 winning the most volume.

7 We appreciate the opportunity to meet with you  
8 today to discuss these issues that I have previewed, and to  
9 answer your questions in these investigations. Thank you,  
10 very much.

11 MR. BISHOP: Thank you, Mr. Beline. Opening  
12 remarks on behalf of those in opposition to imposition will  
13 be given by Brittney R. Powell of Fox Rothschild. Ms.  
14 Powell, you have five minutes.

15 OPENING STATEMENT OF BRITTNEY R. POWELL

16 MS. POWELL: Good morning. For the record, my  
17 name is Brittney Powell of the Law Firm Fox Rothschild.  
18 Thank you for the opportunity to appear today on behalf of  
19 our client, Bharat Forge Limited, one of the leading forging  
20 companies in India, and the largest producer and exporter of  
21 fluid end blocks, or FEBs, from India.

22 This is a case in which the Commission must pay  
23 close attention to the conditions of competition, and  
24 particularly the conditions of the oil and gas industry.  
25 Petitioners admit that the fortunes of the domestic industry

1 rise and fall with the cyclical nature of the oil and gas  
2 market.

3           The health of the domestic industry is therefore  
4 not dependent on any presence or absence of subject imports,  
5 particularly imports from India, which are not the cause of  
6 the domestic industry's vulnerability in the interim period.  
7 This is a period in which the domestic industry alleges they  
8 suffered the greatest harm. Between 2016 and 2018, the  
9 domestic industry's production and shipments of FEBs  
10 increased by volume which, unsurprisingly, mirrors the  
11 condition of the oil and gas industry as it recovered from a  
12 collapse in 2015.

13           We believe the record will show that throughout  
14 most of the POI the domestic industry maintained consistent  
15 and stable pricing, and was able to increase sales. Unit  
16 prices also are expected -- we expect the record will show  
17 that unit prices also increased over the POI.

18           However, shipments, production, and profitability  
19 all decreased during the interim period. This reversal,  
20 again, coincided with the volatility of the oil and gas  
21 market that began towards the end of 2018 and continued  
22 through 2019.

23           During this period, demand for FEBs declined,  
24 along with the oil and gas market. Oil prices plunged more  
25 than 40 percent and caused oil and gas companies to tighten

1 their spending. Notably, the volume of subject imports also  
2 declined during that period.

3 An analysis of 40 U.S. shale oil companies by  
4 Reichstad Energy, an independent research organization,  
5 revealed how badly things had gotten in the first quarter of  
6 2019. Across the fracking industry, capital expenditures,  
7 outlays, cash flow from operating activities by nearly \$5  
8 billion. In the second quarter of 2019, many shale  
9 companies suffered large drops in volumes due to paltry cash  
10 returns. And we believe the health of the domestic industry  
11 mirrors the meager performance of the overall market during  
12 this period and was not attributable to subject imports.

13 The Commission should also note that competition  
14 between Indian imports and the domestic industry, as well as  
15 imports from the other subject countries, is highly  
16 attenuated. While the domestic industry and  
17 the other subject countries predominantly manufacture  
18 unfinished and semi-finished FEBs, Indian production is  
19 predominantly in the finished sector and is the only country  
20 in which FEB production is finished, substantially.

21 Similarly, whereas the domestic industry has  
22 moved toward greater production of FEBs using stainless  
23 steel, Indian production of FEBs using stainless steel was  
24 minimal during the Period of Investigation.

25 In sum, imports, particularly those from India,

1 are not the cause of any injury or threat thereof in the  
2 domestic industry, or their vulnerability in the interim  
3 period. Since there is no evidence of that, we respectfully  
4 request that these investigations be terminated.

5 Thank you.

6 MR. BISHOP: Thank you, Ms. Powell.

7 Would the panel in support of the imposition of  
8 the antidumping and countervailing duty orders please come  
9 forward and be seated.

10 Mr. Chairman, this panel has 60 minutes for the  
11 direct testimony.

12 MR. CORKRAN: Thank you very much for appearing  
13 today, and the panel may begin when ready.

14 MR. LEVY: Good morning Mr. Corkran and  
15 members of the staff. Jack Levy, a partner at Cassidy Levy  
16 Kent, appearing this morning on behalf of Petitioners and  
17 joined by my partners Mary Jane Alves, Myles Getlan and  
18 Thomas Beline. We're going to start immediately with our  
19 industry witnesses and their testimony, and then look  
20 forward to your questioning.

21 You'll be hearing first from Scott Boyd,  
22 president of Ellwood City Forge, followed by Kathy Saunders,  
23 Director of Marketing at Ellwood, and finally from Mark  
24 Shirley, the CEO of Finkl Steel. So with that very brief  
25 introduction, I'll turn things over to Mr. Boyd. Thank you.

## 1 STATEMENT OF SCOTT BOYD

2 MR. BOYD: As Jack said, my name is Scott  
3 Boyd, and I'm the president of Ellwood City Forge. We're  
4 the largest producer of fluid end blocks or FEBs in the  
5 United States. I started a 40 plus year career in  
6 manufacturing after graduating from Engineering school,  
7 where I focused on Metallurgy in 1978. Over the years, I  
8 also studied Business Administration at both the graduate  
9 and postgraduate level.

10 We spent over 13 years at the Ellwood Group,  
11 the last five as president of Ellwood City Forge. So my  
12 tenure at Ellwood City Forge corresponds to the entire  
13 Period of Investigation. I'd like to give a brief  
14 introduction to our company, the Ellwood Group. Ellwood was  
15 founded in 1910 as a family company making steel forgings,  
16 and we're still led by the fifth generation of that very  
17 same company, that very same family.

18 We still maintain our headquarters in the  
19 original town, Ellwood City, Pennsylvania, but have expanded  
20 to included plant locations in New Castle and Urban, also in  
21 Pennsylvania. Ellwood is a vertically integrated producer  
22 of steel and now aluminum metal products. We serve multiple  
23 sectors such as the United States military, the space  
24 industry, commercial aerospace and the oil and gas  
25 industries.

1                   With annual sales of over \$1 billion and a  
2 century of experience in all kinds of markets, we've proven  
3 we can compete and win. A company can't sustain over that  
4 length of time without innovating, reinventing and  
5 reinvesting in our people and equipment. To that point, we  
6 have invested over \$500 million in new capital just in the  
7 last five years.

8                   Despite our company's many successes over many  
9 years, I regret to say fluid end blocks have reversed course  
10 from being highly profitable to now being financially  
11 unacceptable. As you will note by our questionnaire  
12 response, Ellwood is being injured and the cause I am  
13 convinced is due to very low predatory pricing from foreign  
14 imports.

15                   A few comments on the oil and gas industry  
16 that uses fluid end blocks. A hydraulic pump, specifically  
17 a positive displacement pump, is at the heart of America's  
18 new-found energy independence, as it allows the innovators  
19 in the field to fracture shale formations and unlock the  
20 trapped oil and gas there. If you would turn to Exhibit 1  
21 in your packet, shown on the screen as well, you'll see a  
22 hydraulic pump with its two crucial elements, the power end  
23 labeled, and the fluid end.

24                   A fluid end block is a vital component of the  
25 fluid end and the subject product of this case. Fluid end



1 blocks are highly engineered steel forgings that are  
2 critical to high-performing, high pressure pumps. Exhibit 2  
3 illustrates fluid end blocks in various levels of finish,  
4 from solid, rectangular blocks to various stages with holes  
5 to contouring and finally in the finished machine. At  
6 Ellwood, we produce to all of these stages and according to  
7 our customers' requirements.

8 I mentioned that fluid end blocks are highly  
9 engineered products, which is essential due to the extremely  
10 harsh environments and high pressures within which they  
11 operate. Companies that use pumps in this sector want  
12 optimal performance from the fluid end block, without any  
13 unnecessary cost and there are significant differences in  
14 how these parameters are defined by various customers.

15 We work directly with our customers' technical  
16 teams to design the optimal steel type, the forging process,  
17 the heat treatment and finishing sequence to give the  
18 optimal performance at the lowest cost. We're proud at  
19 Ellwood that we play an integral part in a dynamic,  
20 innovative industry that has helped America achieve energy  
21 independence. Our company should be enjoying the benefits  
22 of a decade of industry success in this field, but instead  
23 we're watching subsidized and dumped imports from outside  
24 the country unfairly reap the rewards.

25 We say with some certainty that these imported

1 fluid end blocks are dumped because as a company Ellwood  
2 benchmarks our cost of production against many countries.  
3 As an integrated producer, we know the cost of all the  
4 inputs, the materials, the labor, energy, all that comprise  
5 the cost of manufacturing a fluid end block. Some of the  
6 more recent prices of imported fluid end blocks are below  
7 our total cost of production. Clearly, this is an  
8 unsustainable situation for any company.

9 Ellwood has been making forgings for over a  
10 century, competing at every step of the way and succeeding.  
11 Until recently in the case of fluid end blocks, we have  
12 always found a way to win. But now if we're required to  
13 compete against seemingly unlimited government subsidies of  
14 our competition, we feel our only recourse is to petition  
15 for our rights under the U.S. trade remedy law, and we  
16 believe this is our only option.

17 So I'll be happy to answer any of your  
18 questions following comments by my colleague Kathy Saunders,  
19 and Mark Shirley of Finkl Steel. Thank you.

20 STATEMENT OF KATHY SAUNDERS

21 MS. SAUNDERS: Good morning. I'm Kathy  
22 Saunders. I'm the Director of Marketing. Is that better?  
23 Okay. Good morning. I'm Kathy Saunders. Good morning, all  
24 right. I'm Kathy Saunders. I'm the Director of Marketing  
25 for Ellwood City Forge.

1                   Good morning. There we go. Much better.  
2   Okay. I am Kathy Saunders. I'm the Director of Marketing  
3   for Ellwood City Forge, and my educational background is in  
4   Business Management. I've worked in various roles in the  
5   Ellwood Group for more than 33 years, and since 2013 I have  
6   overseen our sales team that handles fluid end blocks. I am  
7   also responsible for monitoring competitive intelligence,  
8   including demand trend and trade flows.

9                   As Scott testified, hydraulic pumps are  
10   essential equipment in the upstream oil and gas sector,  
11   particularly for drilling and recovery of oil and gas. FEBS  
12   are integral components in the manufacture of the fluid end  
13   module of hydraulic pumps. Because fluid ends are  
14   continually being replaced, we can say that demand for FEBS  
15   generally tracks drilling and fracking activity. If you  
16   refer to Exhibit 3, you can see data showing drilling and  
17   fracking activity during the Period of Investigation.

18                  One data series is from the EIA and is  
19   specific to drilling. The other data series is from spears  
20   and is specific to fracking horsepower. As you can see,  
21   demand has fluctuated, increasing from 2016 to 2017 to 2018,  
22   and then declining again in 2019. There is no question that  
23   when demand is down like it was in 2019, there are fewer FEB  
24   sales opportunities. But this makes the impact of unfair  
25   import competition even more harmful to us.

1           The subsidized and dumped imports have been  
2 undercutting our prices and taking share in a declining  
3 market. Next, I would like to say a few words about how  
4 FEBS are sold. The purchasers in this industry are OEM  
5 manufacturers of hydraulic pumps or manufacturers of the  
6 fluid end modules. There are easily more than two dozen  
7 purchasers in the U.S. market.

8           Some of these customers such as Haliburton are  
9 manufacturing and operating their own pump equipment, and  
10 they themselves are also engaged in drilling and recovery.  
11 Others by contrast, such as Gardner Denver, are simply  
12 selling their pump equipment to third parties involved in  
13 oil and gas exploration and production.

14           When a customer needs FEBS to manufacture  
15 their fluid end modules, they will send out an RFP with all  
16 of their required specifications, steel chemistry, forging,  
17 heat treat, properties, dimensions, machining tolerances,  
18 etcetera. Every customer has their own specification for  
19 each corresponding fluid end module and pump assigned.

20           For example, one customer may call for an  
21 alloy steel triplex block that has been drilled and rough  
22 machined to specify dimensions. Another customer, by  
23 contrast, may call for a stainless steel quintoplex block  
24 that is also unfinished but has even more contour machining.  
25 These products are custom produced to fit custom

1 specifications for specific customers.

2           In this way, all suppliers are bidding to  
3 supply to the same custom specification, and the purchasers  
4 are therefore in a position to make apples to apples  
5 comparisons among competing suppliers on the basis of price.  
6 If you refer to Exhibit 2, you can see the assortment of  
7 FEBs that are specified by customers in the U.S. market.

8           As producers, we have a choice to perform  
9 finishing operations in-house, or we could decide to  
10 contract out some of these operations to an independent  
11 machine shop. At Ellwood, we have relied very little on  
12 independent machine shops in recent years.

13           Next, I should say a word about qualification.  
14 Most customers require some kind of first article testing  
15 before a manufacturer is qualified to perform FEBs in  
16 commercial quantities. But in our experience, all of the  
17 major suppliers in the U.S. and in the subject countries are  
18 qualified and able to produce a quality product that meets  
19 customer specifications. For this reason, competition  
20 generally boils down to price.

21           I say "generally" because sometimes we get  
22 awarded volumes despite our higher prices because customers  
23 want the security of having a backup domestic supplier with  
24 shorter lead times. Unfortunately, those volumes are hardly  
25 enough to support a healthy business.

1                   Let me close by giving you a concrete example  
2 of the kind of competition we have faced in the past year.  
3 When Ellwood was invited to bid on blocks at a particular  
4 customer account, we would try to keep prices consistent  
5 with increase in cost for raw materials. But the feedback  
6 we received was that competing imports were as much as 20  
7 percent lower than Ellwood's best price.

8                   This type of example, which was detailed in  
9 the petition, has become the new normal. Subsidized and  
10 dumped imports have made it impossible for us to obtain a  
11 fair price for our FEBs. At this time, I'll turn things  
12 over to Mr. Shirley at Finkl Steel.

13                   STATEMENT OF MARK SHIRLEY

14                   MR. SHIRLEY: Hello, my name is Mark Shirley.  
15 I'm the CEO of Finkl Steel. My educational background is in  
16 metallurgical Engineering and I also earned a Master's  
17 Degree in Business Administration. I have three decades of  
18 experience working in steel products. Prior to joining  
19 Finkl, I held various roles in the amsted industries,  
20 ranging from plant management to engineering, product  
21 development, management of overseas joint ventures, and  
22 executive management. I joined Finkl Steel as its CEO in  
23 late 2014 and the FEB business has been a strategic focus at  
24 Finkl every since I joined the company.

25                   Let me start by giving you a little background

1 on Finkl Steel. Like Ellwood, our company started as a  
2 family-owned business more than a century ago. Finkl was  
3 founded in 1879 in Chicago. The company got started making  
4 hammers to clean bricks of mortar after the Great Chicago  
5 Fire. Over time, the company's operations expanded into  
6 larger forging operations and the business continued to  
7 grow.

8 Finkl has a proud history of innovation. We  
9 have roughly 70 coveted U.S. patents and it is no  
10 exaggeration to say that Finkl invented clean steel  
11 technology. When it comes to production techniques that  
12 limit inclusions, we literally wrote the book. In the 2007  
13 timeframe, Finkl was acquired by a publicly-traded European  
14 company which allowed us to finance a new world-class  
15 manufacturing facility on the Southside of Chicago. Our new  
16 plant has a melt shop capacity that is three times what it  
17 had been and the opportunities for future growth are  
18 substantial.

19 When I joined Finkl in October of 2014, Finkl's  
20 FEB business was really taking off and the margins were  
21 definitely justifying significant plant investments. I,  
22 therefore, oversaw the creation of what we call a "lean  
23 line," which enabled us even more efficient streamline  
24 production of FEBs. Unfortunately, because of the unfairly  
25 traded imports, our business has been injured and none of

1 these investments have paid off. In fact, we have been  
2 forced to reduce employment.

3           Production at Finkl is not so different than  
4 Ellwood. We are vertically integrated in that we have our  
5 own melt shop for producing ingots. We have open-dye  
6 forging presses. We have furnaces for heat treatment and we  
7 have machining or finishing lines. We self produce both  
8 alloy and stainless ingots, including a newly patented  
9 stainless steel grade called "HVX." For other stainless  
10 steel grades, we can now self produce those in house as  
11 well. But until recently, we actually purchased stainless  
12 ingots from other manufacturers, such as Electralloy in Oil  
13 City, Pennsylvania to meet our customer requirements.

14           When it comes to finishing operations, we have  
15 significant in house capacity, but we have the option to  
16 farm out some of the work to independent machine shops if we  
17 determine that doing so is cost effective. In recent years,  
18 I would say that our utilization of the outside machine  
19 shops has been minimal. Without question, Finkl is a  
20 world-class FEB manufacturing facility that is the result of  
21 significant plant investments and manufacturing  
22 streamlining. We are positioned to be big winners in the  
23 FEB market if there is a level playing field.

24           Unfortunately, just as demand for FEBs began to  
25 recover in 2017, our ability to earn healthy margins, grow



1 our production and sales volumes and increase our  
2 employment, we came under intense pressure. What we have  
3 seen in recent years is that as material costs have  
4 increased our ability to pass through those higher costs has  
5 been limited by low-priced imports. We have examples  
6 similar to what you've heard from Ms. Saunders.

7           Just a few months ago when responding to a  
8 customer RFP, we received feedback that German and Italian  
9 prices were 25 to 30 percent lower than ours and the Chinese  
10 FEB prices were 40 to 50 percent lower. How do you compete  
11 with that? Very often, we have been faced with two bad  
12 choices, either we reduce prices to compete with the  
13 imports, in which case our margins get crushed, or we try to  
14 hold the line on prices, in which case we lose sales volumes  
15 and lose market share. We have employed both strategies to  
16 a certain extent and both scenarios lost sales and lost  
17 revenues are injuring our business.

18           The surge of low-priced imports has been severe  
19 and sharp and is now destroying our ability to earn a profit  
20 and obtain a fair return on our plant investments. I would  
21 definitely echo what Ellwood told you about the imports.  
22 The price levels have been uneconomic and predatory. It has  
23 turned our business completely upside down.

24           In conclusion, let me say Finkl's investment in  
25 the FEB business is central to the viability of our new

1 plant on the Southside of Chicago and the current situation  
2 is not sustainable. If we cannot compete on a level playing  
3 field, I'm not sure how this 141-year-old company will  
4 survive. That is why we joined in this position and why we  
5 are asking the ITC to enforce the trade laws. I want to  
6 thank the Commission for its important work in these  
7 investigations and I look forward to answering any questions  
8 you may have. Thank you.

9 MR. LEVY: Mr. Corkran, that concludes our  
10 prepared remarks. This panel looks forward to your  
11 questions.

12 MR. CORKRAN: Thank you very much, Mr. Levy, and  
13 to the entire panel. We appreciate you being here. I'm  
14 going to turn first to Christina Lara, our Investigator, to  
15 begin questioning.

16 MS. LARA: Hello, everybody. Thank you for  
17 being here. Just a preliminary matter, I was wondering if  
18 anybody had a chance to look at who all responded in the  
19 questionnaires and if you see any big gaps in coverage that  
20 you'd like to mention, or if you haven't had a chance you  
21 can address that in post-conference briefs.

22 MR. LEVY: Yes, M. Lara, the APR release was  
23 only yesterday afternoon, so we're still in the process of  
24 reviewing and digesting those materials. So, we will  
25 obviously provide a more comprehensive treatment of this

1 question in the post-conference brief, but just some  
2 preliminary reactions, having perused things yesterday  
3 afternoon and evening, we obviously have a view of what  
4 import flows look like and that's detailed in the petition  
5 and it's based on best information recently available,  
6 looking at ocean manifest data. It's admittedly imperfect,  
7 but that was our intelligence going into the investigation.

8           We were hoping to find, as you typically find in  
9 ITC investigations, that the universe of imports would be  
10 covered by importer questionnaire responses. I think, to  
11 date, it fair to say that that is not yet the case. In  
12 part, we think that certain importer questionnaire responses  
13 are lacking. In other cases, it would appear that certain  
14 importers have under reported imports, perhaps reporting for  
15 only one of their locations, but not all of their locations.  
16 However, with the exception of China, we think that the  
17 foreign producer questionnaire responses provide reasonable  
18 coverage in relation to trade flows. So, put another way,  
19 if the record doesn't get much better on the importer  
20 questionnaire front, you could use exports as a proxy for  
21 U.S. imports and get pretty close to the truth, in our view.  
22 And so, we'd simply hold that out as you know one way to  
23 fill a gap for purposes of the preliminary phase.

24           China is another issue. We'll deal with that  
25 more in our post-conference brief, but there you may have to

1 either rely on what's alleged in the petition and/or rely on  
2 imperfect importer questionnaire data. We'll talk more  
3 about that.

4           Also, on the subject of pricing data, it's  
5 pretty clear that there are some issues and it's very  
6 difficult to talk about them with any specificity in an open  
7 conference. So, here again, we will detail that  
8 post-conference, but you know just too give an illustration  
9 of some of the challenges I think I'd call out to, one is  
10 that what we are learning from the questionnaire responses  
11 is that in some cases you have importers who are then making  
12 commercial sales to purchasers and their data are perfectly  
13 useable and there are pricing products for which there is  
14 reported data and so that should all be useable, in  
15 principal.

16           In other situations, we have purchasers who are  
17 themselves U.S. importers of records. We have -- so it's a  
18 direct import fact pattern and I think the Commission is  
19 increasingly encountering in certain cases. And so for  
20 those fact patterns I think for only one of the four pricing  
21 products has the Commission solicited pricing product data  
22 where there's a direct import fact pattern. And it just  
23 happens that that one pricing product it's sort of hit or  
24 miss and it turns out it's a miss and so I think there's  
25 something to be learned there in a final phase investigation

1 as to how we might get you know better coverage of pricing  
2 products, which is to look at not only U.S. commercial  
3 shipments of U.S. importers, but also direct import  
4 information.

