

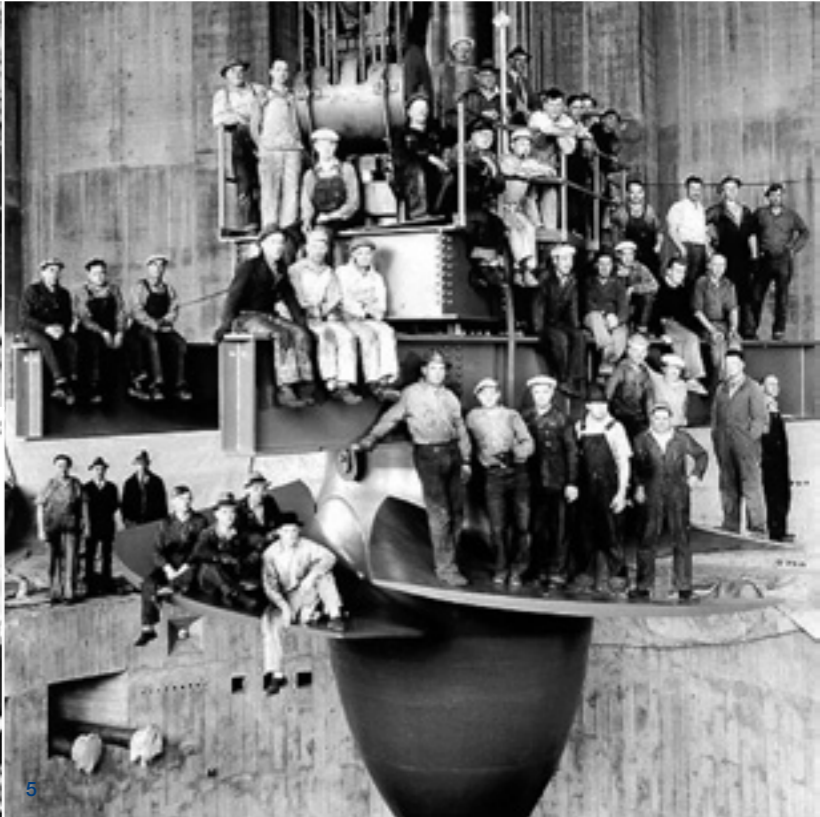
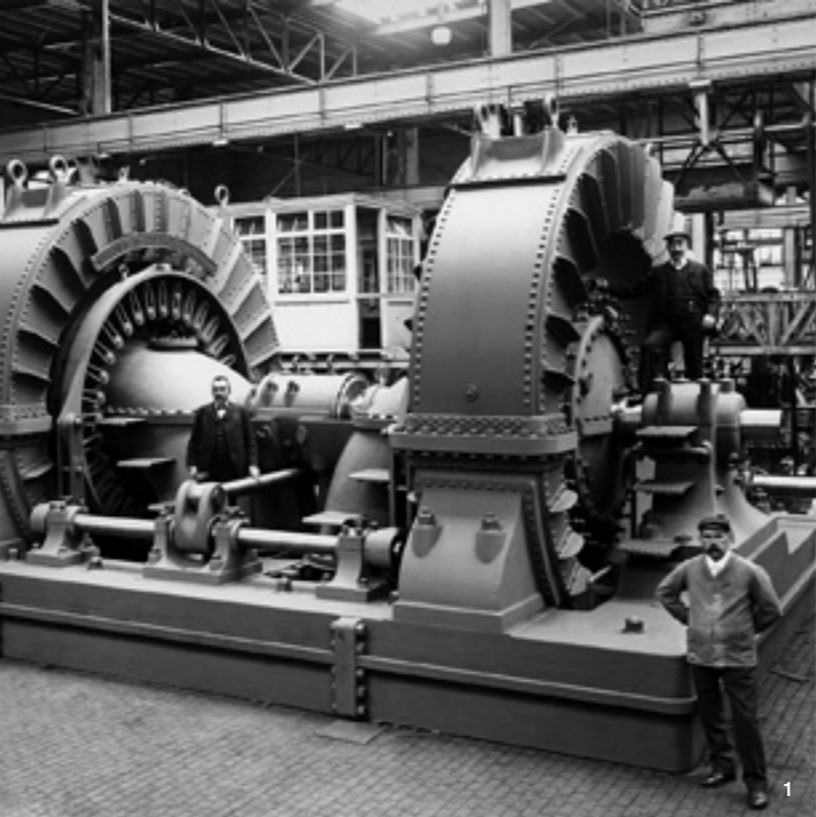
# Precision Heavy Manufacturing in the United States