5           And there are you know just some other issues in  
6 terms of aberrational data. There's at least one example  
7 that occurred to us where an importer of record was  
8 apparently a producer of fluid end modules and the pricing  
9 -- and their customers are obviously people who are in the  
10 oil and gas service industry. They're the end users, if you  
11 will, of fluid end modules and yet they reported pricing  
12 product data at prices that were significantly higher than  
13 the cost of a block. It was very clear that they were  
14 reporting the price of essentially the finished module,  
15 which is not part of the domestic-like product. So, we will  
16 call out these kinds of examples with great specificity in  
17 the post-conference brief. There's still a little bit of  
18 time for the staff to work with questionnaire respondents to  
19 scrub the data and we would welcome that. There's still, I  
20 think, a couple of U.S. producers that have yet to respond.  
21 And obviously the more robust the data the better, but we  
22 think that even with the data that you have before you it  
23 paints the following picture.

24           There is, at the very least, a reasonable  
25 indication that there's a significant and increasing volume

1 of subject imports that is taking share from the domestic  
2 industry from '16 to '17 to '18 to interim 2019. That there  
3 are significant examples of import underselling which helps  
4 to explain the cost price squeeze the domestic industry has  
5 experienced. And if you look at the U.S. producer  
6 questionnaire responses that you have before you, including  
7 those of the Petitioners, Ellwood and Finkl, you see  
8 deteriorating financial performance from '16 to '17 to '18  
9 to interim '19 and we think that all of that paints the  
10 picture that subject imports are a cause of material injury  
11 during this period of investigation.

12 So, I know that's a long-winded answer, but I  
13 wanted to at least give you some sense of how we're seeing  
14 the record. And we know that some of this may have been  
15 complicated by the fact that the questionnaires were sort of  
16 out in the industry during the holidays and that perhaps as  
17 much as anything is our making and so we certainly  
18 understand that dynamic, but we certainly appreciate the  
19 staff's diligence in working to perfect the record up until  
20 now and in the days to come. So, thank you for that  
21 question, Ms. Lara.

22 MS. LARA: Thank you. That was very helpful.  
23 So, moving on to finishing operations, the petition list  
24 seven of them and I'll just list them really quickly -- heat  
25 treating, milling of one or more flat surfaces, contour

1 machining to custom shapes or dimensions, drilling or boring  
2 holes, threading, painting, varnishing or coating, and  
3 attachment of flanges, valves, seals, or connectors.

4 I just wanted to open this up to see there were  
5 any other finishing operations that were not listed in that  
6 list or is that considered an exhaustive list of potential  
7 finishing operations.

8 MR. LEVY: Ms. Lara, that was intended to be an  
9 exhaustive list of finishing operations that can be  
10 requested by purchasers and performed by U.S. producers. I  
11 would add this question about attachments of connectors or  
12 flanges that was language that was in the original scope  
13 which was then amended in a subsequent submission to the  
14 Commerce Department and the Commission. And just to kind of  
15 clarify where that was coming from in terms of the  
16 attachment of flanges or connectors and the like, currently  
17 we don't see that kind of request from purchasers. That's  
18 the kind of operation that would be performed by the  
19 purchasers in the construction of a fluid end module;  
20 however, we were anticipating circumvention fact patterns  
21 where somebody would just sort of slap on an arbitrary  
22 flange that had no place and that that would be a vehicle  
23 for circumvention. And upon further reflection and  
24 discussion with the Commerce Department, we removed that  
25 language from the scope; but we would obviously maintain the

1 view that if that behavior occurs in the future it would be  
2 the basis for some kind of anti-circumvention action.

3 But to answer your question squarely, you know  
4 operations like the ones you described in terms of heat  
5 treat, machining, drilling, et cetera, these are the  
6 operations that are requested and performed by U.S.  
7 producers.

8 MS. LARA: Is there a particular order in which  
9 these finishing operations would typically occur or does it  
10 vary from fluid end block or what the pump manufacturer is  
11 requesting?

12 MR. BOYD: You mentioned heat treatment. That  
13 would necessarily precede any other machining operations;  
14 particularly, anything of a finishing nature and then from  
15 that point on it depends. It depends on what the customer's  
16 ultimate form and structure of the fluid end block looks  
17 like and they could be in or out of sequence of drilling,  
18 surface machining, contouring. Generally, those things  
19 would happen in a sequence like that -- drilling, surface,  
20 surface milling, contouring.

21 MS. LARA: Okay.

22 MR. SHIRLEY: Nothing to add there, the same.

23 MS. LARA: Other than the painting, varnishing,  
24 or coating operations that I read that's sometimes optional,  
25 would you say that all of the other ones would occur on a



1 finished end block, whether it be done by the producer or  
2 the pump manufacturer?

3 MR. BOYD: So Jack has just referred back to  
4 Exhibit 2 and the last photograph to the right, Sample D,  
5 shows generally the form that the fluid end block takes when  
6 it's been fully machined. So this is now ready to be  
7 painted, varnished, and further assembled now by the module  
8 maker. So the Sample D would be the most advanced form that  
9 we, the producers, would provide a block to the module  
10 maker.

11 MS. LARA: Okay.

12 MR. LEVY: And Ms. Lara, just to sort of add to  
13 that, 'cuz I think you gave us additional context, I think  
14 Mr. Boyd is right, Sample D, that is an illustration of the  
15 most advanced form of finishing that a purchaser--that is to  
16 say, a manufacturer of a fluid end module or a pump--would  
17 call for, from a U.S. producer of FEBs.

18 But just to kind of think about what the world  
19 looks like downstream, if you turn to Exhibit 8, here you  
20 see on the right an image of an assembled fluid end module.  
21 This is essentially the end use, and on the left is an  
22 exploded version of the same item, which obviously has lots  
23 of interesting parts, whether it be valving or plungers or  
24 rings or seals or connectors and the like, but it's  
25 obviously a very different animal, in terms of the level of

1 manufacturing operations.

2 But just to help you understand the continuum in  
3 terms of what FEB producers are making and selling, and then  
4 what the purchasers are doing with it. So that Exhibit 8  
5 gives you a visual illustration of that.

6 MS. LARA: Miss Powell mentioned that, for her  
7 client, Bharat, that they typically would sell something in  
8 a more finished state than what the U.S. producers are  
9 selling the pump manufacturers. Do you have any idea which  
10 particular finishing operation she might be referring to,  
11 that they're doing that the U.S. producers may not be doing?

12 MR. BOYD: The Exhibit 2, showing the machine  
13 block, would be the most advanced state that Bharat Forge  
14 would supply a block to a module maker. Ellwood City Forge  
15 also would supply blocks in that form when requested from  
16 customers. And I've seen personally Bharat forge blocks  
17 that look more like the rectangular block on the left that  
18 has just surface machining done.

19 MS. LARA: Can you identify some of the finishing  
20 operations that are the most costly or add the most value to  
21 the fluid end block?

22 MR. BOYD: Well, in our opinion, the value begins  
23 and is added at the front-end of the process. It's in  
24 engineering the process, melting the steel, forging the  
25 steel, heat-treating it. There are dozens of operations

1 that the fluid end block goes through in our plants just to  
2 get to the Sample A form. Finishing operations could  
3 certainly add some value. It depends on what the customer  
4 is looking for as to how much additional value that would  
5 add. And even the same operation could be valued  
6 differently by one customer compared to the other.

7           So, from our standpoint, we think the values on  
8 the front-end, the machining is done really by request of  
9 the customer and, when it's done outside of the contract  
10 machining house, that relationship or that transaction, is  
11 negotiated between them. So we're really not in that  
12 discussion. We don't really know what they believe the  
13 value-added is coming from that machining shop. So sorry I  
14 don't have a clear, concise way to answer that.

15           MR. SHIRLEY: I would just add that many of our  
16 customers do the finish-machining to Sample D inhouse  
17 themselves. They also have the option to contract that out  
18 to contract machine shops.

19           MS. LARA: So Kathy and Mark both mentioned that  
20 your companies do little farming out of these finishing  
21 operations. Is that something that -- is there a shift?  
22 Did you used to contract this stuff out more in the past  
23 and, what are the types of operations that are most common  
24 that you're contracting out?

25           MR. SHIRLEY: So from our experience, we've done

1 very little of the contract machining. In most cases, our  
2 customers require the block in the condition of either  
3 Sample A or Sample B, occasionally Sample C. And they do  
4 the finishing operations themselves in-house. Or ask us to  
5 ship direct to a contract machining house on their behalf.

6 MS. SAUNDERS: Kathy Saunders, Ellwood City  
7 Forge. It wasn't that we were doing a lot of finish  
8 machining in the past and then just in recent years, you  
9 know, we quit doing it. It's something that we offer to our  
10 customers as a value-add. When it makes sense for them,  
11 they'll ask us to perform those finishing operations for  
12 them. But I think in more recent years, it's probably more  
13 a function of what's happened with the market demand. So  
14 it's definitely something that we still offer to them.

15 MS. LARA: So would you say that in the instance  
16 when tolling does occur, is that usually occurs at the, you  
17 know, between the pump manufacturers and machining  
18 companies, as opposed to U.S. producers with the machining  
19 companies?

20 MS. SAUNDERS: Yes.

21 MR. SHIRLEY: The same.

22 MS. LARA: So other than tolling operations, are  
23 you aware of any scenarios where, instead of it being a  
24 tolling operation, it would be, you know, a U.S. producer  
25 sells the actual fluid end block to a machine company, and

1 then that machine company goes out and sells that the  
2 manufacturer? Are you aware of any of those types of  
3 scenarios?

4 MS. SAUNDERS: Almost never.

5 MR. SHIRLEY: Our experience is the same.  
6 Virtually never.

7 MS. LARA: This is just a request and for  
8 post-conference, brief, if you could provide a list of any  
9 machining companies that are performing finishing operations  
10 on fluid end blocks, you can provide those in  
11 post-conference brief.

12 So moving on to stainless versus non-stainless  
13 steel, so far as I've looked at the data, I noticed that  
14 there was somewhat of a shift between, I'd say, 2017 and  
15 2018, where in the past U.S. shipments reported were greater  
16 for non-stainless steel and then after that time, it's like  
17 it slipped, there's been more stainless steel. Can you  
18 explain why that shift may have occurred? Or if that is  
19 occurring?

20 MR. BOYD: Yeah, I can start that. So the  
21 industry was--we'll refer to them as carbon blocks back in  
22 the period prior to this investigative period. And so in  
23 the pre-2016 era, there was very little, except in some  
24 specialized cases, demand for stainless end blocks.

25 The industry began shifting coming out of a

1 serious downturn in 2015 and started looking at, "Are there  
2 ways that we can get more uptime for our stimulation crews  
3 out in the field?" And if so, "What could we do to make  
4 that happen?" And we began talking and working with them,  
5 because we had, at Ellwood City Forge, we had supplied some  
6 stainless for very specialized applications before that.

7           So we began supplying some stainless steel and  
8 there was demand from a couple of fluid end block module  
9 producers, pump makers for stainless fluid end blocks. But  
10 the industry itself didn't really come around completely to  
11 that conclusion that a stainless-steel block was in their  
12 best interest, cost-effective, essentially, until probably  
13 the 2018 period. And even at that, there's, you know, a  
14 very large pump maker today that has used both alloy blocks  
15 and stainless blocks and they're unconvinced that stainless  
16 is the way to go.

17           So it's true, there was an industry shift. It  
18 helped in their utilization of equipment in the field. But  
19 it was really driven by the industry saying, you know, "What  
20 can you help us do to get better uptime of our equipment?"  
21 And supplying some stainless blocks in some cases was, for  
22 some of the pump producers, the solution. So there was a  
23 shift. We were there along with them and, but yet, even  
24 today in 2020, it's not settled science that stainless  
25 blocks are always the right way to go.

1           MR. SHIRLEY: Just to add to Scott's comments, by  
2 and large, the stainless steel fluid end will last longer.  
3 But it also costs more upfront. So there is a debate on  
4 whether the upfront cost is enough to justify the extended  
5 life and there is many different variables in a fracking  
6 field that may cause a customer to think an alloy block  
7 might be better in this application and a stainless block  
8 might be better in this other application.

9           I also believe that the shift to stainless was  
10 accelerated by the low-priced imports. Because it brought  
11 the pricing delta that the cost delta between an alloy and a  
12 stainless block, it squeezed that delta down.

13           MS. LARA: So are you seeing imports tend to be  
14 more on stainless steel, more so than what the U.S.  
15 producers are producing?

16           MR. SHIRLEY: We see them in both stainless and  
17 alloy.

18           MS. LARA: Can you comment on the extent to which  
19 other products are produced using the same machinery as  
20 fluid end blocks? I'm aware that at the forging stage,  
21 there are many other products that can be produced, but I  
22 was more interested in maybe at the machining stage, are  
23 there certain, you know, is there certain equipment that is  
24 purchased just for the sole use of producing fluid end  
25 blocks?

1           MR. SHIRLEY: I can start with that one. In  
2 terms of the forging side of the business, the forge presses  
3 are capable of producing fluid end blocks or any of our  
4 other products. Part of our challenge is with the volume  
5 that we've lost to the unfairly traded imports on fluid  
6 ends. Our other markets are very mature and there just  
7 isn't opportunity to fill the press with other products to  
8 make up for it. And then we're forced to basically scale  
9 back and reduce employment.

10           On the machining side, for Finkl, it's a bit of a  
11 mixed bag, in terms of what machines are capable of  
12 machining different products. So we do have dedicated  
13 machining line for fluid ends. This is the lean line that I  
14 referred to in my opening remarks. And for us, you know,  
15 that equipment is grossly underutilized and idle much of the  
16 time these days.

17           MR. BOYD: I would agree completely with Mark's  
18 comments. Yes, we can run other product across the presses,  
19 but it's not the volume of a healthy frack block, fluid end  
20 block market. It's not there to support full operation of  
21 all the presses that we utilize, and then downstream, the  
22 presses, we have idled equipment from drilling equipment to  
23 surface preparation equipment to machining equipment and  
24 many, many, more or less, dedicated pieces of equipment that  
25 are used for fluid end blocks. And if the demand's not



1 there, it's mostly sitting idle.

2 MS. LARA: I read in the petition that fluid end  
3 blocks tend to produced to order. Does this mean that very  
4 little is typically held in inventory? And if so, is that  
5 true even for the relatively unfinished fluid end block?

6 MR. SHIRLEY: Yes, absolutely. This is a  
7 make-to-order business. There's roughly a dozen pump  
8 manufacturers that buy fluid end blocks, so we have a small  
9 number of buyers. They buy in bulk. A lot of times it's a  
10 quarterly type buy. So they put a lot of volume out there  
11 for quote. They put a specification out, and then we all  
12 quote to the specification. And because we're all quoting  
13 to the specification, typically the award is based on price.

14 And, you know, either you win or you don't based  
15 on that quote, and when we lose, we talk to the customers to  
16 find out, you know, why we weren't selected, and typically  
17 these days, we find out that we lost on price to imports and  
18 it's typically ranging from 25- to 50% high. And it becomes  
19 impossible to compete with that.

20 MR. LEVY: And Mark, just to clarify, are you  
21 building up inventories in anticipation of potential sales?  
22 Or do you simply produce to order, sell what you produce and  
23 then essentially work to zero inventory?

24 MR. SHIRLEY: We essentially work to zero  
25 inventory because each fluid end purchaser has a different

1 specification so a block for one person or one purchaser is  
2 not gonna meet the spec of another. So you produce to the  
3 order, there is no inventory other than, you know, what  
4 you're putting through the plant, you know, for that  
5 particular order.

6 MR. BOYD: I'd echo those same comments that we  
7 produce to order. These are all very custom specifications  
8 that each customer has, and even vary within a customer,  
9 wanting different specifications for certain blocks. So  
10 there's no value in trying to produce to inventory. We just  
11 have to make it as we get an order.

12 MR. SHIRLEY: One final comment on the topic is  
13 that with these quarterly, you know, bulk-type orders, the  
14 size of those orders can range from several million dollars  
15 up to double-digit million dollars. So it is a painful  
16 process to lose out on one of those orders because you can't  
17 make up for that. And then you're forced to scale back  
18 operations.

19 MS. LARA: I have two last questions that I'll  
20 ask together. First one is, which countries are the largest  
21 nonsubject sources of fluid end blocks being imported into  
22 the U.S.? And the second one is, is there a market outside  
23 of the U.S. for fluid end blocks? And if so, which  
24 countries are the largest markets?

25 MR. LEVY: Let me take the first question. Based

1 on the commercial intelligence summarized in the petition,  
2 we believe the largest nonsubject import sources would  
3 include Austria, France and South Korea. With regard to the  
4 second part of your question, I would defer to Mr. Boyd.

5 MR. BOYD: I'm sorry, Ms. Lara. Could you repeat  
6 that second part?

7 MS. LARA: Is there a market outside of the U.S.  
8 for fluid end blocks, and if so, which countries have the  
9 largest market?

10 MR. BOYD: We don't export fluid end blocks  
11 outside of the country, but the pump builders do. And they  
12 would look to any area that there is fracturing going on in  
13 the oil and gas market. So it would be the Middle East and  
14 South America, Asia, China primarily, but I don't think  
15 there's much export activity to China from our customers.

16 MR. SHIRLEY: We'd also say the same is true for  
17 the drilling pumps.

18 MS. LARA: That's all I have, thank you.

19 MR. CORKRAN: Thank you very much, Ms. Lara.  
20 Next we will turn to our economist, John Benedetto.

21 MR. BENEDETTO: Thank you all very much for  
22 coming here today. If any of my questions touch on any  
23 confidential information, please just say so and respond in  
24 the post-conference brief. My first question is on your  
25 slide about demand drivers, it's Slide 3. Looking at the

1 demand there, I understand it's gone down in 2019, but  
2 overall, it's much higher than 2016 or 2017, right? Is this  
3 a severe demand drop or a mild one?

4 MR. BOYD: It's depending on which side of the  
5 equation you're on. And from the domestic industry  
6 standpoint, it's -- we feel a severe downturn right now, and  
7 it's primarily because of the imported fluid end blocks that  
8 have come in over the last twelve months and even longer.  
9 There's inventory of raw blocks that have come in from the  
10 producer countries named in the petition, and the customers,  
11 the builders of pumps have built inventory as well on the  
12 expectation that demand would have continued along the  
13 linear curve, which has not been the case.

14 So there was a lot of inventory left in the  
15 system coming out of, really, 2018 and continued to build in  
16 2019. So primarily, as a result of foreign imports and the  
17 expectation by the pump builders that demand would keep  
18 growing. However, it has not continued to grow to the  
19 extent that they were forecasting, primarily because the  
20 blocks are lasting longer in the field than they had in the  
21 past.

22 MR. BENEDETTO: I think I understood you in  
23 answers to Ms. Lara's questions, does machining differ by  
24 country? I think your take is that it does not, that  
25 there's no difference in machining by, say, U.S. versus any

1 of the subject countries?

2 MR. LEVY: We'll speak to that more directly in  
3 post-conference, but I think what you heard from the witness  
4 testimony is that the machining differs by the customer RFP.  
5 So, you know, certain customers on a certain day may  
6 want--if we can go back to Exhibit 2--certain customers may  
7 be requesting Sample A, others Sample B, others Sample D,  
8 others Sample C.

9 And so, you know, it may be that if your customer  
10 mix is different for particular FEB supplier, then your  
11 product mix differs. But there's no inherent difference in  
12 terms of what the manufacturer suppliers of FEB are  
13 producing and offering for sale. It's just a function of  
14 customer mix and, therefore, product mix.

15 MR. BENEDETTO: Is there any difference with  
16 regard to availability of certain types of materials, based  
17 on country? Stainless steel or anything like that?

18 MR. BOYD: No. We make to specification anything  
19 that our customers have requested. And there's -- I've not  
20 seen anything unique from a foreign producer that we were  
21 not able to produce ourselves.

22 MR. BENEDETTO: Are stainless steel FEBs more  
23 difficult to produce? Or more difficult to machine than the  
24 alloy carbon ones?

25 MR. BOYD: They can be a little more difficult.

1 They take a little more time at the forging process. But  
2 there are time savings at some stages beyond forging that  
3 make it not quite an equivalent to an alloy block, but it  
4 takes a little more time upfront. It takes a little more  
5 time to machine, but there are time savings in the middle  
6 that help to compensate.

7 MR. BENEDETTO: And Mr. Shirley addressed this a  
8 little, but is the cost difference in the raw materials  
9 between stainless and alloy, does that explain most of the  
10 price difference between stainless steel FEBs and forged  
11 alloy FEBs?

12 MR. SHIRLEY: Yes, I would say that the material  
13 costs is the main cost difference between alloy and  
14 stainless.

15 MR. LEVY: Mr. Benedetto, I would just add, I  
16 think the answer you received is correct. But what we have  
17 witnessed as we're learning about this industry is that  
18 really is a continuum of steel chemistries in this industry.  
19 It's not so binary as sort of alloy and stainless. And  
20 depending on the chromium content, the nickel content,  
21 etcetera, you can have very material differences in raw  
22 material costs.

23 So I would simply call out that nuance which is  
24 important. Obviously for the same level of finish, the  
25 major difference in raw material cost is going to be the

1 steel chemistry. But obviously, as between two products, if  
2 there's a significant difference in the level of finish,  
3 that, too, could be a driver in terms of the difference in  
4 cost and the difference in price of the finished product.

5 MR. SHIRLEY: I would also add that the melt shop  
6 costs of the stainless is gonna be part of that. It's not  
7 just the cost of the chemistry, but the processing time  
8 through the melt shop, longer for stainless.

9 MR. BENEDETTO: Is there any issue or are there  
10 any FEBs made with any patented steel chemistries? And does  
11 that impact the market at all, if so?

12 MR. SHIRLEY: So for the most part, the  
13 chemistries for the typical fluid end blocks are not under  
14 patent. However, I would like to add that Finkl has  
15 developed a newly patented stainless grade called HVX and I  
16 actually think this is a perfect example of us developing a  
17 value for the industry that has been undermined by the  
18 lower-priced imports.

19 So we have a stainless grade that, for the alloy  
20 content, performs extremely well, and we have a very  
21 difficult time getting penetration into the market with  
22 this, or generate interest from our customers because of the  
23 lower-priced imports.

24 MR. BENEDETTO: Mr. Shirley, I believe you said  
25 that the purchases tend to be in bulk. So would a typical

1 purchase be like, say, 5 or 500 or what would a typical  
2 request for a price be?

3 MR. SHIRLEY: So we do have customers that cover  
4 the entire range of a volume that you just described. I  
5 would say, in a typical quarterly quote, we might see  
6 something on the order of 400 to 800 blocks. And you know,  
7 that can range up to double-digit millions in terms of  
8 value.

9 MR. BENEDETTO: So someone was talking earlier  
10 about the difference between different kinds of customers,  
11 some that are also producers, and we like to say, are like  
12 vertically integrated, and others that purchase from you to  
13 make the modules only. Do you know approximately what share  
14 of the production market is these vertically integrated  
15 purchasers that also produce, versus ones that just make the  
16 modules? When I say produce, they also produce FEBS?

17 MR. LEVY: So, Mr. Benedetto, I think if, what  
18 you're asking is, are there purchasers who also make FEBS  
19 inhouse; is that the question?

20 MR. BENEDETTO: I believe that's what I heard  
21 this morning, right?

22 MR. LEVY: So, to be clear, to our knowledge,  
23 there is not a single manufacturer of hydraulic pumps or,  
24 for that matter, fluid end modules, that also self-produces  
25 fluid end blocks. That they are reliant on forgers, be they



1 outside the United States or within the United States, in  
2 providing them with an FEB at a certain level of finish.

3 I think what you may have heard this morning was  
4 that there are certain producers of pumps that are  
5 vertically integrated in the finishing, meaning that -- so  
6 for example, if we can go back to Exhibit 2 -- there are  
7 certain purchasers in the industry, that is to say  
8 manufacturers of modules, who are able to take Sample A and  
9 turn it into Sample D in-house, and others that would rely  
10 on an outside machine shop pursuing to a tolling agreement  
11 to effectuate that finishing. But there is no manufacturer  
12 of fluid end modules or hydraulic pumps in the United States  
13 that has capacity to produce an FEB like Sample A. They  
14 don't have the forging press, they don't have, you know,  
15 any of the other technology or equipment.

16 MR. BENEDETTO: And approximately how long does  
17 it take between a request for quote and delivery of the  
18 requested product?

19 MR. SHIRLEY: So typically a request for quote  
20 would turn into an order in a timeframe of something like  
21 thirty days. And for us today, to turn that order into a  
22 delivery is gonna be something in the range of eight to  
23 twelve weeks. Longer for imports because of the transit  
24 across the ocean.

25 MR. BENEDETTO: Thank you very much. I think

1 that's all my questions. Just for Mr. Levy, your discussion  
2 of the pricing data, when you include that, could you also  
3 talk about how the pricing data as supplied by importers,  
4 the coverage of the -- could you include a discussion of the  
5 coverage of the imports that we have?

6 MR. LEVY: Certainly, happy to do that. Thank  
7 you, Mr. Benedetto.

8 MR. BENEDETTO: Thank you very much.

9 MR. CORKRAN: Thank you, Mr. Benedetto. Next we  
10 will turn to Sam Varela-Molina, our accountant/auditor.

11 MR. VARELA-MOLINA: Good morning, everyone. I  
12 want to start by thanking everyone by making the trip here  
13 today and taking our questions. As a financial auditor,  
14 most of my questions will contain BPI, so I do not have any  
15 information for you today. However, I've already reached  
16 out to some of you by e-mail and I have reviewed information  
17 and if needed, I will be reaching out to you guys for any  
18 additional or any clarification that I need. Thank you.

19 MR. CORKRAN: Thank you very much. We'll turn  
20 next to Mr. James Stamps, our industry analyst. Thank you.

21 MR. STAMPS: Good morning, everyone. I know  
22 we've talked a bit about the manufacturing process, but I  
23 want to return to that topic for just a bit more  
24 clarification. Can you please elaborate on any similarities  
25 or differences between manufacturing processes used to

1 manufacture domestic FEBs and those imported from subject  
2 countries.

3 MR. LEVY: Let me just try to frame the issue and  
4 then I'll turn over to our industry witnesses. I think you  
5 may have gotten, I'm not gonna say, a skewed view, but it's  
6 worth calling out that you heard today from Ellwood and  
7 Finkl. They are unique in the U.S. industry in that they  
8 are vertically integrated and they can self-produce their  
9 ingots, which they then in turn forge and for their  
10 heat-treated machine.

11 There are other U.S. producers of fluid end  
12 blocks, all of whom to our knowledge are buying ingots on  
13 the merchant market. They are not self -- they don't have a  
14 hot end, right? We think that similar to the domestic  
15 industry, overseas in the subject countries, you have a mix  
16 where some of the foreign producers are vertically  
17 integrated in the self-production of ingot and others that  
18 are buying ingots on the merchant market. And some, as was  
19 the case with Finkl earlier in the period of investigation,  
20 it may be a mix where you self-produce, say, alloy and buy  
21 stainless steel ingots or vice versa.

22 So with regard to the issue of self-production of  
23 ingots, we think there's diversity within the domestic  
24 industry and similarly there's diversity in the subject  
25 countries. Now, the other part of your question, I'm sorry,

1 Mr. Stamps, again?

2 MR. STAMPS: That was differences and similarity.

3 MR. LEVY: So I think though that, you know,  
4 putting that aside, there is this issue of open dye versus  
5 closed dye forging. And I was hoping that perhaps Mr. Boyd  
6 can talk about that and what the differences are and how it  
7 compares across countries to the extent he has knowledge.

8 MR. BOYD: We're looking at Exhibit 7 now from  
9 your packet. The photograph on the left is a picture of one  
10 of our open-dye presses. We would take an ingot that's been  
11 heated in a furnace and with flat dyes work that ingot, in  
12 the case of a fluid end block, into a full-string, a  
13 rectangular string. So one ingot would produce one big  
14 rectangular string, which we would then, after  
15 heat-treating, we would then process into individual fluid  
16 end blocks.

17 If we were to try to make a closed-dye forged  
18 product, we would use that same process where we'd take an  
19 ingot, we would forge a string, and then we would cut  
20 individual--we'd call them multiples from that string--and  
21 we would feed that closed-dye press on the right and we  
22 would, with two impression dyes, we would make a contoured  
23 fluid end block from that previously forged ingot.

24 We, in fact, do that today with using this very  
25 same equipment for a couple of customers. But we find it

1 uneconomic, frankly, because essentially we have to make the  
2 fluid end block first on the open-dye press and then forge  
3 it further in the closed-dye press, which just adds more  
4 time, more money, more inventory and, without a good  
5 compelling reason to use a closed-dye press, we see no  
6 advantage and neither do our customers.

7 MR. LEVY: And, Mr. Stamps, just to follow up,  
8 our belief is that Bharat Forge in India uses a closed-dye  
9 press at least in part. And as to the other subject  
10 countries, we don't have adequate knowledge. We suspect  
11 they look a lot more like Finkl in that regard, meaning just  
12 pure open-dye.

13 MR. STAMPS: Thank you. Any differences in  
14 physical characteristics and uses between domestic FEBs and  
15 subject FEBs?

16 MR. SHIRLEY: This is Mark Shirley, Finkl Steel.  
17 I'm not aware of any differences in the fluid ends or their  
18 performance, based on your question.

19 MR. BOYD: I'd answer the same. Scott Boyd.  
20 That we don't see any differences. Again, they are all  
21 custom-made products. The customer gives us a very detailed  
22 specification and says we want this material processed in  
23 this way, and then you have to prove at the end that it's  
24 capable of meeting the properties that were required. And  
25 we do that with every fluid end block order, as does an

1 offshore producer.

2 MR. STAMPS: Thank you. Perhaps I'm asking the  
3 same question a different way, but how interchangeable are  
4 domestic FEBs and FEBs from subject countries?

5 MR. BOYD: Scott Boyd again. Completely  
6 interchangeable.

7 MR. SHIRLEY: Mark Shirley, Finkl Steel. My  
8 answer is the same, completely interchangeable,

9 MR. STAMPS: Thank you. Are you aware of any  
10 trade remedy actions taken by third-party countries against  
11 subject countries related to FEBs?

12 MR. LEVY: Mr. Stamps, Jack Levy for Petitioners,  
13 we are not aware of any.

14 MR. STAMPS: Thank you. Can unfinished FEB  
15 forgings be used for anything else other than for the  
16 production of finished FEBs?

17 MR. SHIRLEY: Mark Shirley, Finkl Steel. No.  
18 Once it's forged out to a block like Mr. Boyd described, it  
19 is fully dedicated to becoming an FEB.

20 MS. SAUNDERS: Kathy Saunders, Ellwood City  
21 Forge. I agree. There are certain chemistries and  
22 configurations of the fluid end blocks. Once it's forged to  
23 that configuration, there's usually no other -- no other  
24 opportunity to use it for something else.

25 MR. LEVY: Mr. Stamps, Jack Levy for Petitioners.

1 Just in the interest of full candor, there are uneconomic  
2 uses for these blocks. You could, you know, put them back in  
3 the pot as scrap. But, you know, there would be no business  
4 reason to do so. So from an economic perspective, once you  
5 go through the great expense of producing to a custom  
6 chemistry and a customs' forging, and a custom dimension of  
7 what you saw in Sample A, at that point you are dealing with  
8 a product that is dedicated for use in a fluid end module.  
9 And all that remains is the finishing so that it can be  
10 employed in that use.

11 MR. STAMPS: Thank you. Can an unfinished FEB be  
12 imported, then undergo transformation processed domestically  
13 to make them finished FEBs? And if so, can you give us an  
14 idea of how often this occurs with unfinished FEBs from  
15 subject countries?

16 MR. LEVY: So -- Mr. Stamps, Jack Levy for  
17 Petitioners again -- if you turn back to Exhibit 2, you see  
18 a continuum of FEB products with different levels of  
19 finishing. You may have customers that in their own spec  
20 are saying we want sample A, or we want sample B. If a  
21 subject producer wins that bid, that's what they're selling  
22 them. And any further finishing will take place in the  
23 United States either internally within the purchaser's  
24 operations, or pursuant to a contract manufacturing  
25 arrangement between the purchaser and an independent machine

1 shop.

2 So the prevalence of that kind of processing from  
3 sample A or B to sample D is as frequent as the demand for  
4 such specifications by purchasers, and the extent to which  
5 foreign producers win those bids.

6 MR. STAMPS: Thank you. Are there separate  
7 markets for unfinished and finished FEBs?

8 MR. BOYD: Scott Boyd from Ellwood City Forge.  
9 No, they're the same markets, and some customers one month  
10 might prefer a sample A block, and another month a sample C  
11 or D block. So, no, there are no other markets.

12 MR. STAMPS: Thank you. This is about channels  
13 of distribution. I know you described that in the  
14 Petition. Can you describe any differences between channels  
15 of distribution for domestic FEBs and FEBs from subject  
16 countries?

17 MR. LEVY: Jack Levy for Petitioners. I think  
18 we'll ask to answer this more fully postconference. But I  
19 think just to give kind of an initial response, our  
20 understanding is that domestic manufacturers are selling on  
21 their own account direct to OEMs. They obviously have sales  
22 representatives, some of whom may be internal to the company  
23 and some that are external.

24 What might be different with regard to certain  
25 subject countries is the extent to which they are affiliated



1 with the U.S. importer of record, or whether the purchaser  
2 itself is a U.S. importer of record. So that would be a  
3 difference in terms of, if you will, the supply chain, or  
4 the structure of channels of distribution, to use that  
5 terminology, but, you know, we don't see, to be more  
6 pointed, the prevalence of independent distributors in this  
7 market.

8 MR. STAMPS: Thank you. And my final question  
9 is: Can you describe any differences in the production costs  
10 and/or sales values of the unfinished and finished FEBs?

11 MR. LEVY: We can speak to that postconference.  
12 Thank you.

13 MR. STAMPS: I thank you.

14 MR. CORKRAN: Thank you, Mr. Stamps. We will now  
15 turn to Mr. Brian Allen, our attorney.

16 MR. ALLEN: Thank you, Mr. Corkran. Can you hear  
17 me? Hello? Okay, thank you, Mr. Corkran. I also  
18 appreciate the witnesses coming to testify today. We always  
19 learn a lot when we hear from people in the industry.

20 In earlier testimony, Ms. Saunders, you had  
21 briefly mentioned that FEBs -- there is some need to be, I  
22 believe you used the words, continually replaced. And, Mr.  
23 Shirley, you had mentioned that stainless FEBs last longer  
24 in use. And, Mr. Boyd, you had mentioned I believe that  
25 FEBs in general are lasting longer currently than they had

1 in the past. And I was wondering if there was any sort of a  
2 general estimate or a time range of how long a standard FEB  
3 lasts before replacement is required. And, of course, if  
4 there needs to be adjustment for that information for  
5 quality of materials, or consistency of use, please feel  
6 free to elaborate.

7 MR. LEVY: Mr. Allen, Jack Levy for Petitioners.  
8 Some of that information is in the Petitions in a  
9 declaration, and we would be happy to elaborate on it in the  
10 postconference brief.

11 The intelligence about, you know, the life of a  
12 block is very much business proprietary, but perhaps some of  
13 the witnesses can speak more qualitatively about those  
14 questions, just to give a little more color.

15 MS. SAUNDERS: Kathy Saunders for Ellwood City  
16 Forge. There's a lot of variables involved in how long a  
17 fluid end block might last, including the pressure under  
18 which it's operated; the shale play or the geography of  
19 where it's operated; the makeup of the fluid that's being  
20 used; how much sand, how much chemicals, and even the work  
21 crew that's operating the pump. Because one of the big  
22 items is maintenance, and that also sort of goes back to the  
23 difference between an alloy block and a stainless block.  
24 Some people have not switched maybe to a stainless block  
25 because they could get a very high life out of an alloy

1 block if they maintain that pump properly. So there are  
2 certain things you have to do to help that.

3 MR. ALLEN: Thank you very much.

4 And, Mr. Shirley, you also mentioned when you  
5 were talking about your company's new stainless formulation  
6 that in certain regards the higher quality of your product  
7 isn't necessarily valued to the extent that would otherwise  
8 justify paying the higher price that it would be.

9 In what respect -- can you speak generally about  
10 where a quality break is for that? Is quality not  
11 necessarily so highly valued in this product such that  
12 people, companies would presumably purchase inferior FEBs  
13 much more frequently instead of buying a higher quality one  
14 less frequently?

15 MR. SHIRLEY: Mark Shirley for Finkl Steel. I  
16 think some of the comments that Ms. Saunders just made are  
17 absolutely correct, that there are so many variables that go  
18 into evaluating the performance of a given fluid end,  
19 including the maintenance practices, and the level of  
20 experience, you know, of a particular crew.

21 So with that said, my experience is that in  
22 general there is a quality bar that you have to, you know,  
23 be beyond. And at that point, if you are accepted as a good  
24 quality manufacturer, then the business becomes commoditized  
25 because you're producing to a customer spec that defines the

1 material properties required, the chemistry, and sometimes  
2 even the specifications on how it's forged, and certainly  
3 how it's heat-treated.

4           So the industry is doing its best to commoditize  
5 the product to get the best price because the purchase  
6 process inevitably falls to price because, you know, once  
7 the quality bar is achieved, that's where you land. And at  
8 the same time, the industry encourages us to develop better  
9 products, but doesn't have a process in place to recognize  
10 the better product that you might develop, which is my  
11 struggle with the HVX, and with the new product, the new  
12 patented product HVX, and I believe, but for the low priced  
13 imports undercutting the price, I think I would have much  
14 more success with that product.

15           MR. ALLEN: Okay, thank you very much. My  
16 last question might be more appropriate for counsel, the  
17 number of HTS categories that were listed in the petition.  
18 Generally, there are other products that are imported under  
19 those tariff lines, and as well as some of the underselling  
20 narratives that were confidential in the petition indicated  
21 a wide range of selling prices for between different FEBs.

22           So considering potential product mix issues in  
23 the HTS categories, as well as even variations in selling  
24 prices, is there any usefulness that the Commission is going  
25 to get out of the AUV data that we're going to be collecting

1 on both of these aspects?

2 MR. LEVY: Limited utility, relying on the  
3 census data AUVs is the short answer. We'll give you a more  
4 complete response post-conference. By contrast, we suspect  
5 that some of the U.S. importer questionnaire AUVs may be  
6 probative of particular prices, you know, separate and apart  
7 from the pricing product information and, you know, where we  
8 think that's probative we'll draw that to the attention of  
9 the staff.

10 MR. ALLEN: Okay. Thank you very much. I  
11 have nothing further.

12 MR. CORKRAN: Thank you, Mr. Allen and thank  
13 you to all of the participants on this panel. It's been  
14 very helpful. I have a few questions, but most of the issues  
15 have largely been covered already. One of the questions  
16 that I have is -- well, I guess there would be a request.  
17 In your post-conference brief, if you present information  
18 similar to Slide 3, could you also provide some -- draw your  
19 time line out a little bit longer in order to provide some  
20 historical context.

21 We're looking at 2016 as the first year of --  
22 or index at 100 for 2016. At least looking at the Baker  
23 Hughes Rig Count, that is just a period of absolute historic  
24 lows for drilling activity. So it would help to put the  
25 more recent time frame in context to also see maybe the

1 prior two years, when rig count was something on the order  
2 of, you know, in some periods four times the level of the  
3 rig count in 2016.

4 My second question is stepping back a little  
5 bit, when we look at published demand information for this  
6 product, should we be focusing primarily on broad oil and  
7 gas indicators or is this a product that is used highly  
8 intensively in the fracking part of oil and gas?

9 MR. LEVY: Jack Levy for Petitioners. I think  
10 that if you look at the product mix of the domestic  
11 industry, I think what you'll find is that they are  
12 competing for sales of both fluid ends used in hydraulic  
13 fracturing pumps, the so-called frack end use, but also for  
14 fluid end blocks that are incorporated into mud pumps, also  
15 hydraulic and used for drilling.

16 Then some of their blocks may get used in, you  
17 know, other applications such as pushing cement down a well  
18 hole or removing particular material during the drilling  
19 process, although those applications seem less prevalent for  
20 U.S.-produced FEBs. I think the answer with regard to  
21 subject imports is the same, that we see all of the above.

22 There may be differences in product mix, but  
23 when you saw I think it was Exhibit 2 or Exhibit 3, I'm  
24 sorry, the two demand drivers that were highlighted,  
25 drilling and frack horsepower and service I think are

1 directionally descriptive of demand for FEBs in mud pumps  
2 and demand for FEBs in frack pumps respectively.

3                   Those aren't the exclusive use of FEBs for  
4 sure, but again directionally it helps to understand the  
5 drivers for demand. Again Mr. Corkran, just to reiterate  
6 the other point, and just again to be very clear, while  
7 these are the demand drivers and the trends are I think  
8 directionally descriptive, there's not a one for one  
9 correspondence.

10                   You heard from Mr. Boyd's testimony that  
11 purchasers may build up inventories of FEBs, that they will  
12 then draw upon to produce modules and deploy them in  
13 service. So there could be a timing issue between, you  
14 know, what's happening in the oil and gas sector in terms of  
15 drilling and stimulation on the one hand and production  
16 activity of fluid ends on the other.

17                   So that's one issue. There's a timing issue  
18 because of the purchaser buildup of inventories. The other  
19 issue is technology that, you know, that there has been an  
20 ability over time to extend the life of a given FEB, whether  
21 through changes in materials or design, or through more  
22 effective and efficient use in the field through better  
23 maintenance. So all of these things mean that the fluid end  
24 modules are blowing out less frequently, and therefore even  
25 for the same level of activity in the oil and gas sector,

1 over time there's less demand for FEBs ceteris paribus.

2 MR. CORKRAN: Thank you. That is really  
3 helpful. I would like to ask a question based on that, the  
4 fracking versus the mud pump applications. Does that have  
5 any correspondence or linkage with the metal type used,  
6 alloy, stainless steel versus non-stainless alloy? Do they  
7 correspond to those applications, mud pump on the one hand  
8 versus fracking on the other?

9 MR. LEVY: Mr. Corkran, we can speak to this  
10 more post-conference. But I think what you witness by and  
11 large is that FEBs used in the mud pump application are  
12 predominantly alloy steel. FEBs used in a frack pump  
13 application are either alloy steel or stainless steel. So  
14 there's overlap, but they're not coterminous. I don't know  
15 if the industry witnesses have anything to add on that  
16 point.

17 MR. SHIRLEY: Nothing to add here.

18 MR. BOYD: Same.

19 MR. CORKRAN: Okay, thank you. That's very  
20 helpful as we look at that information. I'm going to move  
21 off some of that, these technical demand issues. Looking at  
22 the raw materials that are used, can you talk a little bit  
23 about the particular stainless steel grades that you tend to  
24 use? One of the things we try to track is published data on  
25 raw material cost and it helps to know specifically what



1 grade you should be looking at for stainless steel.