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A Voith and Siemens Company

**VOITH**  
Engineered Reliability





1-5 Historical photos of Voith employees and equipment

# Voith Hydro, Inc. York, PA

## Location



Voith Hydro, along with its predecessor companies, S. Morgan Smith and Allis Chalmers have been manufacturing heavy steel equipment in the United States since 1877. Located in York, Pennsylvania, Voith takes great pride in providing high-quality, cost-effective products and services. Each Voith product is designed, manufactured and installed in accordance with agreed-to specifications, standards and documented quality procedures certified to ISO 9001 requirements.

Recent investments have reinforced this factory as a cornerstone of the Voith global manufacturing footprint, further improving its ability to provide world-class fabrication, machining, metal forming and assembly of large, precision mechanical components for the North American Industry. The 215,000 square foot production area has some of the largest machine tools in the United States. With a 300 ton lifting capacity and rail car access for simplified shipping, Voith is well equipped to handle a diverse range of projects.

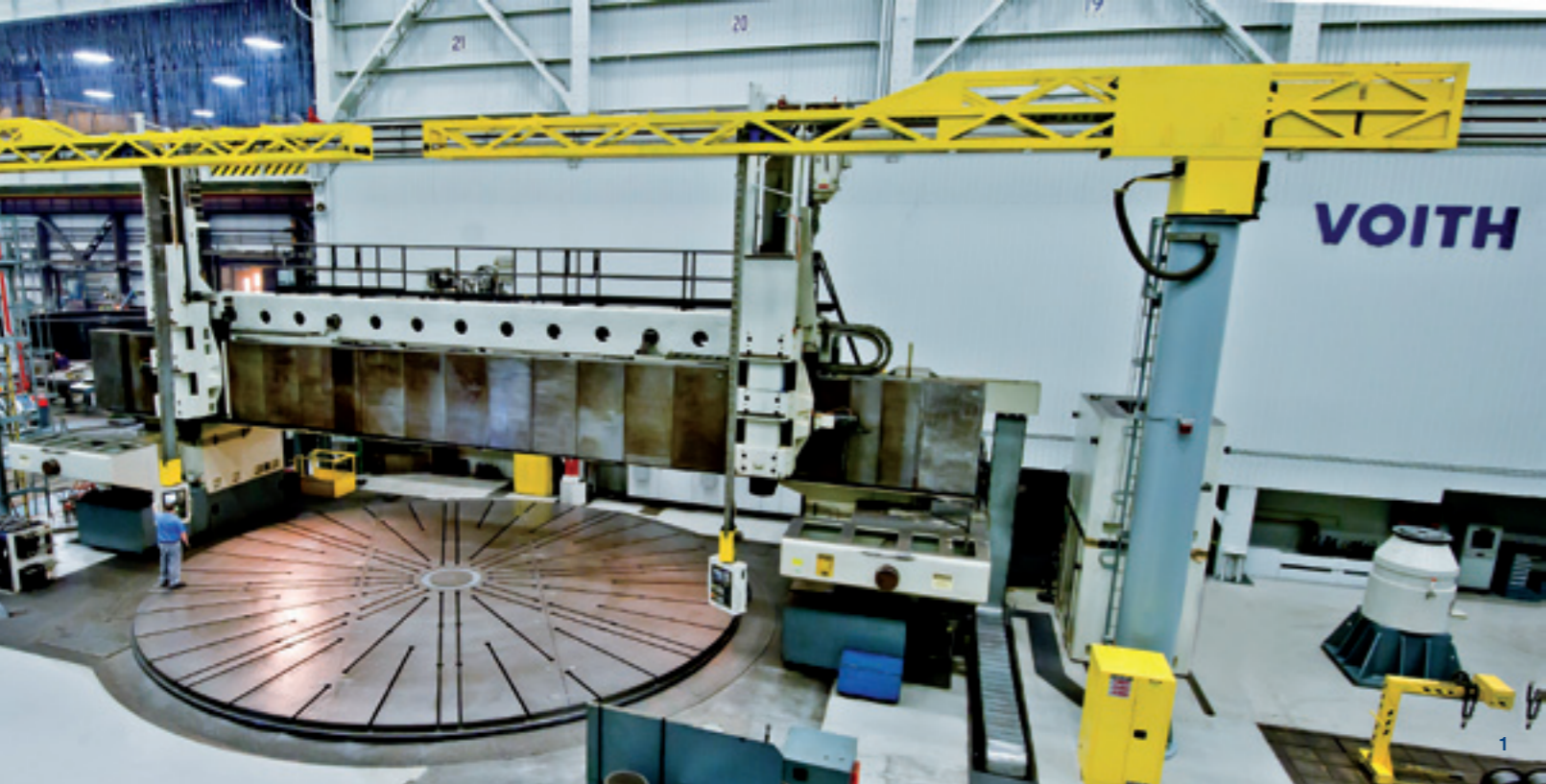




- 1 6 meter Dorries VMC
- 2 25 foot Farrel VMC
- 3 12.8 meter MTR VMC

**Machining: quality and precision at any size**

Machining is the heart of manufacturing. Skilled craftsmen work with precision machine tools of uncommon size and capacity to produce finished components in a variety of steel, stainless steel, and other materials to exacting standards and critical tolerances. Voith machining equipment includes some of the largest diameter and highest capacity equipment in North America. All of the machining centers are outfitted with CNC controls and highly trained and capable machinist/operators.



1 13.2 meter Dorries VMC

2 8 inch Schiess HBM

#### Machine Capacities – Turning

| Equipment              | Capability       | Max X (mm) | Max Height Under Rail (mm) | Max Turning Swing (mm) | Turning Table Dia. (mm) | Rotary Table | Max Table Load (tons) |
|------------------------|------------------|------------|----------------------------|------------------------|-------------------------|--------------|-----------------------|