2 MR. SHIRLEY: Mark Shirley for Finkl Steel.  
3 Typical stainless grades are 17-4 and 15-5 used in the FEBs.

4 MR. BOYD: I'd add to that. There's a  
5 continuum too. There are developments with less alloy, yet  
6 being stainless and some developments with more alloy  
7 stainless content. So it again depends on the pump producer  
8 and the shell play that they're targeting, how aggressive  
9 they want to be in the material in the fluid end block. We  
10 could give you a more complete list of grades that we've  
11 seen post-conference.

12 MS. SAUNDERS: Kathy Saunders, Ellwood City  
13 Forge. I just want to add that because we do melt our own  
14 steel, we have the ability to dial in on any chemistry. So  
15 it might not be a standard 15-5 or a 17-4. It might be some  
16 kind of a modification to that. So once you have the  
17 chemistry, you're able to look up the indices. It might not  
18 be a standard.

19 MR. CORKRAN: Thank you very much. I  
20 appreciate that. You described what sounds like a somewhat  
21 limited purchaser base for this product, and a fairly  
22 limited number of companies that have the capability of  
23 forging. One of the questions I had is for this industry is  
24 there such a thing as an approved manufacturer's list, where  
25 purchasers have just a listing, sometimes published,

1 sometimes not, of the companies that they will automatically  
2 accept inquiries or bids from?

3 MS. SAUNDERS: Kathy Saunders, Ellwood City  
4 Forge. Most customers will ask you to go through some type  
5 of a qualification process. So they might ask you to do  
6 first article testing maybe on a new chemistry or a new type  
7 of process. In general, you know, once you're approved for  
8 that particular grade, you know, if the design changes on  
9 the block you're still approved.

10 MR. CORKRAN: In terms of geography, how would  
11 you describe your location? A lot of times when we're  
12 looking at the oil and gas sector we see a concentration in,  
13 you know, Texas among other states. Fracking is  
14 geographically a little bit different. How would you  
15 describe your particular locations in Pennsylvania and  
16 Illinois respectively, in terms of proximity to your  
17 customer base?

18 MR. BOYD: I can start with that. Scott Boyd,  
19 Ellwood City Forge. So we -- my company Ellwood City Forge  
20 is located primarily in Pennsylvania, as I commented  
21 earlier, which there's a fair amount of fracking activity in  
22 the Appalachian region as there is in Texas and then into --  
23 and in North Dakota. So from that standpoint, we're sort of  
24 in the middle. Also, many of these blocks, fluid end blocks  
25 that we make will be further machined by someone.

1                    Oftentimes, those contract machining houses  
2 are located in the Great Lakes region, the northern part of  
3 the country. So we're not disadvantaged there. We're also  
4 a little unique in that we have other companies in the  
5 group, within our group that are within Texas. So we have  
6 utilized those facilities when a customer desired us to have  
7 their product closer at hand, and there was never much  
8 advantage. We would bleed but we would do it, keep them  
9 happy so we could cover many part of the country through our  
10 group.

11                    MR. SHIRLEY: Mark Shirley for Finkl Steel. I  
12 agree with Scott's comments that, you know, for our  
13 customers which are typically located in Texas, but will  
14 take title to the block and have us ship direct to a  
15 finished machining contractor, and in that case we're  
16 ideally located because these contractors are in the north,  
17 not far from the Chicago plant.

18                    We also have a location in Houston and, you  
19 know, there are customers that we ship to in Houston as  
20 well. Our Houston facility has machining capacity where,  
21 you know, we'll bring overflow out of the Chicago plant to  
22 be machined there and then shipped direct to the customer.

23                    MR. CORKRAN: Thank you very much. That  
24 provides some very helpful insight into your operations. I  
25 have, I really only have one more question, and that's

1 specific to Mr. Shirley. I wonder if you could explain a  
2 little bit more about the melt shop expansion. I believe  
3 you indicated that that -- did that occur in 2017, or am I  
4 conflating that with the purchase of your company?

5 MR. SHIRLEY: Sorry. Mark Shirley for Finkl  
6 Steel. So maybe there's two parts to my answer. The plant  
7 on the south side where we -- south side of Chicago where we  
8 currently operate today, that melt shop went live in 2014  
9 with three times the capacity of our historical melting  
10 capacity, and initially we were unable to produce our own  
11 17-4, 15-5 type grade stainless ingots. So during the  
12 period of 2015-16 into 2017, we were buying stainless ingot  
13 from other U.S. producers. In 2017 carrying  
14 into 2018, we upgraded our melt shop to be capable of  
15 producing our own stainless. So that may be the question  
16 that you're asking. So now we're -- today, we're fully  
17 capable of making the entire range in house.

18 MR. CORKRAN: Very good. No, that helps me a  
19 lot. So the initial expansion and capacity actually occurs  
20 prior to the period that we're looking at in our  
21 questionnaires.

22 MR. SHIRLEY: Right.

23 MR. CORKRAN: That as you indicated that was  
24 in 2014 you had the expansion?

25 MR. SHIRLEY: That's correct.

1                   MR. CORKRAN:  And from your testimony, was it  
2  -- is it your firm was unable to fully utilize that  
3  expansion until 2017 because of the chemistry issue?

4                   MR. SHIRLEY:  So the demand for stainless  
5  until 2017 was very small.  It really shifted during the  
6  year of 2017 towards stainless, and at that point for the  
7  demand of stainless that we were supplying, we were buying  
8  those ingots from other ingot suppliers, and then forging  
9  out the stainless ourselves.

10                  MR. CORKRAN:  Okay, thank you, and thank you  
11  to the entire panel.  I very much appreciate this.  It's  
12  been very helpful.  Let me turn to my colleagues to see if  
13  there are additional questions.  No, no?  No, all right.  
14  With no additional questions, this panel will be dismissed  
15  and we will take a, just a ten minute break before beginning  
16  the next panel.  Thank you very much.

17                  MS. SAUNDERS:  Thank you.

18                  (Whereupon, a short recess was taken.  To  
19  reconvene this same day.)

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1 A F T E R N O O N S E S S I O N

2 MR. BURCH: Would the room please come to order.

3

4 MR. CORKRAN: Mr. Secretary, are there any  
5 preliminary matters?

6 MR. BURCH: Yes, Mr. Chairman. The Respondent  
7 panel would like to add a witness, Chris Buckley, President  
8 and Founder of ST9 Gas and Oil.

9 MR. CORKRAN: Thank you very much. We will  
10 proceed on that basis and we will turn to the Respondent  
11 panel. Thank you very much for your presentation today. We  
12 look forward to it and you may begin when you are ready.

13 STATEMENT OF LANE BROWER

14 MR. BROWER: Thank you. Thank you for having  
15 me. My name is, for the record, Lane Brower, with SWG. I  
16 am the Director of Sales for North America. My educational  
17 background is in Business Marketing and Tooling and Plastics  
18 Engineering. I have 33 years of experience within the steel  
19 and tooling industries, including machining.

20 SWG, based in Groditz, Germany is part of the  
21 GMH Groupee Group. SWG was founded in 1779 with over 240  
22 years of tradition and experience in the steel industry,  
23 including steel processing, steering systems, forging  
24 technology, and casting technology, collectively, with over  
25 7,000 employees, 20 different companies or divisions, with

1 55 sites throughout Europe. GMH Group offers over 300 steel  
2 brands with over 2,000 analysis modifications.

3           The foundation of SWG has to been to meet or  
4 exceed customer steel specifications, timing, and technical  
5 support for the U.S. market. Fluid ends represent a very  
6 small part of SWG's product portfolio. SWG supplies  
7 unfinished stainless steel fluid ends to U.S. customers who  
8 make finished fluid ends and hydraulic power pumps for the  
9 fracking industry. Fluid ends are relatively a new product  
10 developed within the last 10 years, relying on strong  
11 expertise and focus on specialty steels and technology  
12 innovations.

13           We feel we've become an industry leader.  
14 Quality is the primary factor that drives purchasing  
15 decisions in the industry, along with timing and performance  
16 in the field. We feel our high-quality fluid ends are  
17 uniquely designed to sustain the harsh environment of the  
18 fracking process. Our specialized products are required to  
19 resist corrosion, high pressure, and extreme weather  
20 conditions. We have been part of the strong movement for  
21 total life cycle value that was discussed somewhat in the  
22 earlier discussions.

23           In my capacity as the North American Director of  
24 Sales, I've repeatedly heard from customers -- end customers  
25 that they were forced to search outside of the U.S. for

1 alternative sources because of the quality and performance  
2 in the field and delivery cycles weren't being met. I think  
3 you'll find in some of the post information provided by  
4 these parties to find that very true. We not only deliver  
5 quality products, but we also work with our customers as  
6 well to create excellent steel for their specific need. And  
7 I'll stress again if you can't meet the pour specification  
8 consistently and you can't meet the delivery requirement  
9 you're not even in the game. I'd like to also add to a  
10 point in the earlier discussion that at least we are -- SWG,  
11 we are -- every RFP we're evaluated based upon the ability  
12 to meet the spec -- the pour spec and the delivery and the  
13 technical support to the U.S. market.

14           If you don't meet those three objectives, forget  
15 price. If you don't meet those three objectives, you're not  
16 invited to the RFP requisition. I'll leave it at that.

17           In conclusion, any anti-dumping or  
18 countervailing duties on fluid ends would harm the U.S.  
19 customers in the downstream in the industry for fracking,  
20 which is already bearing the brunt of Section 232 tariffs on  
21 steel products. Since the Section 232 duties became  
22 effective on March 8, 2018, SWG's U.S. customers have  
23 reduced their purchase orders; although, they have not  
24 shifted to domestic sources due to concerns over the quality  
25 and delivery performance with these domestic sources.



1                   SWG believes that subsidy allegations made in  
2 this petition against Germany are unfounded and irrational.  
3 This trade action is unnecessary, disruptive to the U.S.  
4 fracking industry that is served by domestic hydraulic  
5 fracking pump manufacturers. We urge the Commission to  
6 issue a negative preliminary determination to terminate the  
7 action. Thank you.

8                   STATEMENT OF LIAN YANG

9                   MS. YANG: Good afternoon. My name is Lian Yang  
10 from the law firm of Alston & Bird, LLP, Counsel for German  
11 producer SWG. I just have a few words to say in response to  
12 the allegations against Germany.

13                   So, in the past few years SWG supplied only  
14 unfinished stainless steel fluid ends to the U.S. market.  
15 SWG's customers further process the fluid ends to make  
16 finished fluid ends for the aftermarket or to manufacturer  
17 hydraulic power pumps for the oil and gas fracking industry.

18

19                   As you just heard from Mr. Brower, SWG  
20 distinguishes itself from other fluid end products by high  
21 quality, industry experience, reliability, and service. You  
22 may have heard about the product quality argument from many  
23 Respondents in prior cases, but this is not one of those  
24 cases. Fluid ends are a key component used in  
25 mission-critical fracking operations. The fluid ends must

1 perform under super high pressure and extreme weather  
2 conditions and often in remote and  
3 environmentally-sensitive locations. A failure of the fluid  
4 ends in the field could lead to a costly disaster.

5 U.S. customers purchase fluid ends from SWG  
6 because it has the capability to meet the exacting end  
7 application requirements and because there's a lack of  
8 capacity for such high quality stainless steel fluid ends in  
9 the U.S. market. SWG never had one single block rejected by  
10 customers for quality concerns, let alone, failed to perform  
11 in the field. We understand that's not the case with U.S.  
12 producers. SWG strongly believe Petitioners' anti-dumping  
13 and countervailing duty allegations against Germany are  
14 unfounded and the Petitioners intend to use the trade remedy  
15 to drive these competitors completely out of the U.S.  
16 market.

17 We urge the Commission to reach a negative  
18 preliminary injury determination to terminate this action  
19 against Germany immediately. Thank you.

20 STATEMENT OF CHRISTOPHER BUCKLEY

21 MR. BUCKLEY: Good morning. My name is Chris  
22 Buckley and I appreciate the opportunity to join at the late  
23 moment there when I heard a lot of the questions that were  
24 being asked over there I felt as an industry expert I might  
25 be able to help on some of the subsequent questions that you

1 were asking.

2                   So, myself, my name is Chris Buckley, and along  
3 with Nick, I'm the original founder of a company called ST9  
4 Gas and Oil based out of Houston. We started off three  
5 years ago and there's probably 32 people that made the  
6 products that we make and now I claim Number 3 in the  
7 industry behind Weir and -- , so I think that's a tremendous  
8 amount of jump in the time that we've done it. Our sales  
9 target for 2020 is \$230 million, so we're very sizable in  
10 our objectives and where we're trying to get to.

11                   My background, myself, when I left school I was  
12 a machinist, so I've done everything from basics to running  
13 multimillion dollar companies. From being a machinist, I  
14 went back to school and I've got a Master's Degree in Design  
15 Engineering. So, I'm very well educated in the process and  
16 the products ended up running hydraulics for all of  
17 Caterpillar out of Illinois. And that's what brought me to  
18 the States in 2008, then worked for Caterpillar Oil and Gas,  
19 so I ran the fracking part of the frack pump part for  
20 Caterpillar Oil and Gas. And then from then I was recruited  
21 to Weir Oil and Gas, which is Number 1 or Number 2, and I  
22 was the Vice President for that whole division.

23                   And then I 2016, along with Nick, we decided to  
24 break away and set up our own company. So, I thought my  
25 industry experience, my knowledge, my growth strategy, I'd

1 be able help out on some subsequent questions; but Nick will  
2 talk on the relative aspects that we'd like to defend.

3 Thank you.

4 STATEMENT OF NICK PORADEK

5 MR. PORADEK: So obviously I'm Nick Poradek, and  
6 just to kind of follow up on that, too, I want to point out  
7 that we're actually the only OEM in the room, which is the  
8 Original Equipment Manufacturer, so everybody else here,  
9 aside from obviously the legal teams, would be a supplier to  
10 us. So we probably have a lot of various facts and datas,  
11 and we would love to share all of that with you.

12 So to give you a brief history of ST9, obviously  
13 we started about two-and-a-half years ago, three years ago.  
14 In 2017 is when we actually founded. And, short and sweet,  
15 we entered the market. We were number 32. Since then we  
16 have actually gained a ton of market share, and we have  
17 grown to number 3 in the world.

18 A general, you know, history of fluid end blocks  
19 specifically, when we first entered the market we actually  
20 started out-sourcing from Italy. And the reason we started  
21 there is because we were familiar with the product from  
22 Italy, and it was well known to us, and so we went with the  
23 safe bet.

24 After about, you know, six or eight months or so,  
25 we were approached by domestic producers. And we -- with a

1 price reduction -- so we received a price reduction to  
2 switch, made the decision to switch to the domestic  
3 producers. So it was Italy that was undercut by a domestic  
4 producer.

5 And then on top of that, you know, we worked --  
6 in 2019, we would have been the largest purchaser of fluid  
7 end blocks in the United States from domestic producers. We  
8 were the largest customer for domestic producers.

9 The reason we are no longer the largest producer,  
10 or the largest purchaser for blocks from domestic producers  
11 is because of quality issues, technical capability, and  
12 safety-related issues in the field. So those are the  
13 primary reasons why we have chosen to start switching back,  
14 and we switched back to Italy specifically.

15 And in terms of actual general points of  
16 reference for that, so if you talk about quality and  
17 performance, right? So we look at the performance of the  
18 fluid ends. Everything else equal, right? Design,  
19 specification, machining, which we -- forging is usually  
20 purchased separately from machining, I report that out. So  
21 almost nobody has a machine to perform by the actual forger  
22 themselves. A very, very small portion who do.

23 And so the only difference being the forging,  
24 right, using domestic forgings versus the Italian forgings,  
25 we've seen nearly half the life out of our fluid end

1 products in the field. It's a significant drop, right?  
2 We're not talking a small drop, it's significant. And we  
3 have a ton of that, and we're happy to share all of that  
4 with you, and we will.

5 And so that's the biggest thing. Now the hard  
6 part about that is it takes about a year to figure that out.  
7 The blocks live a very long time. They live for about six  
8 months to a year. So it takes awhile for you to learn all  
9 this, which is what we experienced in 2019.

10 Going through that experience, we then decided to  
11 switch back to what we knew worked, and that's what was  
12 done. And I also want to point out, it's price neutral.  
13 There is no difference in price between the Italian and on  
14 our end, obviously, between the Italian and the American  
15 production for forging.

16 And I'll let Chris, because he's actually better  
17 at it than I am, so --

18 MR. BUCKLEY: I was just going to say, as we go  
19 through this process we'd like to be an open resource to  
20 your team to even invite you to our facility, explain the  
21 products, explain how they transform through the different  
22 processes. There's one thing that wasn't spoke about  
23 earlier on, is when the block is forged and then machined,  
24 it goes through a post-processing activity, too. And the  
25 post-processing activity before assembly, and I think this

1 is what may be on the Haliburton side, or what Bharat Forge  
2 offer in India, is the post-processing that nobody talked  
3 about.

4 And post-processing is when you change the  
5 internal bowl configuration of the material and you put  
6 residual surface tracks into the product. And that can be  
7 done through auto footage, which is pressure; it can be done  
8 by chemical; or it can be done by a shop cleaning. And so  
9 that's one of the things that got missed out on.

10 But anyway, when you require information from  
11 which customers and which suppliers and which part of the  
12 value added chain that they do, we believe we have a  
13 tremendous amount of information that we'd love to help you  
14 document and show who machines where, and why, and how.  
15 Thank you.

16 MR. PORADEK: Just to follow up on that, one  
17 other side too is that there was technical capabilities  
18 which was another reason we've actually had to switch back  
19 to Italy. So there were some block compositions that we've  
20 requested, that we attempted to make here in the United  
21 States, and they were unable to produce them. So we had to  
22 switch on that, as well.

23 STATEMENT OF BRITTNEY R. POWELL

24 MR. POWELL: Good morning again. My name is  
25 Brittney Powell with the Law Firm Fox Rothschild. I am here

1 with my colleague, Ron Wisla, and we represent the Indian  
2 Respondent and foreign producer Bharat Forge.

3           Again, we earlier mentioned that Bharat Forge is  
4 the largest producer and exporter of fluid end blocks from  
5 India. Bharat Forge began production in 2009, in that time  
6 frame, and has worked with its U.S. customer over the past  
7 decade to continuously evolve and develop a highly  
8 engineered product.

9           They have consistently enhanced their product  
10 through engineering improvements which differentiates it  
11 from global competition, including the domestic producers.  
12 As a consequence, Bharat Forge's products uniquely meets its  
13 customer's design and performance specifications in ways  
14 that the domestic industry is unable to match.

15           In 2008, Bharat Forge was approached by its  
16 primary customer in the U.S., one of the largest global  
17 technology service company providers engaged in the U.S. oil  
18 and gas industry. Their intention was to forge a strategic  
19 relationship, given Bharat Forge's strong engineering and  
20 innovation capabilities. The ability to provide seamless  
21 capacity with short lead times was also a strong factor in  
22 the formation of that relationship.

23           As a result of Bharat Forge's innovation and  
24 close collaboration with its U.S. customer, it is able to  
25 supply the customer with the value-added product that is



1 finished, pre-stressed, painted and sieved and ready for  
2 use.

3 This has given the company a nonprice-competitive  
4 advantage over the domestic producers. We understand that  
5 the U.S. customer was not satisfied with its earlier  
6 purchases from Petitioner Ellwood. In addition, we  
7 understand that Bharat Forge's customer has never purchased  
8 significant quantities from Finkl Steel and has determined  
9 that Finkl Steel's product did not meet its specifications.

10 Again, Bharat Forge has made significant  
11 investments in its facilities and engineering to develop a  
12 highly proprietary process and a uniquely designed product.  
13 The company recently invested in a closed dye forging  
14 facility with more machining and pressure testing. Their  
15 unique production process changes the shape of the product  
16 and imparts the product's desired mechanical properties.  
17 The result is a superior product with better compaction, and  
18 a stronger material that is able to withstand the ever  
19 increasing pressure used to pump liquids in the fracking  
20 process.

21 Such high pressures are often the cause of fluid  
22 end failure, an expensive problem in the fracking industry  
23 whereby corrosion on the surface of the fluid end can cause  
24 the fluid end to crack.

25 Bharat Forge has filed a patent on its closed dye

1 manufacturing process in 2016, which is pending in the  
2 United States, Europe, and China. This supply condition  
3 differentiates it from global competition.

4 For this reason, Bharat Forge's finished product  
5 that is exported to the United States does not compete with  
6 the domestic industry. Again, we mentioned while the  
7 domestic industry predominantly manufactures unfinished and  
8 semi-finished products, which are very much commoditized  
9 products, Bharat Forge has steadily moved away from the  
10 production of those products and now focuses on producing  
11 the finished prestrep product that its U.S. customer  
12 requires.

13 At the same time, the domestic industry has moved  
14 towards the production of FEBs using stainless steel, while  
15 Bharat Forge continues to predominantly use alloy steel in  
16 its production.

17 Competition is similarly attenuated between the  
18 Indian FEBs and the other subject countries for the same  
19 reasons. Again, the other subject countries predominantly  
20 produce unfinished and semi-finished products. We believe  
21 the Germany and Italian production concern only unfinished  
22 and semi-finished products and, again, do not compete with  
23 the Indian-origin FEBs. And, again, the other subject  
24 countries predominantly use stainless steel in their  
25 production, whereas Indian production is predominantly

1 nonstainless steel.

2           This case clearly requires the Commission to  
3 focus on the conditions of competition. As mentioned in our  
4 opening statement, the health of the domestic industry  
5 mirrors the conditions of the oil and gas market, which  
6 improved slightly after 2016, but turned south again towards  
7 the end of 2018. And the poor conditions of the market in  
8 the interim period impacted not only the domestic industries  
9 but also subject countries.

10           Complaints of decreased profitability during the  
11 interim period are due to those deteriorating conditions in  
12 the market, and not due to the imports from subject  
13 countries which again declined during the interim period.

14           Given this insignificant overlap and the  
15 differences in the conditions of competition between the  
16 Indian origin imports and the other subject countries, we  
17 urge the Commission to decumulate Indian imports from Italy,  
18 Germany, and China. Of course some overlap may exist  
19 because markets do not generally perform in an  
20 all-or-nothing manner.

21           Here, however, we believe the data will establish  
22 that significant market differentiation between imports from  
23 India and the other subject countries is prevalent, and that  
24 any market overlap is not significant. Therefore, the  
25 Commission should examine Indian-origin imports separately

1 from the other subject countries, as they do not participate  
2 in the U.S. market in the same way.

3 To conclude, there is no causal link between the  
4 behavior of Indian-origin imports during the POI and the  
5 condition of the domestic industry. Rather, the domestic  
6 industry's lack or unwillingness perhaps to enhance the  
7 engineering of its product and inclination to supply the  
8 commoditized, unfinished product are the drivers of the  
9 injury they've suffered.

10 While the commoditized product manufactured by  
11 the domestic industry tends to be easily replaceable, has a  
12 lower investment risk, and amounts to less research and  
13 development expenses, it makes the domestic industry more  
14 susceptible to fluctuations in the larger oil and gas  
15 market.

16 That concludes our affirmative presentation, and  
17 we welcome any questions you have.

18 STATEMENT OF JOSH LOWREY

19 MR. LOWREY: Good morning. My name is Josh  
20 Lowrey. I'm the president of Galtway Industries in Houston,  
21 Texas. I'd like to point out, I'd like to begin with an  
22 important fact, that I'm incredibly reluctant to present at  
23 this hearing. I have the most unique background of anyone  
24 in this room, and have the most carnal knowledge of the  
25 commercial aspects of this topic.

1           I've also been told that my input will not  
2 have the same effect, because I only have soft facts and not  
3 hard numbers, although we do have hard numbers but my story.  
4 I hope that my input will be received by a wise group of  
5 people that can see between the lines of a well-crafted  
6 economics question that we're forced to defend.

7           My background has put me in the position to  
8 speak to you today not as a lawyer who's been paid to  
9 memorize numbers, but as an industry participant who knows  
10 that if color isn't added to the picture, the important  
11 details of the canvas might not be recognized. I have been  
12 to Washington, D.C. before in a room similar to this to  
13 speak about U.S. forgings and fluid ends in May of 2014.

14           I was invited to speak at a Congressional  
15 oversight committee entitled "American Energy Jobs:  
16 Opportunities for American Manufacturing." My comments are  
17 on the record and you can see that I specifically reference  
18 fluid ends. At that time, I was asked to speak specifically  
19 because it cannot be argued by anyone in our industry that  
20 -- when I say "our industry," I mean the steel industry and  
21 the oil and gas industry, including the companies and people  
22 that brought us here today, that I'm one of the biggest  
23 proponents of the United States steel business and the  
24 American manufacturing industry.

25           In fact, I actually put my name in the hat to

1 become the president of the FIA when they were looking for a  
2 new president. I felt like I could help the entire  
3 industry. I have tremendous respect for the companies that  
4 have been named, and I have a 30 year relationship with  
5 Ellwood, and a 14 year relationship with Finkl.

6           Even as we speak, my family has worked with  
7 either Ellwood, Finkl or Union Electric since 1971 today.  
8 My father and two brothers proudly work for Union Electric.  
9 If you're counting, that's almost 50 years of partnerships  
10 and relationships that my family has been involved with the  
11 parties involved. I often tell people that Ellwood put me  
12 through college, and it has always been a source of pride to  
13 be associated with Ellwood.

14           I consider many of the senior Ellwood Group  
15 leaders long time friends, mentors and many of the employees  
16 friends. But I've got an essay that I'm not going to  
17 continue on, but I want to finish with Mark Shirley is in my  
18 next paragraph. Mark is -- I've known Mark for as long as  
19 he's been president of the company. Mark is my kind of guy.  
20 He's very competitive, very aggressive and he likes to win.  
21 We like win, and I basically say the exact same comments  
22 with regard to the quality of people at both companies. I  
23 back up what they say.

24           In 2007, my family partnered with Finkl Steel  
25 and developed an indoor powerhouse when making alloy frack

1 blocks. A quick note: It is important to note that the  
2 caveat of alloy fluid ends is important. Finkl became so  
3 enamored with the success of alloy fluid ends that my family  
4 brought to them. They routinely joke that Finkl had become  
5 addicted to the frack pipe.

6                   Unfortunately, this addiction was so  
7 enthralling that they didn't develop other oil and gas  
8 products and made them a non-factor in the American subsea  
9 business that dominated the 2005 to 2014 market. Sadly,  
10 that lack of diversification cost them the most important  
11 decade in the history of offshore and subsea manufacturing.

12                   The reason that's important is one of the  
13 opening attorneys, I wrote Mr. B. I apologize; the guy who  
14 read the initial opening, he kind of nonchalantly said that  
15 the downturn, you know, here's your arguments. You're going  
16 to hear about the downturn, you're going to hear about  
17 quality. Well, just because you flippantly call those out  
18 that doesn't mean that's not the exact reason of what part  
19 of the reason that they went away from them.

20                   So I want to be open and honest. I know --  
21 actually my opening statement goes on for another seven  
22 pages, but I'm not going to bore the rest of everybody here.  
23 It is a breakdown of why business went away from the United  
24 States. Price is not the reason. There are some very  
25 legitimate reasons that this happened, yeah. Josh Lowrey.

1 STATEMENT OF GREGORY GILBERT

2 MR. GILBERT: My name's Greg Gilbert. I'm  
3 also with Galtway Industries. I specifically handle the  
4 pressure pumping and frack market as from a sales and  
5 consulting and supply chain point of view. I've been in the  
6 steel business for ten years. I am probably one of the  
7 younger guys that gets the privilege of doing this, and  
8 there are a lot of perspectives that I think need to be  
9 brought to the attention, because it is not a black and  
10 white issue. It is quite complicated.

11 There are macroeconomics behind it. There are  
12 trends, there are relationships, whether fruitful or that  
13 have been severed, and let's be honest. These are  
14 businesses with both customers and suppliers, and there's a  
15 lot of dynamics that have to be met to have profitable  
16 businesses at every level. So I'll look forward to  
17 answering any questions from a market perspective. I'm not  
18 going to be the guy to tell you how to make steel, but when  
19 it comes to some of the questions we heard on the economics  
20 and some of the information and terminology and where these  
21 parts go, the difference between a mud pump fluid end and a  
22 frack fluid end, there are substantial differences.

23 You can't just call them alloy because there  
24 are big differences between the two. So look forward to the  
25 next session and answering questions.



1                   MR. LOWREY: I want to -- oh, I had mentioned  
2 -- when I mentioned that I'm a fan of the manufacturing  
3 business, up until 2019 I was the youngest advisory board  
4 member of one of the largest oil and gas industry  
5 organizations, Petroleum Equipment Suppliers Association. I  
6 am on the advisory board, I have been. As I mentioned, I  
7 was the youngest member on that advisory board until some  
8 younger guy took my spot, and it is -- the company  
9 represents or the organization represents over 200 member  
10 companies, which represent 500,000 jobs.

11                   So it needs to be -- the bigger picture needs  
12 to be looked at, that this is not a couple of steel mills,  
13 which with all respect I mean I know it's important. But  
14 it's not just a couple of steel mills. We're talking about  
15 hundreds of thousands of American jobs that are tied to the  
16 energy industry, that actively care about this entire  
17 process that we're handling so --

18                   MS. YANG: I think the Respondent panel is  
19 ready for questions. Thank you.

20                   MR. CORKRAN: Very good. Well, if that  
21 concludes your direct presentation, I'd first like to say  
22 thank you very much for being here. We certainly appreciate  
23 it. We find this very helpful, and this is an opportunity  
24 for us as a staff to look at both, as was alluded to, both  
25 hard data and soft information. We try to compile a very

1 complete record and we appreciate your participation in this  
2 process.

3 I'm going to turn first to our Investigator,  
4 Kristina Lara, to begin our questioning.

5 MS. LARA: Thank you all for being here as Mr.  
6 Corkran said. I guess I'll start with kind of the similar  
7 questions I asked the Petitioners about the finishing  
8 operations. There were seven finishing operations that they  
9 identified in the petition, and I'm just wondering if you  
10 all felt that that was exhaustive or if you felt anything  
11 was left out. Particularly I think Mr. Buckley you  
12 mentioned another process that they didn't mention. If you  
13 could expand on that?

14 MR. BUCKLEY: Sure, and one thing is that  
15 everybody thinks they can machine. But just because you buy  
16 machines doesn't make you an expert. So that's one thing  
17 you have to also vertically integrate and grow the business.  
18 So you might have a great forge but you might not be a great  
19 machinist.

20 So when we block, as you saw on the exhibits,  
21 right, it does start off as a forged block, and some people  
22 take it as a solid forge and some people take it with holes.  
23 I'd say the majority of the industry does their own  
24 machining. I think Bharat with Haliburton is the exception,  
25 where they do a lot of machining for them in India. The

1 other one is Gardner Denver. Gardner Denver do a lot of  
2 machining in house now by themselves.

3 We choose to -- we run the "make-buy" strategy  
4 every quarter, and work out whether to invest in machines or  
5 whether we should still contract it out. When we do a  
6 make-buy strategy, it's a very simple cube and you have  
7 proprietary processes you're always going to do yourself.  
8 So we're always going to design, we're always going to do  
9 post-processing, we're always going to do assembly.

10 What we always look for on the other coin is a  
11 -- that we can leverage and work with to get what we need,  
12 okay. So going back to your original question, when that  
13 block then comes and some people will machine it completely  
14 into what you saw on the picture on, I think it was on the  
15 right-hand side. That's what the finished fluid end looks  
16 like.

17 Well they look finished, but are they  
18 finished? I don't know. The only other come to people like  
19 ourselves, the OEMs, and nobody knows what we do after that.  
20 So that's where we do post-processing, and the  
21 post-processing, like I said, can be done three ways. It  
22 can be done chemically and physically with shop -- , or you  
23 can do it hydraulically or with oil or water. What you do  
24 in there is you're putting a determined amount of pressure  
25 in each one of the cylinders. It can be a different

1 pressure and it can be at different times, and the ramp rate  
2 can also be different.

3           When you do that, you put a residual surface  
4 stress into the bores themselves, and you're talking them  
5 both yield but below tensile. One thing, and again when we  
6 talk about proprietary information, there's a strong  
7 correlation between what the producers can produce, either  
8 domestically or internationally on the clipper points  
9 between yield and tensile and it's really important, and I  
10 don't normally talk to the suppliers what I'm looking for,  
11 because I think that's proprietary to ST9.

12           However, things like this are really  
13 important. So that's one thing that was left out. Then I  
14 don't know anybody who actually assembles. Maybe you do in  
15 India, but all the other people in our competition, we don't  
16 do that.

17           MS. LARA: Ms. Powell, you mentioned that  
18 Bharat Forge does mostly finished and non-stainless. For  
19 the finishing, is it just because that's what your client's  
20 demanding, or is that a decision that Bharat made  
21 internally? And for the non-stainless, is that because of  
22 the particular application that you're making it for or --

23           MS. POWELL: We will address most of those  
24 questions in the post-conference brief. Much of the  
25 production is proprietary in nature, and the relationship

1 with their customers is as well. But as far as whether the  
2 customer requires a finished product that you heard earlier  
3 that most of the products are made to order, to customer  
4 specification.

5 So it would be the customer that's requiring  
6 the finished product, and with Bharat Forge's technical  
7 know-how and their engineering of the product to the  
8 finished specifications that the customer requires, they've  
9 been entrusted to do that process.

10 MS. LARA: Okay. And also in your  
11 post-conference brief, if you can address -- I think you  
12 mentioned that Bharat has done proprietary technology. If  
13 you can kind of just detail how that affects performance and  
14 quality, how that technology does that, that would be  
15 helpful.

16 (Pause.)

17 MS. LARA: So do the respondents agree with  
18 Petitioners that unfinished and finished fluid end blocks,  
19 the whole spectrum, should be considered one domestic like  
20 product?

21 MR. PORADEK: So I think first off on as far  
22 as an issue be, we would call finishing up to the machine,  
23 right. There is no post-processing, there's no assembly in  
24 that particular scenario, right? So what people say is  
25 finished machining. So it would be finished, meaning fully

1 machined and then also of course it was forged steel,  
2 because they had to machine something. But that would be  
3 the first big point I just want to make, because there is no  
4 post-processing in that scenario and there is no assembly.

5           An assembly involves the design of multiple  
6 other products which actually go inside this product. So  
7 it's fairly complicated on that side. If you're talking  
8 about is it a forging or is it machined, which would be your  
9 finished machining or semi-finished machining, which means  
10 they rough out, they take off a lot of material but it's not  
11 the detailed machining. That's what semi-finishing is, then  
12 I would say that there is a significant difference because  
13 the Petitioners don't really do --

14           They have the capability to do some finished  
15 machining. They don't have the capacity to handle what the  
16 industry needs, and they've only entered it recently. It's  
17 more of a value added tin for them. The reason they're not  
18 used because there's plenty of capacity and lots of people  
19 with more expertise, and it's readily available.

20           So that's as far as third party. And then on  
21 top of that, many of us as OEMs actually vertically  
22 integrate ourselves, and do the machining. The reason we do  
23 that is to control our design and not allow leakages into  
24 the market, right? So I would say that there is a  
25 significant difference between forging and finished.

1                   MR. BUCKLEY: And I'd add to that is the  
2     forging companies --

3                   MR. BURCH: Will you please identify yourself?

4                   MR. BUCKLEY: I'm sorry. My name's Chris  
5     Buckley from ST9. I'd add to Nick's comment on that is that  
6     the forging guys aren't machining experts. On any quotes  
7     that we received, they're actually subcontracting out either  
8     the roughing or the roughing and the finishing before they  
9     supply to it. So they would be just be brokering it out  
10    anyway and putting an additional margin on it, and then  
11    passing it on to ST9.

12                  MS. LARA: Ms. Yang or Ms. Powell, do you have  
13    any comments on the domestic like product?

14                  MS. POWELL: For the purposes of the  
15    preliminary investigation --

16                  MR. BURCH: Will you please identify yourself for  
17    the court reporter?

18                  MS. POWELL: I'm sorry. Brittney Powell with Fox  
19    Rothschild. Again, for purposes of the preliminary  
20    investigation, we believe there may be one like product.

21                  MS. YANG: Lian Yang, Alston & Bird, we'll address  
22    that in our post-conference submission.

23                  MS. LARA: Are respondents aware of any other  
24    markets outside of the U.S. for fluid end blocks? And if  
25    so, which countries?

1           MR. PORADEK: So the vast majority of fracking is  
2 actually in the U.S. and Canada, so --

3           MR. BURCH: Will you please identify yourself?

4           MR. PORADEK: Oh, I'm sorry. I'm Nick Poradek  
5 from ST9. And so the majority of it would be in North  
6 America, right, specifically there's maybe 7% of market in  
7 Canada and then probably over 85% in the U.S. There's a  
8 little bit in China, but I think most of that's died now.  
9 The Chinese aren't that interested anymore. And then  
10 there's a little it in Russia, but again, it's mostly here  
11 in the U.S. And specifically, it's mostly within Texas and  
12 adjacent areas to Texas.

13           MR. LOWREY: Josh Lowrey, Galtway Industries.  
14 There is fracking growing outside of the U.S. America did  
15 figure out a way to get oil and gas in areas that they  
16 couldn't before out of tight-rock shale. And Argentina is  
17 one of the countries that is developing. The countries that  
18 Nick mentioned. I just got back from Dubai last month, I  
19 guess, and there is a growing fracking industry in China and  
20 interestingly enough, they actually want Western product,  
21 both American and European, in China -- they don't want  
22 Chinese fluid ends, believe it or not. So there are growing  
23 markets outside of the U.S. And, again, this is the future  
24 of how they're gonna get oil and gas.

25           MR. BROWER: Layne Brower, SWG. I agree with his



1 comments in regards to China.

2 MS. LARA: Mr. Brower, you mentioned in your  
3 testimony that -- you kind of hinted that there may be  
4 quality issues with the U.S. product. You mentioned  
5 quality. So can you be more specific? Any details that  
6 you've noticed? You mentioned delivery, meeting the  
7 specifications, quality --

8 MR. BROWER: Certainly. I will not identify the  
9 specific customer, but I think you'll see in the  
10 post-presentations from the industry, well, they will  
11 provide specific data in regards to this failure, with one  
12 specific customer which I will not name. We're all measured  
13 by our past performance, period. Specifically, the ability  
14 to meet pour specification, meet the standard.

15 Secondly, as time and in support of, and with one  
16 of the petitioners, absolute failure. I don't even believe  
17 they're on the RFP inquiries for quotation. In both cases  
18 I'm aware of, from the customer information, there's been  
19 sporadic performance issues that we are all held to here.  
20 And many cases, and I believe you'll see strong evidence and  
21 data, because they track us, that there's significant  
22 failure in both of the Items 1 and 2.

23 So pour specification, inability to execute and  
24 timing. And when you look at the pour specification, which  
25 I believe you'll see strong evidence from these parties,

1 significant failure in the field, which creates catastrophic  
2 problems and cost. And people are sent home. In exchange,  
3 it's fast, 'cuz once you're out in the field, you're out in  
4 the field, and they're just not carrying around frack lots  
5 per se. So I'll answer it with that. We'll provide more  
6 detail in our post-information.

7 MR. BUCKLEY: Chris Buckley, ST9. I'd just like  
8 to support that comment. That when a block is poured, it  
9 has a heat-treatment number, and that comes back from the  
10 forge company, and then that turns into a serial number. So  
11 the product is tracked, all the way from the original mouth  
12 all the way to when it's in the field and each one of our  
13 customers can correlate a failure by serial number all the  
14 way back to the mouth, and so the data that we collectively  
15 can maybe provide is evidence tracked in the field, when did  
16 it go in service, what conditions was applied to that  
17 product, and then when did it fail, and then from our heat  
18 treatment data, or heat code, we can actually determine the  
19 source of that material as well, and so we'd like to provide  
20 post-conference data to support premature failures from  
21 domestic supplied steel.

22 Can I also add to that, is that there's also  
23 safety instances, too. It's not just live data if something  
24 fails 20% early, 50% early, even 5% early. But the safety  
25 issues which, again, we can provide, pictures and data and

1 even customer testimonies where, when these products work,  
2 they rate it up to, I would say it's up to 15,000 psi, so to  
3 put that into context and the tire in one of your vehicles,  
4 whether it be a car or a truck, might be between 30 and 40  
5 psi. So the amount of pressure difference is just  
6 phenomenal, okay.

7           And then take into account what is this pump  
8 pumping? And typically, a pump -- the amount of ingredients  
9 that go into the water is correlated by gallons, so in each  
10 gallon of water, so imagine the little red gas tank, and  
11 then go and put four to five pounds of sand in there. So  
12 it's like a really solid liquid. It's really abrasive. And  
13 then this is going through this pump, typically twelve and a  
14 half hours in psi. And so when these products break and it  
15 squirts out, if somebody was leaning over it when it failed,  
16 it would kill them, okay? And so that's another reason to  
17 where we have documented evidence of product failing  
18 catastrophically which could have caused death or injury.  
19 And that was also part of our reasoning to revert back to  
20 the Italian steel.

21           MR. BROWER: I'd like to add this. One of the  
22 reasons that we were gaining market share with at least one  
23 to two customers was because of horseback so we could need  
24 it, but really, failure in the U.S. marketplace. If there  
25 wasn't a failure, we probably would have minimal amount of

1 business. So that's how we got in, roughly in 2014. And I  
2 believe you'll see that specific information from that  
3 customer in their post, or when they submit on the 14th.  
4 Thank you.

5 MS. LARA: So as petitioners testified, they  
6 mentioned that in the U.S. market, there's a lot of variety  
7 in terms of whether a U.S. producer will do machining or  
8 make their own steel. For those are representing some of  
9 the foreign companies, can you comment on if the markets in  
10 those countries are similar, where it would vary? Or are  
11 they primarily vertically integrated or most of them not  
12 performing the machining aspect? If you could just, if you  
13 have any characterization of those markets?

14 MR. LOWREY: That's a very big question. It's a  
15 long answer. The short version answer is during the heyday  
16 of oil and gas, the large--because of supply-demand, just  
17 time issues--the large companies started requiring their  
18 vendors to do more services, including finished machining.  
19 So when--which is why vertically integrated  
20 companies--really, I mean, unless you're a vertically  
21 integrated company, it's very difficult to compete, it just  
22 is because of the requirements needed.

23 So when they went looking because of various  
24 reasons that we can go over piece by piece if you want, but  
25 when they went looking, they went looking for companies that

1 had machining capabilities and the ability to service from  
2 cradle to grave, for lack of a better term.

3 MR. GILBERT: I want to add to that. It's not  
4 just about capabilities. It's also about capacity and  
5 experience. So when you have a domestic market of producers  
6 that essentially force a customer base to go look elsewhere  
7 because of their inefficiency and then they don't fix those  
8 inefficiencies and five years later, they're blaming the  
9 countries that their customers went to because they couldn't  
10 service them. And so there is a distinct difference between  
11 capabilities, capacity and experience.