| 3 meter Dorries VMC    | Milling, turning | 1,545      | 2,500                      | 3,000                  | 2,768                   | Yes          | 60                    |
| 6 meter Dorries VMC    | Milling, turning | 3,340      | 4,038                      | 6,000                  | 5,000                   | Yes          | 143                   |
| 13.2 meter Dorries VMC | Milling, turning | 6,600      | 6,096                      | 13,208                 | 11,582                  | Yes          | 300                   |
| 25 foot Farrel VMC     | Milling, turning | 4,166      | 4,445                      | 7,772                  | 7,315                   | Yes          | 200                   |
| 12.8 meter MTR VBM     | Milling, turning | 6,400      | 5,080                      | 12,800                 | 8,229                   | Yes          | 250                   |

#### Machine Capacities – Lathe

| Equipment             | Capability | Max X (mm) | Max Part Length (mm) | Max Turning Swing (mm) | Turning Table Dia. (mm) | Rotary Table | Max Table Load (tons) |
|-----------------------|------------|------------|----------------------|------------------------|-------------------------|--------------|-----------------------|
| Schiess Turning Ring  | Turning    | 480        | 6,000                | 1,100                  | 1,100                   | Yes          | 44                    |
| 124 Inch Farrel Lathe | Turning    | 775        | 16,040               | 3,150                  | 3,150                   | No           | 160                   |

#### Machine Capacities – Boring

| Equipment               | Capability      | Max X (mm) | Max Y (mm) | Max Z (mm) | Rotary Table | Max Table Load (tons) |
|-------------------------|-----------------|------------|------------|------------|--------------|-----------------------|
| 8" Ingersoll HBM        | Milling, boring | 15,240     | 6,706      | 1,219      | Yes          | 100                   |
| 8" Schiess HBM          | Milling, boring | 22,700     | 6,000      | 1,250      | Yes          | 100                   |
| 6" Giddings & Lewis HBM | Milling, boring | 3,048      | 2,134      | 914        | No           | 17.5                  |
| DMC 340U                | Milling, boring | 2,800      | 3,400      | 1,600      | Yes          | 10                    |