12 Also wanna add one on that, on what Chris Buckley  
13 was saying, most of these conversations are centered  
14 strictly around frack pumps. The mud pumps are much lower  
15 pressure. There's a term in the industry, we just call it  
16 "dumb iron". It's a basic alloy, low pressure. It's  
17 basically pumping just water and maybe a mud mix through it.  
18 It's not highly abrasive and it's not high pressure. So,  
19 yeah, and the life cycle on them is much longer.

20 I think many of the producers that you're  
21 questioning, I think some of the data that you're gonna get  
22 back is gonna be quite overwhelming as far as how things are  
23 measured with their customers. It's easy to ask a forger  
24 what they do and most forgers won't know every aspect that  
25 goes through in the field. And there's a lot of in-betweens

1 that can be responsible for that.

2 MS. LARA: Mr. Gilbert, you mentioned that there  
3 was other, there are other things that are different between  
4 the mud pumps and the frack other than the type of steel  
5 that's used. Can you comment on what other differences  
6 there would be?

7 MR. GILBERT: I mean primarily the pressure and  
8 what they're used for. A drilling rig simply needs fluid to  
9 run through the drill bit to break up mud, to drill the  
10 hole. So you only need enough pressure to get down there.  
11 I mean there has been a slight increase in what the  
12 pressure's required, but you know, the complexity of the  
13 frack pump is a mixture of not just pressure, but it's  
14 what's going through that fluid end. And so when you take  
15 that into account, they're honestly not comparable in my  
16 opinion.

17 MR. PORADEK: And just to jump on that in case it  
18 wasn't clear. The reason that the point that he's making is  
19 because the volumes are related mostly to frack fluid ends,  
20 so the volumes technically related to the mud pumps are  
21 much, much smaller. They're also much smaller blocks and  
22 they cost a lot less as well. Just specially from a dollar  
23 perspective, it's much lower.

24 MR. GILBERT: One more thing to add. There was a  
25 comment made earlier by the panel on the complexity of the

1 HTS codes and the different product identification, so the  
2 generic term, fluid end, just means that piece that sits on  
3 the end of a pump. That's just called the fluid end. Now,  
4 you have to get into the details of where it's being  
5 operated, how it's being operated and what application.

6           So the generic term of a fluid end simply means  
7 anything from a pump that fits into your hand all the way to  
8 one that goes on a frack pump. And I think you'll see a  
9 struggle when you're trying to go through these HTS codes.  
10 Not all things are equal when it just gets a designation of  
11 a fluid end.

12           MR. BUCKLEY: To elaborate on Greg's comment, so  
13 a mud pump is pushing a liquid and the mud down. And it's  
14 actually making something move, right? So it's driving a  
15 motor to drill, so that's making a motor run. A frack pump,  
16 when we push this fluid down, the hole has already been  
17 drilled and we do it in stages under the ground and the  
18 increased pressure is causing the earth to crack and then  
19 the sand propagates into the cracks. When the water  
20 dissipates, the sand keeps the ground open, so gas and oil  
21 can be extracted.

22           So one is driving a tool, another one is fracking  
23 the earth. And then it's the same with cementing, which is  
24 the middle one, when people mention cement pumps. And  
25 typically a frack pump can be used for a cement pump, too.

1 And what that is, is pushing cement down the hole and coming  
2 up the annulus to create the tubes to get down to the heel  
3 of the wheel, where we need it.

4 And then the other fourth count degree is pump  
5 down, where tools or retrieving or any other subsequent and  
6 supporting applications in the field is used. It's called  
7 pump down where you typically just pump water down there,  
8 but that's at a low pressure and typically is when the frack  
9 pump is getting to the end of its life that then filters  
10 into that category if that helps.

11 MR. GILBERT: One more comment. To really get a  
12 good picture of the mud pump side of the business, you  
13 really need to explore drilling contractors, because they're  
14 gonna be able to give you a lot more experience on the life  
15 and really how long these things last and the lack of need  
16 for them. It's not necessarily an over-supplied market as  
17 much as just a -- there's no demand in the drilling pump  
18 side.

19 MR. LOWREY: Which actually, Mr. Corkran, that  
20 goes back to your question about needing more data on that  
21 slide that was provided. 2016 was the low for maybe the  
22 last fifty years, maybe even longer. And as you go back and  
23 you're gonna explore the drilling, you're gonna see where  
24 trough has come back, but what you're never gonna see  
25 again--which is why the distinction between mud pump and a



1 frack pump block is important--is the United States will be  
2 able to get more oil and gas with less rigs going forward.  
3 You'll have half as many rigs and I think it's maybe 7- or  
4 800, I should know that off the top of my head, I don't, I  
5 apologize.

6           But it's not gonna rise, it's gonna shrink going  
7 forward. In fact, I just went to the annual IADC, which is  
8 the drilling contractor's organization, their meeting, and  
9 it's a depressed place because they know that if  
10 there's--round number--just fifty drilling contractors now,  
11 that's not what's needed in the future, and that has nothing  
12 to do with anything other than new technologies developed to  
13 get product out. I actually had one of the drilling  
14 contractors tell me, he's, like, "I may never have to buy  
15 another mud pump block ever again."

16           MR. BUCKLEY: I'd encourage you to, when you pull  
17 the data, to source experts on understanding that data. A  
18 good correlation, or sorry, one of the correlations, but  
19 it's not that good anymore, you talked about rig count  
20 earlier on, efficiencies is a big thing which has come into  
21 this as well, right, as people have tried to have energy  
22 independence, you'll see the rig count go down, but over the  
23 time period I've been in the business, drilling, rig  
24 efficiency might have quadrupled, okay? So you need less  
25 rigs to drill the amount of holes that you need, not

1 necessarily a retraction in demand, although that is there,  
2 too, right.

3           So think about the factors that you're  
4 correlating to work out demand and it might be stages  
5 fracked under the ground, or, say, the amount of hours,  
6 because the stage is typically a two- to three-hour section  
7 under the ground before they keep on moving back and working  
8 their way out of the stage. However, they can be three  
9 hours, they can be two hours, so I'd quantify it by the  
10 amount of hydraulic horsepower in the industry, which might  
11 be 15 million hydraulic horsepower. And then also the time  
12 worked in hours. And then there's lots of documented record  
13 on how this is established.

14           MS. LARA: Does anybody have any insight into the  
15 shift between, or the shift from nonstainless to stainless  
16 and maybe what was driving that in 2017?

17           MR. BUCKLEY: I know about this, because this is  
18 when I first got into oil and gas in 2011. And it was  
19 through Caterpillar. Caterpillar got into the fracking  
20 business. They got into the fracking business because  
21 they're the largest supplier of transmissions in the  
22 industry and one of the largest engine suppliers. So it was  
23 a nice part to add the frack pump, so I'm very familiar with  
24 this.

25           I'd actually go back to say it was stainless

1 steel started raising its head around 2013, it wasn't 2016.  
2 Now, when it became prominent, it might've been where these  
3 guys -- and that's when the volume ramped up, it took a lot  
4 of people to work out the reasons why. And the reason why  
5 stainless steel is so predominant is called stress corrosion  
6 cracking. And so the mixture is pretty corrosive.

7           You'll see it on your vehicles, right? If you  
8 leave your car for a week, you'll see on your brake disks,  
9 you know, you've got a glaze of corrosion on there. So it  
10 acts very fast. And so inside these pumps, they would  
11 corrode the alloy steel, which then caused an indentation,  
12 and then through high pressure, it then propagates out and  
13 manifests out into a crack and then a fracture.

14           And so that's why stainless steel is so good is  
15 because the chrome within the mixture helps the corrosion  
16 properties of the fluid and so you don't have stress  
17 corrosion cracking. I'd say the other reason why people  
18 went to all stainless steel or predominantly stainless  
19 steel, again with Halliburton have some secret source, and  
20 again, that's their business, but they seem to really love  
21 alloy, and I go back to post-processing, what do people do  
22 with this material after they've taken it from the forge  
23 company, which is everybody's secret magic?

24           Is it the stainless steel people don't know where  
25 they're gonna do, work on a job which is 6,500 psi? They

1 don't know whether they're gonna do it on a 12,500 psi.  
2 They don't know whether they're gonna be on two pounds of  
3 sand or six pounds of sand. And we don't know who's gonna  
4 doing 15% acid, because the customer, the well service  
5 company that works for the MP, doesn't know that the job is,  
6 people like to standardize.

7           So if you can standardize, you have flexibility.  
8 You have flexibility, you can reduce and control your costs.  
9 And that's why a lot of customers, the ball sizes we didn't  
10 talk about in the fluid end. There's different sizes as  
11 well, relevant to pressure or what you want to produce. Is  
12 it flow or is it pressure from the horsepower that makes the  
13 plungers go in and out of the fluid end?

14           So again, people will standardize on 4-1/2"  
15 plunger, stainless steel quintuplexes because people didn't  
16 talk about triplexes which is a baby version of the  
17 quintuplex pump. So people ended up standardizing stainless  
18 steel, the size of the plunger, just purely for flexibility,  
19 so you could go anywhere in the country, you could then work  
20 for any E&P company that put their quote out for you. So  
21 that's the history of stainless steel.

22           MR. PORADEK: So to follow up on that, the one  
23 thing to point out, so excluding Halliburton, who still use  
24 a lot of alloy steel blocks, and that's partly because they  
25 have their own proprietary design and a whole proprietary

1 supply chain, right? Which obviously Bharat is a part of.  
2 But aside from them, I'd say it's more than the vast  
3 majority of the market is now stainless steel. And the  
4 reason for that being is because as a general trend, as a  
5 rule of thumb, they live for about three to five times  
6 longer than the alloy steel block. And that it's pretty  
7 simple, when you talk about total cost of ownership, if it  
8 lives three to five times longer, but doesn't cost three to  
9 five times more, you can most likely use a stainless steel  
10 block. And that's why the general trend for the industry is  
11 to switch towards stainless steel.

12 MR. BUCKLEY: Again, Chris Buckley, ST9. You  
13 gotta look at the history of stainless steel and who's good  
14 at making it. And the guys actually admitted what they did.  
15 They used to buy the raw ingots themselves. Up to only a  
16 couple of years ago, because they didn't have the knowledge  
17 to make the stainless steel composition. And maybe this is  
18 maybe one of the indicators on quality, both Finkl and  
19 Ellwood have only recently started melting their own  
20 stainless steel at the melt level into the original ingot.  
21 Again, before, it used to be sourced. Where the companies  
22 in Europe that I've been working with have been melting  
23 stainless steel way into the last century, right into the  
24 1900s, and I think that comes with part of the expertise in  
25 all what's happening. Just a point of reference.

1           MR. GILBERT: To add on Chris' timeline, I agree  
2 with that 2013 timeline. You can even look as back as far  
3 as 2009, and I think from some of your producer  
4 questionnaires, you're gonna see that.

5           I think you'll also see some pretty important  
6 information on -- that goes back to one of my earlier  
7 comments on availability and how the U.S. OEMs that engineer  
8 and make these parts were forced to look at other places  
9 strictly out of availability and capacity and then it just  
10 so happened that the sources they found were hundred-year  
11 experts in those materials.

12           And that is was not a matter of pricing, it was a  
13 matter of a mixture of supply chain issues. If you have a  
14 domestic producer that says, "No, I don't wanna make  
15 stainless for you," what is that customer supposed to do?  
16 Go, "Pretty please?"

17           You know, they go find another source, and they  
18 spend a lot of money qualifying these forge shops and steel  
19 mills. They put a lot of programs in place that are very  
20 stringent qualifying programs. You make them, they run them  
21 in the field, the prove out their product and that's just  
22 part of the supply chain. And that when earlier comments by  
23 the petitioners on the RFP process, all that's taken into  
24 account.

25           You send out to eight guys and all eight of 'em

1 quote, not one of 'em gets the entire order. There is a  
2 process in that. And that needs to be taken into account on  
3 that timeline is, if you look at it right now, yeah, they  
4 are capable of making technically those products, but  
5 there's gonna be data revealed that shows the reason why the  
6 demand curve has done what it has done for the domestic  
7 industry.

8 MR. BROWER: I'd like to add to that, too. It's  
9 a key statement there. They're not gonna award, it's not  
10 "all or nothing" based upon price. It's definitely the  
11 quality, timing and then the support. But in no case have  
12 we been awarded an RFP a 100% ever. So, thank you.

13 MR. LOWREY: Back to the opening comments, Mr.  
14 B--I forget to get his name, I apologize, but the downturn  
15 was one of the reasons that he said we might use. Well,  
16 anybody can make money at \$140 a barrel. Just anybody.  
17 It's what happens when oil goes to \$26 a barrel, which is  
18 what happened to us in December of 2015, where 400,000  
19 people were laid off. Think about that. Just let that  
20 number soak in.

21 If that was in Pennsylvania, Ohio, Canada, or you  
22 know, wherever the automotive industry--no disrespect to the  
23 automotive industry--but if we weren't oil and gas people  
24 and lose 400,000 jobs, it would be a national nightmare and  
25 it'd be on the news.

1           You probably didn't even know--I mean you guys  
2 might--but the average person doesn't know that the oil and  
3 gas industry lost that many jobs. A generation of  
4 employees, gone. Some have found their way back, but many  
5 are not ever coming back.

6           And so during that downturn, the industry had to  
7 figure out who it was and what it's gonna do. I had one of  
8 the fluid end OEMs tell me, "Josh, if you can get me to 900  
9 hours on an alloy block, I'll give you 100% of my business,"  
10 and you know, now, I wouldn't think any of us would look at  
11 900 hours, it's just child's play, right? Especially when  
12 compared to stainless. But at the time, I mean I was, this  
13 is one of the top five people out there, and he's gonna give  
14 me all his business if we can get to 900.

15           So we realized, and the industry realized that  
16 the terms, that the term that was being used, and now it's  
17 called -- it used to be called "lower for longer", meaning  
18 we're gonna just have to keep waiting, the price'll come  
19 back up. Well, the price is just now hitting levels that  
20 any of us remotely care about.

21           So the new phrase is "lower forever". We are in  
22 a "lower forever" environment with oil and gas, worldwide --  
23 fact. And because of the "lower forever" numbers they had  
24 to make, they couldn't keep having alloy blocks last 500  
25 hours or even 900, so the switch came when -- all the



1 reasons that they mentioned, and that clients had to figure  
2 out a lower total cost of ownership, to learn how to be  
3 profitable at about \$35 to \$50 a barrel oil. And if they  
4 can't do that, then nobody can play.

5 MR. GILBERT: And to add on that, they had to do  
6 it quickly. They couldn't wait four years for a domestic  
7 supplier to come online with a vertically integrated option.  
8 So there was a time crunch involved on that, too.

9 MS. LARA: That concludes my questioning. Thank  
10 you.

11 MR. CORKRAN: Thank you very much, Ms. Lara. And  
12 now we will turn to our economist, John Benedetto.

13 MR. BENEDETTO: Thank you all very much. If any  
14 of my questions touch on anything that's confidential,  
15 please just say so and then follow up postconference.

16 So, Mr. Gilbert, you referred a little bit to  
17 this, but I just wanted to get everyone's thoughts on this.  
18 Do you agree with the testimony this morning -- and I'm  
19 going to paraphrase it here -- that basically your typical  
20 OEM has a list of approved suppliers. The RFP will have a  
21 list of specifications, and then they said the competition  
22 is based on price. And I know there's been some  
23 disagreement with that, but is that basic structure the  
24 right idea? Or are there some details missing there?

25 MR. PORADEK: So I'd like to jump in on that.

1 Nick Poradek, ST9. The answer is, yes, we have approved  
2 vendors' price. We have approved suppliers. However,  
3 within that grouping, right, there's obviously different  
4 levels of performance and different levels of quality.  
5 That's one way we quantify.

6           So we look at -- we look at a supplier, and we  
7 then look at the data we have for said supplier's product.  
8 So bear in mind that when we talked about it earlier, right,  
9 we handed the same spec, and everything else was the same to  
10 two different forging companies, right, that we saw. It's  
11 over a 50 percent decrease in life as a result -- bear in  
12 mind, the same specifications, right. So if you're talking  
13 about from a lot of the companies, both of those companies  
14 would have been on an approved vendor list because, yes,  
15 they could both meet said specifications.

16           However, the reality of it is that the  
17 performance was a 50 percent decrease for the same product,  
18 that should have been the exact same product. So there's  
19 also like a soft touch that you have an approved vendor  
20 list, and then you have what actually functions the best  
21 within that vendor list. And it's actually a pretty small  
22 selection of people.

23           MR. BENEDETTO: Anyone else?

24           MR. GILBERT: Greg Gilbert, Galtway Industries.  
25 The short answer is, yes, usually, at least in my

1 experience. Again, I don't deal with two of the larger  
2 producers that maybe Bharat services, but as far as the  
3 customers that I have direct dealings with, there is always  
4 an RFP process. And there's an initial phase, and then  
5 there's usually a second phase.

6           And you can get, you know -- there's several  
7 reasons why you could get nothing, and reasons why you can  
8 get a small percentage. But it's always divided up. Unless  
9 it's a short, a quick, small volume spot buy, which usually  
10 the lead time is the most critical, and then of course  
11 history and economics behind it. But there's always an RFT  
12 process, and there's always usually -- usually always two  
13 stages in that. And never is it single source.

14           And the reason why many of these OEMs don't want  
15 a single source is, I mean you can go to the insurable  
16 reasons of fires in your forge shop, all the way down to  
17 redundant capacity. These guys have gotten to a point to  
18 where they're smart enough to know that many of the forging  
19 guys listed on both the -- by the Petitioners in the U.S.  
20 and abroad, only have so much capacity. And they know that  
21 they have more than one customer.

22           And so there's a limited amount of capacity. It  
23 goes back to that. Some of the numbers I've seen, a guy --  
24 just because you can make something doesn't mean a guy is  
25 going to buy everything from you. And that's how the global

1 market and supply and demand works.

2 MR. LOWREY: Josh Lowrey, Galtway. Or that you  
3 would even take that. I mean, these are smart companies  
4 back here, and they're not going to put all their eggs in  
5 one basket. No company would. So you just wouldn't.

6 MR. BENEDETTO: Okay. We've touched on this a  
7 little bit with Ms. Lara's questions, but what would make  
8 performance less reliable, or a product less long lasting?  
9 Would it be because it doesn't meet the specs you offered?  
10 Is that what would happen? Why would it fail or not work as  
11 long as another one, if they're all made to the same specs?

12 MR. BUCKLEY: Yeah, that's part of the secret  
13 sauce, right? So some variability to track inclusion. So  
14 when you make -- the reason why you forge and you don't cast  
15 is, and you saw through the hammer process, right? And you  
16 compress the material. You're reducing the grain structure.  
17 So imagine like a brick wall when everything is being pushed  
18 together. As you push the bricks closer together, you make  
19 the cement smaller in the brick wall. And so if you add a  
20 route for the fluid working its way out to the outside,  
21 it's limited, right? So we specify a grain structure which  
22 is the size of the grain, and then we specify a cleanliness.

23 So how often can you have an inclusion within  
24 that metrics, right? And I believe that there's more  
25 inclusions that aren't detected in certain people's steel to

1 other people's, and that would give you the difference. So  
2 you could have the same amount of chrome, the same amount of  
3 nickel, you could have the same yield strength, the same  
4 tensile strength. However, the ability for the fluid inside  
5 to find a route out, and then turn into a failure, is the  
6 reason why.

7 MR. GILBERT: Greg Gilbert with Galtway  
8 Industries. I can't speak, because I'm not a metallurgist  
9 or a forge master by any means, but I can say with  
10 confidence that just because it looks the same doesn't mean  
11 it's the same.

12 A forge press that may be 3,000 tons versus 5,500  
13 tons versus 6,500 tons, each one of those presses is all  
14 going to have their individual efficiencies. And that  
15 includes the steel-making process and what size you're  
16 pouring the ingots in, and how to meet these specific  
17 specifications with metallurgical terms like reduction  
18 ratios, and grain sizes. All these things matter in the  
19 process.

20 It's not just taking this formerly molten piece  
21 of steel that's poured into an ingot, running it across any  
22 forge press you want, and then getting an end product. It's  
23 a very complicated process, and I would suggest maybe an  
24 independent forge master that's impartial to both sides can  
25 supply much more detailed information on that.

1           MR. PORADEK: Nick Poradek, ST9. So just to  
2 follow up a little bit, too, though. So, yes, you're right.  
3 So if you gave -- in this example where you have the same  
4 specification, given the two, and then obviously we saw a  
5 significant difference in performance.

6           So first off, we're spending a lot -- we figured  
7 this out in 2019. So right now we're spending a lot of  
8 money trying to figure out the exact specific answer. What  
9 we can say is, as a general trend, though, is we have  
10 noticed that the ones with hundreds of years of experience  
11 seem to have performed better. And so it might have  
12 something to do with experience.

13           We think right now, based on what we've  
14 determined so far, that it has more to do with the  
15 measurement to those specifications, right. So there's a  
16 specification. We ask for certain requirements. And then  
17 how do you measure that you actually hit those requirements?

18           So we think it has a lot to do with the  
19 measurements. That's where our thoughts are right now.

20           MR. GILBERT: Greg Gilbert with Galtway  
21 Industries. I think one more thing you'll find from some of  
22 the foreign suppliers' responses is how they've optimized  
23 their efficiencies within their shop, too. A lot of  
24 investments have been made in taking the air out with  
25 automated equipment, whether that's in the heat treat side,

1 or the  
2 post-heat-treat inspection.

3 I think you'll see a lot of differences between  
4 some of the foreign guys and all that plays into, you know,  
5 if it doesn't meet the spec, catching it before it goes out  
6 into the field and leads to a catastrophe.

7 MR. BENEDETTO: Mr. Lowrey, I haven't seen your  
8 testimony yet. You said you were going to talk a little bit  
9 about demand. I'd just like, if anyone would comment,  
10 including Mr. Lowrey or anyone else. Mr. Lowrey, you said  
11 there were macro economic things. If you could talk a  
12 little bit about the details of what's been going on with  
13 demand for FEBs since 2016, that would be really helpful.  
14 Maybe just a summary, if you don't want to give a high-level  
15 picture.

16 MR. LOWREY: Yeah, I try to stay in my lane,  
17 first of all. Josh Lowrey, Galtway Industries. You know,  
18 demand since 2016, it's again a very loaded question. You  
19 have companies that demand before that was just outrageous.  
20 I mean, everybody -- I mean there was so much private equity  
21 money out there that people would -- money was free. You  
22 could get a couple million dollars to start a frack crew  
23 with a couple of your Odessa friends and just go out and  
24 start fracking. I mean, really, that's what it was. It was  
25 insane.

1           And so during the downturn, those guys went out  
2 of business. So you lost just demand because there was  
3 people that really shouldn't of had \$10 million that had it.  
4 Then when it picked back up, again I don't want to even make  
5 it out to sound like it's the same demand as before. It's a  
6 different demand. You're not talking about the wild west of  
7 pre-downturn. You're talking about a much more calculated  
8 demand from the oil and gas market.

9           You can look up any public companies' earnings  
10 calls, and they are going to start with how they control  
11 cash now, right? It's all about controlling cash. It's  
12 about-- the reputation that oil and gas guys get is that we  
13 spend whatever we get. There's a reason that there's a  
14 bunch of movies about us.

15           But the reality is that, you know, that's not  
16 what the new investor wants. The new investor wants  
17 controlling cash flow. So any demand that's come up is --  
18 you know, there's what's called a DUC, drilled but  
19 uncompleted. And there's many thousands of DUCs out there  
20 now where the drilling rig guys went out and drilled a  
21 bunch of wells and then capped them and waited for the  
22 demand to come back up to where they could go then out and  
23 frack the wells, DUCs.

24           So you have over 5,000 DUCs still out there to be  
25 fracked. So, you know, demand has a lot to do with the



1 economy, the price of oil. You know, what makes it a  
2 sustainable number to send a frack crew out there?

3           The other thing about demand -- and Ms. Saunders  
4 pointed it out in her testimony -- you know, these guys have  
5 developed better maintenance programs, right? Because of  
6 that loss of 400,000 jobs, the people they did bring back,  
7 they tried to bring back the cream of the crop of their  
8 operators, or roughneck rig hand guys, to where they  
9 wouldn't -- they just weren't throwing a fluid in the way,  
10 honestly, like they were doing. I mean, you've got to think  
11 how expensive these -- these are cars that they were running  
12 for 400 hours and throwing away a brand-new, you know,  
13 Mercedes every 400 hours is the cost of it, essentially,  
14 selling it for scrap.

15           So demand is market driven. Price of oil. The  
16 demand for -- that oil field service companies comes on,  
17 that comes from whatever the EMP guys -- those are the  
18 Exxons, Anadarco, those types of companies, that they  
19 require.

20           So you just -- you know, one of the other phrases  
21 I mentioned, "lower for longer, now lower forever," and then  
22 the other reality is that really any of us are only as good  
23 as our partners. I mean, if you don't have a good partner  
24 from the top down, you're in trouble anyway. If you are not  
25 partnered with the right type of EMP company, that's

1     partnered with the right type of oil field service company,  
2     that's partnered with the right type of manufacturer, that's  
3     how little room for error there is in our business anymore.

4             It used to -- like I said, I've just mentioned to  
5     you a couple of ways you can go out and do this. That is  
6     the wild west of oil and gas. Go look at any earnings call,  
7     is over.

8             MR. GILBERT: Greg Gilbert with Galtway  
9     Industries. To add on that from the demand side, there's  
10    some very reputable analysts out there. You know, when  
11    people were asking questions on, well how's business? And  
12    they'll tell you, well, that depends on who your customers  
13    are. Because this business is riddled with people that do  
14    business, right? It's riddled with people that cut  
15    corners. And it's starting to lose the people that were  
16    just bad offenders.

17            So if you're partnering with the right people,  
18    you know, and that supply chain works, it's really hard to  
19    get these guys out of their comfort zone. They want  
20    consistency. They can't afford any mistakes that cause cash  
21    flow blips on earnings calls. And if you go back and look  
22    at some of them, even in the past four years there's been  
23    earnings calls that have blamed failed forgings for missing  
24    targets, to the tune of \$8 to \$12 million. That as back at  
25    the end of 2015.

1           And there was another one in 2017 and 2018 where  
2 these guys publicly had to make right for their supply chain  
3 shortcomings. And most of it was blamed on the forging  
4 suppliers.

5           MR. LOWREY: And I want to be clear, we're not in  
6 any way insinuating that these guys don't have good  
7 partnerships, because actually they do. We all sell to many  
8 of the same customers. So they do have a lot of, you know,  
9 the Tier 1 OEMs that they deal with.

10           So I mean we're all trying to find out position  
11 into the right supply chain.

12           MR. PORADEK: So just to -- Nick Poradek, ST9.  
13 This actually used to be my job at Weir, so this is a fun  
14 one. I was actually a senior financial analyst at Weir, so  
15 my job was telling them what their demand would be in the  
16 future for, you know, upcoming years based on micro events  
17 and then also technology that was developing.

18           So to follow up on that, so we talked about a  
19 downturn that started in 2015. That was driven by the price  
20 of oil. The price of oil was well over \$100 at that time,  
21 right? So there's a lot of inefficiencies in the fracking  
22 technology. As a result, the cost was higher. But when  
23 it's \$100 and your cost is \$80, you're still making \$20 in  
24 profit per barrel, right?

25           Now then as that drove down, the price of oil

1 dropped down into the \$20s, and then it moved back up into  
2 the \$30s, and later the \$40s, obviously the cost of  
3 production was still higher than the actual cost -- or the  
4 price you could get barrel of oil.

5           So what of course every company sets about doing  
6 is applying technology, supply chain pressure, and trying to  
7 work their cost of production down. That's what they've  
8 done, and that's where that really started heavily in 2016.

9  
10           The cost of production -- and bear in mind, it  
11 used to be nearly \$80 to \$90 -- is now closer to \$40 for the  
12 same price of oil in fracking, right? So that's why they  
13 call it lower for longer. The price of oil hasn't increased  
14 because, guess what, we're profitable at \$50, \$70. The oil  
15 company is now profitable at that range because their cost  
16 of production has decreased so much. So that's the initial  
17 trend, right?

18           Then there's the trend on the equipment side,  
19 which we are here for today, right? So obviously we're an  
20 equipment provider. There's service companies who use our  
21 equipment to do work, and then there's oil companies who own  
22 the wells and sell the oil, right? And then also have  
23 refineries and such like Shell, for example. On the  
24 equipment side, and the fluid end block side, the pricing  
25 hasn't gotten better even though volumes have actually

1 increased over the last couple of years, or since 2016,  
2 because, yes, more wells are being produced because, yes,  
3 they've gotten more cost effective to produce because they  
4 got their cost of production down, right? So they're more  
5 profitable on the operator's side, which would be the guys  
6 who own the wells.

7           However, unfortunately, in the middle on the  
8 service company side the reason we haven't gotten pricing  
9 back, and the reason why it continues to decrease, is  
10 there's an excess amount of service companies out there.  
11 There's a lot of them. There's about twenty-five million --  
12 and I think actually the Petitioners actually have some of  
13 this data in their information, they said there's about 14  
14 million that's actually being used, about 25 million out  
15 there that's capable of being used. Obviously when there's  
16 nearly half of the horsepower available, not being used,  
17 pricing pressure continues. It's that simple for that,  
18 right? And this is all domestic.

19           So as a result, the pricing pressure continues  
20 for everybody downstream of that, which would be your  
21 equipment manufacturers, which is us, and then the suppliers  
22 to the equipment manufacturers which is the forging  
23 companies and the machining companies. And then of course  
24 all other components. Across every single product line we  
25 have, we've seen pricing decreases -- we're having to give

1 pricing decreases, right? It's a given. And the same thing  
2 for our customers. They're having to give pricing decreases  
3 to do the work, just to keep working.

4 So, yes, volume have gone up, but pricing  
5 pressure continue to go down. So the main thing earlier was  
6 they said all this pricing decrease was driven by foreign  
7 suppliers. It's not foreign suppliers. It's pricing  
8 decrease across the entire industry.

9 You look at our customers, half of them have  
10 negative margins or single-digit margins. You look at OEMs,  
11 most of them are in single-digit margin. You look at our  
12 suppliers, they're probably in single-digit margins. It's  
13 just pricing pressure across the entire industry, right?  
14 That's where the pricing pressure comes from. It's not  
15 foreign guys coming in and providing ridiculously low  
16 prices. It's the reality of we don't want to go bankrupt,  
17 so we're pushing for pricing decreases in that scenario, if  
18 that makes sense.

19 MR. GILBERT: Greg Gilbert with Galtway  
20 Industries. To add what supply chain pressure means, from  
21 the EMP setting criteria for the operator, the operator  
22 setting criteria for their engineered product suppliers, in  
23 this came EOM, and the OEM setting criteria to their  
24 suppliers, this industry ran with so much fat on it because  
25 it was just so used to being able to do whatever it wanted,

1 it focused in all the wrong places.

2           So they have cut out deficiencies. So machine  
3 shop to machine shop -- and I'm not a machining expert, but  
4 I can tell you that these guys have calculated it down to it  
5 should only take you this long to machine a fluid end. And  
6 why am I paying this much? You know, because three of these  
7 guys are doing it at this rate, and then there's a fourth  
8 guy doing it at this rate, and he's over there wondering why  
9 he can't get business. But maybe he didn't invest in the  
10 right tooling, or the right fixturing, or he has an asset  
11 that's 15 years old and the people he's competing against  
12 are running assets that have new technology and are one year  
13 old.

14           So it really exposed who is efficient at making  
15 what, from the EMP all the way down to the operator, all the  
16 way down to a guy that makes safety gloves. I mean, this  
17 industry has been forced to look at things differently, and  
18 that's why the term "supply chain pressure" doesn't mean,  
19 you know, dump the lowest price. It means who is the most  
20 efficient to support the business, at whatever level that  
21 is?

22           MR. PORADEK: To follow up on that too, there's  
23 the technology side, right? So, of course, there's pricing  
24 pressure across the industry, right? So, there's two ways  
25 to tackle it, try to force cost down and then or apply

1 technology that allows you to ultimately reduce cost through  
2 longer life of said product, right, which is during the  
3 2016, 2015 is the start of an increase -- the steel supply  
4 first, the stainless steel. That's why is because  
5 stainless steel lives longer, so the market started heavily  
6 transitioning, right? It was no longer a matter of, well,  
7 maybe I'm in the mood to transition. I was I may go  
8 bankrupt if I don't transition. So, that's why a lot of  
9 service companies started heavily transitioning at that  
10 time.

11           And then, to follow that up to you, right,  
12 within the stainless steel sector, right, so the OBMs who  
13 are purchasing stainless steel you've seen a trend, as they  
14 pointed out, towards Italy. Well, we were a little slow to  
15 learn the trend, but we did eventually get there. The  
16 reason why is because within the stainless steel sector the  
17 Italian blocks were living longer and we know of other  
18 competitors who've seen similar performance as a result too,  
19 so that's one of the big reasons.

20           MR. BUCKLEY: So, I think you've seen a trend.  
21 Them guys over there made a comment that when oil's high it  
22 causes a lot of inefficiencies and everybody can make money.  
23 And as it comes down, it makes everybody become more  
24 efficient and it's who can react and be more efficient. And  
25 you ask yourself how can a couple of guys working for one of



1 the Majors go from Number 32 to Number 33 in less than three  
2 years, right? It's all about efficiencies in technology --  
3 Number 3. I'm going backwards. And we focus on value.  
4 It's all return on investment and also technology. So, I  
5 think by the end of the next quarter we will have submitted  
6 nearly 20 pounds from our company, so it's all about  
7 technology and how do you bring in technology from the  
8 automotive section and aerospace and so we're the first  
9 people to make the first truly electric frack pump, right,  
10 with integrated electronics and so you've got to move to  
11 stay alive and make the right investments at the right  
12 time.

13 MR. LAUREY: One of the questions about the 2016  
14 timeframe, one of the important things to note about 2016 to  
15 now is that's the year that our company stopped working with  
16 Finkl. We were with Finkl until -- and the reason -- the  
17 company that we're with now in Italy the guy was one of the  
18 most visionary thinkers really in our industry. And again,  
19 I would've said that back when I worked with Ellwood as  
20 well.

21 He came over to the States, saw what a frack  
22 pump was, and realized that that was the future of oil and  
23 gas. Went back to Italy and to his family business and said  
24 we are going to be come as automative of a forging company  
25 as possible. Put millions and millions of Euros into it --

1 investment into it and before it came to fruition he died in  
2 a car wreck. When he died in a car wreck, they had  
3 basically built a super -- a forge-specific run similar to  
4 what Mark was kind of talking about. They built it and the  
5 company had no way to then get into the United States. They  
6 were selling a little bit -- actually, they were selling to  
7 one of the Majors -- the Number 1 at that time, actually,  
8 SPM, and the -- when we moved to Finkl and our network --  
9 again, I mentioned that this is my 20th year in the industry  
10 and my family's been in it for 70 years.

11 This is a relationship game as much as anything  
12 too and there was a lot of -- we saw the technology that  
13 Italy had and we had not seen it prior to that. We saw the  
14 opportunity to the stainless that they were leading the way  
15 and we knew they were leading the way because we'd competed  
16 against them, so that's part of why the numbers to Italy  
17 look different is a large -- I don't want to self-serve, but  
18 I mean, but our group was able to -- you know we knew that  
19 industry better than anybody else and we knew that the shift  
20 was going to stainless really before anybody else. We were  
21 able to move as quickly as we possibly could.

22 MR. BENEDETTO: This morning we heard testimony  
23 -- and this is what Mr. Laurey calls the "soft data," so I'm  
24 not necessary asking for hard data, but if you have some  
25 that would be great, but we heard sort of the soft data that

1 imports can be sometimes 25 to 50 percent less expensive  
2 than U.S. product -- the FEBs with fluid ends I guess you  
3 all call them. Is that your impression? Anecdotally, is  
4 that your impression of the cost or the prices in the  
5 market?

6 MR. PORADEK: From our side, obviously, I can't  
7 speak to their actual cost. I mean, directionally, if I  
8 were picking one who I thought would have a cost advantage I  
9 would say it probably be the U.S. suppliers, aside from  
10 China, though, because they're obviously subsidized. We all  
11 know that. But if you talk about the actual cost advantage,  
12 I would say the U.S. suppliers and the reason for that being  
13 is because they can buy the scrap because remember all the  
14 fluid ends are being used in the U.S. and so the fluid ends  
15 are therefore fail in the U.S. and scrap is here in the  
16 U.S. They're actually able to buy exact specification  
17 scrap, so scrap that nearly perfectly meets what they're  
18 needing in the melts for a significantly lower price.

19 People overseas have to obviously start with  
20 scrap that doesn't have exactly what they want and then they  
21 have to add in, so if you can buy scrap that's near perfect  
22 when you melt it, it should be significantly cheaper.  
23 That's from my understanding. I can't speak to any more  
24 that. What I can say on our side, though, is when we're  
25 looking at what prices are provided to us by the forging

1 companies, the ones that we solicit from, we can say that  
2 it's pretty close to -- when you talk about an FOB  
3 perspective, which is what you guys have requested, it's  
4 pretty close to cost neutral. I mean we're talking within a  
5 percent or two. It's very, very cost neutral for us today.  
6 However, when you're talking about flange costs, it's  
7 actually more expensive for us to buy from Italy, so from  
8 our perspective there's not a price reason to switch to  
9 Italy. It costs us more.

10 MR. BUCKLEY: And I encourage you to when you  
11 look at the cost analysis this breaks up -- and people  
12 provide how much we buy a block for and then how much they  
13 sell them for and Nick's point was that in the U.S. the U.S.  
14 suppliers have the benefit of the scrap being returned  
15 direct to the forge company, so it's the perfect chemistry,  
16 but when we sell those back to them it's only 10 percent of  
17 the price that they sell it back to us, not even, right,  
18 but I'll let you make that determination yourself. But I  
19 ask you to look at how much the scrap goes into them for,  
20 then how much they want to sell me the block back for, and  
21 where does all that money go in between. There's plenty of  
22 opportunity there to be profitable.

23 MR. PORADEK: And just so it's on the record,  
24 it's \$400 a gross ton is what we get for scrap. That's what  
25 we get, so if you look at a fluid end it's about \$1400 is

1 what they would spend.

2 MR. BENEDETTO: Any other impression on price in  
3 the U.S. market -- comparative prices? And then, Mr.  
4 Poradek, you raised the issue of China. I know they're the  
5 only -- there's no one representing the Chinese industry  
6 here. What role do Chinese FEBs play in the U.S. FEB --  
7 fluid end market? Are they large share, small share, or do  
8 you see them a lot?

9 MR. PORADEK: So, I think there's two sides to  
10 that question. So, I think it's what percentage is imported  
11 and then I think what percentage is actually used. To my  
12 knowledge, I don't know of any of my customers that  
13 specifically use Chinese fluid ends, so I think a portion of  
14 that Chinese percentage that's imported might be slightly  
15 skewed and the reason being is because there's Chinese OEMs  
16 who've tried to set up here and you have literally millions  
17 -- actually, probably hundreds of millions of dollars worth  
18 of block sitting that they can't sell. So, yes, they  
19 would've imported it. It would show up as a percentage of  
20 import, but I don't think a huge portion of that's being  
21 sold.

22 MR. GILBERT: Tagging onto that, that again  
23 plays into the focus of the overall market as total cost of  
24 ownership. Price is not everything. You know could buy one  
25 of those Chinese fluid ends at a very low price, but if it

1 doesn't perform in the field at the expectations that  
2 everybody throughout that supply chain has, then nobody's  
3 going to buy it.

4 MR. PORADEK: And just to follow up, we have one  
5 our customers who's actually told us that they've had offers  
6 from Chinese companies at nearly 20 percent of the price  
7 that we would sell it for, so I mean it's significant and  
8 people still don't buy it from them. So, I don't think --  
9 that's why I say I don't think those blocks are actually  
10 being sold. They maybe being imported, but I'm confident  
11 they're actually being sold.

12 MR. BENEDETTO: That's fascinating. I mean do  
13 you have any evidence of that you can put on the record that  
14 would be great. I mean I understand it might just be an  
15 impression.

16 MR. PORADEK: Yes, I can provide you emails to  
17 confirm that. Yes.

18 MR. LAUREY: I can back it up. We don't really  
19 run into China ever. I don't ever see China.

20 MR. BENEDETTO: Do you think it's been imported  
21 and it's just sitting in the United States somewhere?

22 MR. LAUREY: Yeah.

23 MR. BUCKLEY: Can I make a reference to that  
24 too. So, through my career, I started off with Caterpillar  
25 and I've built facilities in China for Caterpillar. And in

1 China you can get world-class product -- SKF bearing  
2 manufacturer. They make bearings in China. They just --  
3 what's allowed to come in and what they've used internally  
4 and so you know China does make great product. It doesn't  
5 mean they make bad product, but sometimes they do and  
6 everybody makes good product and everybody could make bad  
7 product. And then what you will find in the frack blocks  
8 the customers have a stigmatism against China for one reason  
9 or another, even though the product could be okay. But you  
10 will see imports of well service product on the Christmas  
11 trees. So, when our product pumps and then goes to the  
12 Christmas tree, which is on the wild head, a lot of that  
13 product is supplied by China now. Yes, it just got tires as  
14 well.

15 MR. GILBERT: I was speaking strictly on frack  
16 pumps -- frack pump fluid ends. I can't really attest to  
17 the mud pump fluid inside. Instinct would tell me it's  
18 probably much more prevalent on the mud pump fluid end as  
19 far as China goes.

20 MR. PORADEK: And to follow that up, that's also  
21 -- so, we were referring to the frack pump fluid ends. On  
22 the mud pump side, they may be more prevalent.

23 MR. BENEDETTO: Thank you all very much.

24 MR. CORKRAN: Next, we'll turn to Samuel  
25 Varela-Molina, our Accountant/Auditor.

1                   MR. VARELA-MOLINA: Yes, I have no questions for  
2 this panel today. Thank you.

3                   MR. CORKRAN: Thank you very much. Let me turn  
4 next to James Stamps, the Industry Analyst.

5                   MR. STAMPS: Thank you very much for your  
6 presentation today. I want to return to -- I know we've  
7 heard a lot about the manufacturing process, but I wanted to  
8 return to the notion of interchangeability and specifically  
9 how interchangeable are FEBs produced in the United States  
10 with those imported FEBs from the subject countries.

11                   MR. PORADEK: Nick Poradek, ST9. So it  
12 depends on what your qualifications. If you're talking will  
13 parts fit in it? Sure, depending on the design. Assuming  
14 they both made the same design, parts will fit in it. Will  
15 it function the same and live as long? No.

16                   MR. GILBERT: Greg Gilbert, Galtway  
17 Industries. I would say whether it's a domestic supplier or  
18 a supplier in Germany or Italy, if they're presented with a  
19 drawing and a purchase order, I would say they're both going  
20 to produce to that drawing, and that purchase order. So on  
21 the surface, they're going to look identical if it's to that  
22 specific drawing.

23                   But keep in mind, most of these OEMs have two,  
24 three, possibly four material specifications that they're  
25 working to and probably between legacy products and current



1 products, there's a handful of different criteria for that  
2 question. It's not quite that simple.

3 MR. STAMPS: Thank you. I have a few  
4 questions just to round the circle on some issues. Can the  
5 unfinished FEB forgings be used for anything else other than  
6 for the production of FEBs, finished FEBs?

7 MR. LOWREY: Paperweights. Yeah, I back up  
8 what Finkl and Ellwood said, nothing.

9 MR. BROWER: Thank you. Layne Brower, SWG.  
10 Concur.

11 MR. STAMPS: Are there separate markets for  
12 unfinished and finished FEBs? Are there separate markets?

13 MR. PORADEK: Nick Poradek, ST9. So there  
14 are, but the majority of the market is here in the United  
15 States.

16 (Off mic comments.)

17 MR. PORADEK: And to further follow that up  
18 too is that bear in mind. So if you're talking about is  
19 there separate markets necessarily for the forging  
20 companies, it's probably not because most of the OEMs are  
21 here in the United States on top of that.

22 So if you're talking about like, for example,  
23 activity that might be in the Middle East or Russia or China  
24 aside from the Chinese-made, it's mostly exported from the  
25 United States to those countries, which means the forgings

1 would have come into the United States for those companies  
2 that are OEMs.

3 MR. STAMPS: Thank you. Can you describe the  
4 channels of distribution for FEBs produced in the United  
5 States and those imported from the subject countries?

6 MR. PORADEK: So there's two channels of  
7 distribution for any fluid end blocks. It's either going to  
8 an OEM, who then manufactures them and, you know, finishes  
9 all the other portions of it, and then sells them to a  
10 service company. Or if the service company has integrated,  
11 vertically integrated their own designs and does not  
12 purchase from an OEM at all, it would go directly to the  
13 service company. So instead of going to a service company,  
14 it's going to an OEM. That's the only channels.

15 MR. GILBERT: Greg Gilbert, Galtway  
16 Industries. On the frack fluid end side, it is my opinion  
17 that it is all direct order from the OEM, whether they're  
18 vertically integrated or not. It will be from a source that  
19 has the engineered parts. On the mud pump side, I would --  
20 it's easy to assume, and I'm sure you'll validate that, that  
21 there is a pretty broad distribution network. Excuse me, on  
22 the mud pump fluid end side.

23 MR. STAMPS: Thank you. Question about  
24 production costs and/or sales values. Mr. Poradek, you  
25 talked a bit about scrap prices. Are there differences in

1 production costs and sales values between unfinished and  
2 finished FEBs?

3 MR. PORADEK: Yes sir, because obviously  
4 you've got to go through -- an unfinished FEB would just be  
5 a block of steel, which is just the forging, and then of  
6 course you have to machine it, you have to post-process it  
7 as well. And then you'd actually -- if you're talking about  
8 a fully completed block that we can sell, you have to  
9 assemble it and put all the other components to go with it  
10 into it as well. So there's a significant difference  
11 between those two.

12 MR. GILBERT: Greg Gilbert with Galtway  
13 Industries. I would also say that every frack fluid end  
14 block that these guys order, whether it's unfinished or  
15 finished, has gone through a machining process. Nobody gets  
16 an as-forged product. So again, that falls back into the  
17 manufacturing side down to the forge masters. How close can  
18 they cut it, how minimal can they make the material removal,  
19 and all that lends itself to efficiencies and costs, rather  
20 than just selling it whatever price they want.

21 MR. LOWREY: Actually, what he just said  
22 really can't be understated. If you go again \$140 oil,  
23 mistakes can be made. If you go look at these forgings a  
24 couple of years back, I mean you've got -- the way it works  
25 you've got the raw material on the press. It gets pressed,

1 it's moving and you've got different laps.

2           They don't let that happen anymore. They  
3 really try to true square up these blocks to be -- because  
4 the least amount of material you have to remove post, the  
5 better. That's machining time, that's material loss. So  
6 the efficiencies along the press are just -- I mean it's  
7 key. It cannot be understated.

8           MR. GILBERT: Greg Gilbert, Galtway  
9 Industries. That would even go all the way back to the  
10 melting practices and what sizing they're pouring. You can  
11 even start there. So like I said, not all things are equal.  
12 Terminology is the same but the process is not.

13           MR. PORADEK: Nick Poradek, ST9. So from an  
14 OEM's perspective, typically a forging would be the block we  
15 receive from the forge house. That's typically what we  
16 would call forging. They are right. There is trimming,  
17 there is some machining that's done to it. From our  
18 perspective though, it's mostly -- we call it a forging.

19           Then you would take that forging and you'd  
20 have what's called rough machining, which is you rough out  
21 the shape right, and it's not perfect. But it gets most of  
22 the material off into the net shape you want. Then you have  
23 what's called finished machining, and that's very high  
24 tolerance, very time consuming. That's basically a  
25 perfectly machined block at that point.

1                   Then there's the post-processing, which was  
2                   discussed, and then there's the assembly. That's kind of  
3                   how we see it in general.

4                   MR. STAMPS: Thank you. There was a mention  
5                   early in the presentation about the 232 tariffs. I just  
6                   want to throw that back out at you. Any comments on the  
7                   impact of the 232 or the 301 tariffs on your imports of  
8                   products used to produce FEBs?

9                   MR. BROWER: Layne Brower, SWG. Yes, we're  
10                  impacted severely.

11                  MR. GILBERT: Greg Gilbert with Galtway  
12                  Industries. My background in steel distribution at an early  
13                  part in my career has connected me to my still-existing  
14                  network of friends and colleagues that still run those steel  
15                  distribution facilities, and all of their products were  
16                  subject to 232. Many of them were buying from Italy and the  
17                  UK and Korea, several other parts and not having quality  
18                  issues in the field. It really wasn't based on prices.  
19                  Again, it goes back to capacity. If Timken Steel gives you  
20                  a 40 week lead time and somebody in Italy gives you a 25  
21                  week lead time at a higher price, depending on your business  
22                  model you may have to pay it.

23                  So 232, and there probably will be something  
24                  submitted on this from some of those guys, has impacted  
25                  their business very negatively.

1                   MR. LOWREY: In fact, I mentioned earlier that  
2 I'm on the advisory board of PESA, Petroleum Equipment  
3 Suppliers Association, and the -- when we had our call with  
4 reference to this, many of companies like ST9 jumped on it,  
5 SPM, Gardner Denver, Haliburton and then their clients  
6 amongst -- I mean really there was 20 or so companies on the  
7 line.

8                   I was surprised to see how many steel  
9 companies, steel distribution companies jumped on the line  
10 that don't touch fluid ends. The reason they got on the  
11 line was to make sure that people knew be careful what you  
12 ask for because you just might get it. If you go back and  
13 look at Timken, for instance, which Ellwood is -- you know,  
14 they own -- actually I'm pretty sure they own. I'll be  
15 quiet, but the -- part it, sorry, the stock. I'm getting  
16 tripped up here.

17                   But there was, you know, an immediate hurray,  
18 we did it, great for us and the stock price goes up. Well  
19 go look at their stock price now. It's down again, and the  
20 customers are furious with Timken, and this is not me saying  
21 this. This is them saying this. The lead times went out,  
22 service went down. Their supply chain was thrown into a  
23 flux at a time when again lower for longer and lower  
24 forever, is it's real.

25                   And the -- again, I was very surprised with

1 the support that those companies that have been impacted by  
2 232, because we're not impacted by 232, they wanted to offer  
3 to this hearing.

4 MR. STAMPS: Thank you. Again, I'll put this  
5 out to anyone. Have there been any changes in operations  
6 such as plant closings or openings in any of the subject  
7 countries during the Period of Investigation?

8 MS. POWELL: Brittney Powell for Fox  
9 Rothschild. Bharat Forge did open a closed die production  
10 facility during the Period of Investigation.

11 MR. STAMPS: And my final question is are any  
12 of you aware of any trade remedy actions taken by third  
13 party countries against the subject countries related to  
14 FEBS?

15 (No response.)

16 MR. STAMPS: Okay, thank you.

17 MR. CORKRAN: Thank you, Mr. Stamps. Next  
18 we'll turn to our attorney, Mr. Brian Allen.

19 MR. ALLEN: Thank you, Mr. Corkran. Is this  
20 on? Okay. Thank you to the industry witnesses. We always  
21 appreciate you guys coming to Washington and giving us  
22 perspective. My question is directed toward counsel for  
23 this panel, as well as any counsel for Respondents that are  
24 in the audience or who might be reading this transcript  
25 before the deadline.

1                   Might be reading this transcript prior to the  
2                   deadline for submission of post-conference briefs. Please  
3                   indicate in your briefs, as Ms. Lara started, whether or not  
4                   you agree with the definitions of the domestic industry and  
5                   the domestic like product as proposed in the petition and  
6                   the petition amendments, as well as if you have any events  
7                   or information to examine of related parties, whether or not  
8                   you think there are any related party issues in this  
9                   investigation. I have nothing further.

10                   MR. CORKRAN: Thank you, Mr. Allen. I wanted  
11                   to thank the panel especially. We've got just a broad range  
12                   of experience that helped color this presentation. It was  
13                   very helpful to us as a staff. We very much appreciate it.  
14                   I do not have any questions to follow up on. Let me turn to  
15                   my colleagues, just to see if there are any additional  
16                   questions. Any additional questions? No, okay.

17                   Well with that, we'd all like to thank you  
18                   once again. We will go ahead and dismiss this panel. We  
19                   will allow about five minutes just for everybody to gather  
20                   their thoughts, and then we'll go into closing statements.  
21                   Thank you all very much.

22                   MR. BURCH: Will the room please come to  
23                   order? Closing and rebuttal remarks on behalf of those in  
24                   support of imposition will be given by Myles S. Getlan of  
25                   Cassidy Levy Kent. Mr. Getlan, you have ten minutes.



1 CLOSING STATEMENT OF MYLES S. GETLAN

2 MR. GETLAN: Good afternoon. Thank you to all  
3 of the staff here who's listened to the last close to four  
4 hours of testimony I guess. A lot has been thrown at you no  
5 doubt, as is the case in most staff conferences. I will use  
6 my time to try to make sense of what you've heard, at least  
7 put it in context for the report that you're responsible for  
8 issuing, and the decision that the Commission has to make,  
9 and with particular reference to the relevant legal criteria  
10 for that decision.

11 First on the topic of like product, I won't  
12 belabor the point. We'll of course address these issues in  
13 greater detail based on the record as it's developed in our  
14 post-conference brief. But we would want to reiterate that  
15 we do believe that there's a single like product here, that  
16 the imports covered by the scope and the U.S. producers of  
17 fluid end blocks produce a single like product.

18 There are of course differences in the  
19 products at issue here. But these are essentially a  
20 continuum of products, and as you see on Exhibit 2, there's  
21 been a lot of reference to Exhibit 2 today, but it really is  
22 a good demonstration of that continuum. There are no  
23 significant dividing lines between products that are of  
24 different levels of finishing in particular. We also --  
25 these are all fluid end blocks used for the production of

1 fluid ends and hydraulic pumps used in the upstream oil and  
2 gas sector.

3                   Of course there are differences I say, but  
4 they form part of the continuum and with really significant  
5 differences. Whether you're talking about fluid ends for  
6 mud pumps or frack pumps, there is overlap in material,  
7 alloy, dimensions, weight. And again, we'll make reference  
8 to all the relevant like product criteria in our  
9 post-conference brief. But we stand by that. The  
10 definition is of a single like product.

11                   On the issue of cumulation briefly, again the  
12 record as it will develop and exists today supports  
13 cumulation of subject imports from all four countries.  
14 There was some argument today about attenuated competition  
15 between imports from India and other countries. Again, I  
16 think the record will quite clearly show the extent of  
17 overlap that is necessary to cumulate imports of India with  
18 all other subject imports.

19                   There is a mix of products that are finished  
20 or semi-finished as there are from other sources, domestic  
21 and foreign. They're all present in the market. Other  
22 areas of overlap that we'll clearly be able to demonstrate  
23 and compel a decision to cumulate subject imports from all  
24 four countries. So on that basis, I think the record as it  
25 is evolving shows that cumulated subject imports from these

1 four countries are a cause of material injury to the  
2 domestic industry, and it is inflicted to that injury  
3 through increased volumes at low prices.

4           On the volume aspect, there is no doubt that  
5 the volume of imported fluid end blocks is significant.  
6 Here, I want to pay careful attention to the relevant  
7 period. When we talk for this preliminary phase a period  
8 that begins in 2016 and goes through interim 2019. I  
9 reiterate that, because there was a lot of comment in this  
10 last panel about developments that preceded that period of  
11 time.

12           Some of it is interesting, but from a legal  
13 perspective the Period of Investigation here begins in 2016,  
14 and o whether stainless, you know, emerged in the market in  
15 2013 or 2015, you know, whether 2006 to 2015, which Mr.  
16 Lowrey pointed out as a great decade of opportunity. Again  
17 perhaps interesting, but not really relevant here.

18           What is relevant is from 2016 on, subject  
19 imports were significant, from 2016 to 2018 increasing. We  
20 think the record will show upwards of 600 percent plus  
21 increase in imports during that period, and in doing so  
22 during that period took enormous market share from the U.S.  
23 industry, producers such as Ellwood and Finkl losing that  
24 market share. In the interim period, imports you'll find  
25 declined a bit, but not nearly to the extent that there -- I

1 think we'll find the decline in apparent domestic  
2 consumption, and we will see continued share gains even in  
3 this down period in the market.

4           To be clear, Mr. Lowrey referred to my partner  
5 Mr. B, that would be Tom Beline several times, referencing a  
6 downturn in the market. What we're talking about here,  
7 because the relevant time period is 2016 to 2019, the down  
8 period that he was talking about is in 2019. That's where  
9 we see continued market share loss at the hands of  
10 low-priced subject imports.

11           To be clear, our industry, the domestic  
12 industry had the capacity during that period to produce the  
13 full range of products. So there's really no explanation  
14 for that surge in imports during the relevant period. We  
15 contend, and we think the record will show that the  
16 explanation for that surge in imports and market share gain  
17 is price, the low prices of subject imports.

18           Here, the record will show that purchases are  
19 made on the basis of price. We do not dispute that quality,  
20 timing and performance are relevant factors to purchasing  
21 decisions. Of course they are. But once a producer is  
22 meeting that level and meeting those standards, it does boil  
23 down to price. We think the record will clearly show this.

24           In fact, you know, there were a lot of  
25 comments in the prior panel about the performance and the

1 quality issues that relate to domestic production and their  
2 products. We dispute that and we will -- we think the  
3 record will absolutely confirm it. If our clients and this  
4 industry, they do not receive routine data on product life  
5 of a fluid end block. But you know, if you think that  
6 there's any less attention to safety and quality by  
7 family-owned U.S. manufacturing companies such as Finkl and  
8 Ellwood, give me a break.

9           This is -- they are in the market and to Mr.  
10 Brower's point, I think he actually makes it quite clear.  
11 If you're not making quality products, you're not invited to  
12 the RFP. That's what Mr. Brower said. They're not even in  
13 the game. Well let me tell you, the domestic industry,  
14 domestic producers like Ellwood and Finkl, they are  
15 routinely throughout the Period of Investigation, invited to  
16 the game. They're part of the RFP process.

17           What happens is they lose those RFPs on the  
18 basis of not being price competitive. We think, as we think  
19 the record will show this, low prices by the imports. No  
20 doubt the preliminary record is going to be spotty in  
21 places. We will address that in the post-conference brief,  
22 not unique to this case. But there is plenty of evidence,  
23 including of lost sales and lost revenues that we allege in  
24 the petition, and that will be corroborated by certain  
25 purchaser questionnaire responses we believe.



1 Rothschild. Thank you again for the opportunity to appear  
2 today. You've heard that several factors distinguish the  
3 Indian origin FEBs from the domestic market, such that they  
4 do not compete, nor do they compete with subject imports  
5 from the other countries.

6 First, the domestic product and those of the  
7 other subject countries are using the stainless steel.  
8 They've moved toward that during the Period of  
9 Investigation. The Petitioners said that the shift was due  
10 to dumped, subject imports.

11 First, Indian production does not use  
12 stainless steel, so it cannot be cause for the move to their  
13 stainless steel in the domestic market. Second, you've  
14 heard from the Respondent panel that the shift towards  
15 stainless steel was precipitated by the demand in the market  
16 for more enhanced product that lasts longer in response to  
17 supply conditions in the oil and gas market generally.

18 Second, Bharat Forge employs a closed die  
19 forging process, which again enhances their product and  
20 their engineering, machining, and it makes for a superior  
21 product. One of the Petitioners stated that closed die  
22 forging is uneconomic from their perspective, that it adds  
23 more time, money and inventory.

24 With respect to the Indian experience, the  
25 closed die production process has been a worthwhile

1 investment. Its customers appreciate the enhanced product  
2 that is the result of it, and again another example of the  
3 lack of competition amongst those industries. Third, the  
4 Indian origin products are predominantly finished. As  
5 mentioned, the finishing operations are not minor and are  
6 among the reasons why its U.S. customer has formed a  
7 strategic relationship.

8                   We also want to clarify that I believe the  
9 Petitioner noted that there are no vertically integrated  
10 U.S. producers. There is one that we're aware of, Eastham  
11 Machining based in Houston, Texas, and that's just a point  
12 for the record. You've also heard that quality issues and  
13 technical capabilities are drivers of purchasing decisions.

14                   That's certainly the case and with respect to  
15 Bharat Forge and Indian experience. The Petitioner Finkl  
16 acknowledged that at a certain level of production, you're  
17 dealing with a highly commoditized market. Bharat Forge has  
18 differentiated its product from the commoditized product in  
19 its finishing operations and its value added production  
20 process. The quality reasons you've heard are also why some  
21 OEMs have begun to source from subject countries.

22                   Finally, you've heard a lot of -- several  
23 economic factors that have occurred with respect to the oil  
24 and gas market that are strongly at issue here. We urge the  
25 Commission to delve into some of these macroeconomic issues,



1 in order to assess the conditions of competition in its  
2 injury analysis. I'll cede the rest of my time to Ms. Yang.

3 CLOSING STATEMENT OF LIAN YANG

4 MS. YANG: Lian Yang, Alston and Bird. I'm  
5 going to be very brief, since everyone skipped lunch to be  
6 here. I think first of all thank you for the staff for the  
7 opportunity. I'm thinking there are two very clear messages  
8 from the panel this afternoon.

9 First, there's a shift from domestic sources  
10 to imports from Germany and Italy because of quality.  
11 Domestic suppliers, their products were rejected, no more  
12 failure. I think the record is going to provide you the  
13 evidence. Quality is not one -- again, the quality argument  
14 here is not one of the type of argument you have heard in  
15 prior cases, because the fluid ends is such a critical  
16 component of the -- in the equipment.

17 The second message is that there was a shift  
18 from alloy fluid ends to stainless steel. The shift is  
19 significant and it appears that the domestic industry was  
20 very late in the game, and they have trouble adapting to the  
21 market changes. Lastly, Section 232. SWG has been paying  
22 Section 232 25 percent tariffs on these products, and we  
23 were surprised that this issue, this topic did not come up  
24 until late in the afternoon.

25 So we urge the Commission and the staff to

1 closely examine these issues, and we think this whole case  
2 should go away immediately. Thank you.

3 MR. CORKRAN: On behalf of the Commission and  
4 the staff, I'd like to thank the witnesses who came here  
5 today and the counsel who came here today, for helping us to  
6 gain a better understanding of the product and the  
7 conditions of competition in the fluid end blocks industry.

8  
9 Before concluding, please let me mention a few  
10 dates to keep in mind. The deadline for submission of  
11 corrections to the transcript and for submission of  
12 post-conference briefs is Tuesday, January 14th. If briefs  
13 contain business proprietary information, a public version  
14 is due on Wednesday, January 15th.

15 The Commission has tentatively scheduled its  
16 vote on these investigations for Friday, January 31st and it  
17 will report its determinations to the Secretary of the  
18 Department of Commerce on Monday, February 3rd.  
19 Commissioners' opinions will be issued on Monday, February  
20 10th. Thank you all for coming, and this conference is now  
21 adjourned.

22 (Whereupon, the hearing was adjourned at 1:37  
23 p.m.)

24

25

## CERTIFICATE OF REPORTER

TITLE: In The Matter Of: Fluid End Blocks from China, Germany, India, and Italy

INVESTIGATION NO.: 701-TA-632-635 and 731-TA-1466-1468

HEARING DATE: 1-9-20

LOCATION: Washington, D.C.

NATURE OF HEARING: Preliminary

I hereby certify that the foregoing/attached transcript is a true, correct and complete record of the above-referenced proceeding(s) of the U.S. International Trade Commission.

DATE: 1-9-20

SIGNED: Mark A. Jagan

Signature of the Contractor or the  
Authorized Contractor's Representative

I hereby certify that I am not the Court Reporter and that I have proofread the above-referenced transcript of the proceedings of the U.S. International Trade Commission, against the aforementioned Court Reporter's notes and recordings, for accuracy in transcription in the spelling, hyphenation, punctuation and speaker identification and did not make any changes of a substantive nature. The foregoing/attached transcript is a true, correct and complete transcription of the proceedings.

SIGNED: Duane Rice  
Proofreader

I hereby certify that I reported the above-referenced proceedings of the U.S. International Trade Commission and caused to be prepared from my tapes and notes of the proceedings a true, correct and complete verbatim recording of the proceedings.

SIGNED: Gaynell Catherine  
Court Reporter