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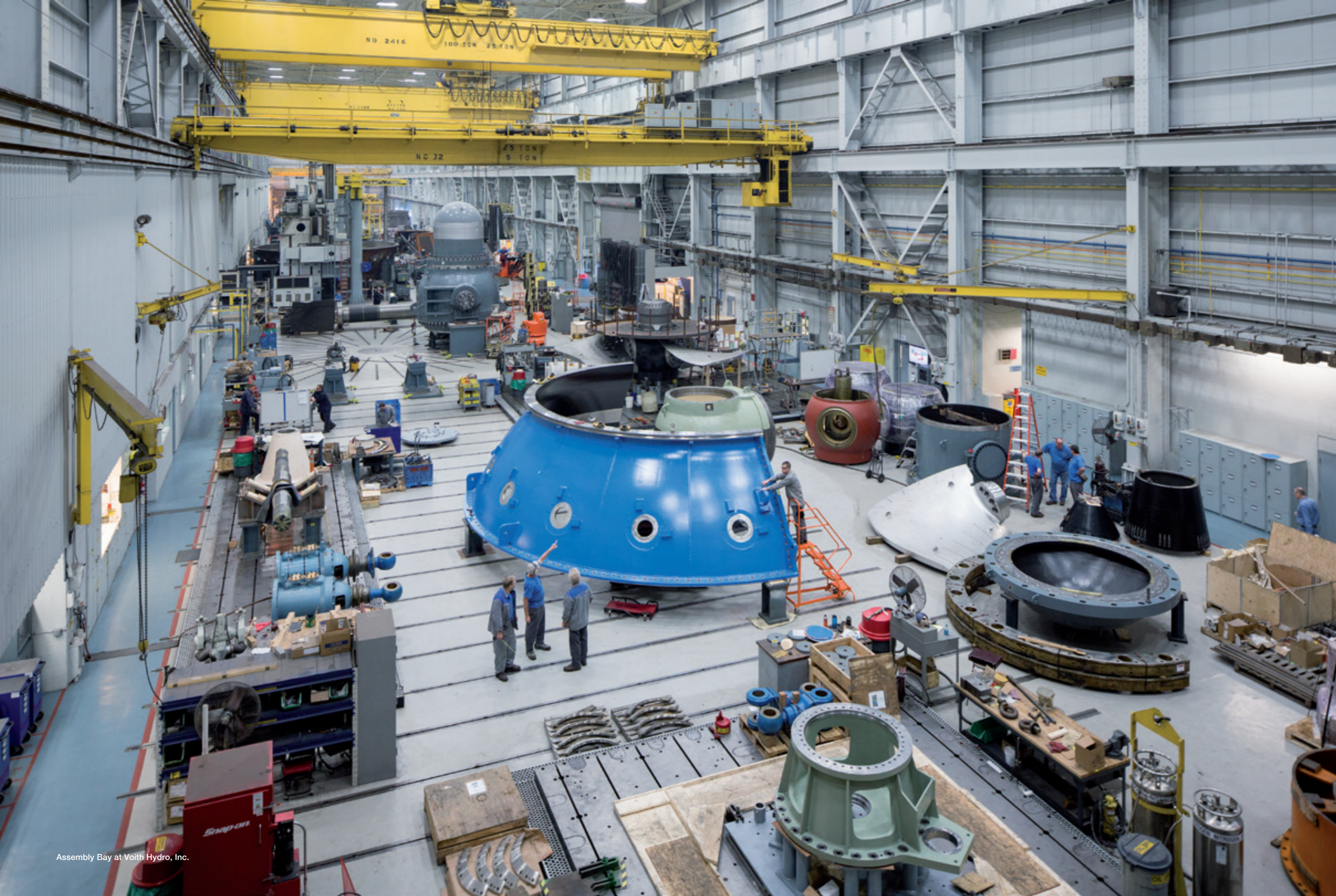
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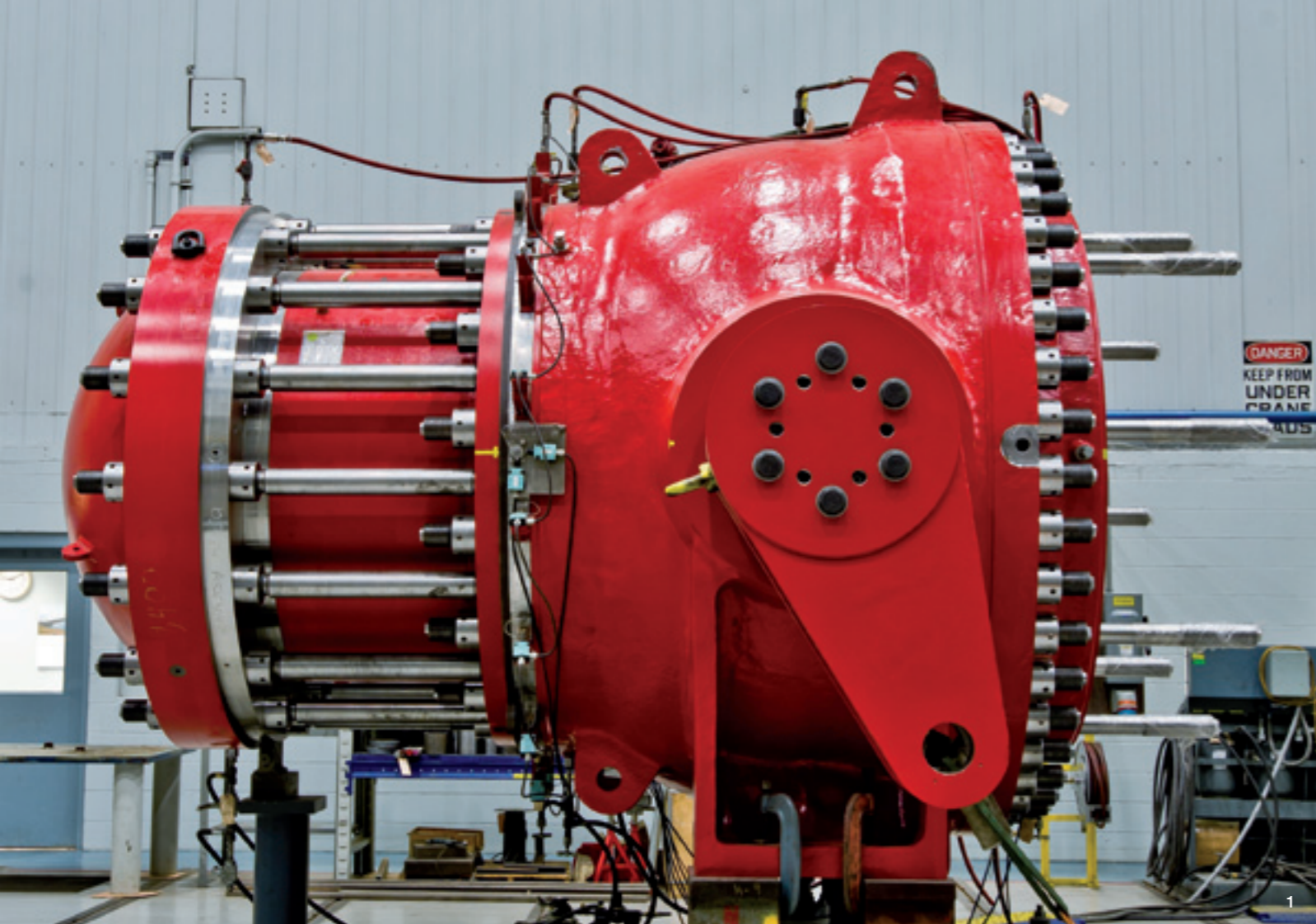
1 DMC 340U 5-Axis Machining Center

2 124 inch Farrel Lathe

### Cutting Edge Technology

Voith is committed to continuous improvement in shop efficiency and quality. The most recent investment in the DMC 340 U machining center highlights the benefits that cutting edge technology offers to improve productivity and quality. Voith commitment to continuous improvement also includes upgrading of controls and components on older machine tools and manufacturing equipment to deliver modern day precision and functionality.





1/2 Components in final assembly

#### Assemble the Best

With a 40,000 square foot assembly bay and 300 ton lifting capacity, Voith has the ability to assemble and test large components on site. The Voith international logistics team can facilitate transport of very large assemblies, minimizing the required assembly time in the field.





- 1/2 Welding
- 3 The newly constructed paint booth
- 4 Final painting of a component
- 5 One of two multi media blast booths on site



### Welding and Testing

Voith technicians are welding experts. They are able to meet the highest standards to meticulously accomplish each task. They are certified according to the ASME code. Moreover, the staff use non-destructive examination methods. To ensure the weld quality, they utilize ultrasonic testing.

### Blasting and Painting

After shot blasting and spray painting in the Voith state of the art, regulatory compliant paint booth, components are sent for assembly where final examination and release for shipment takes place.

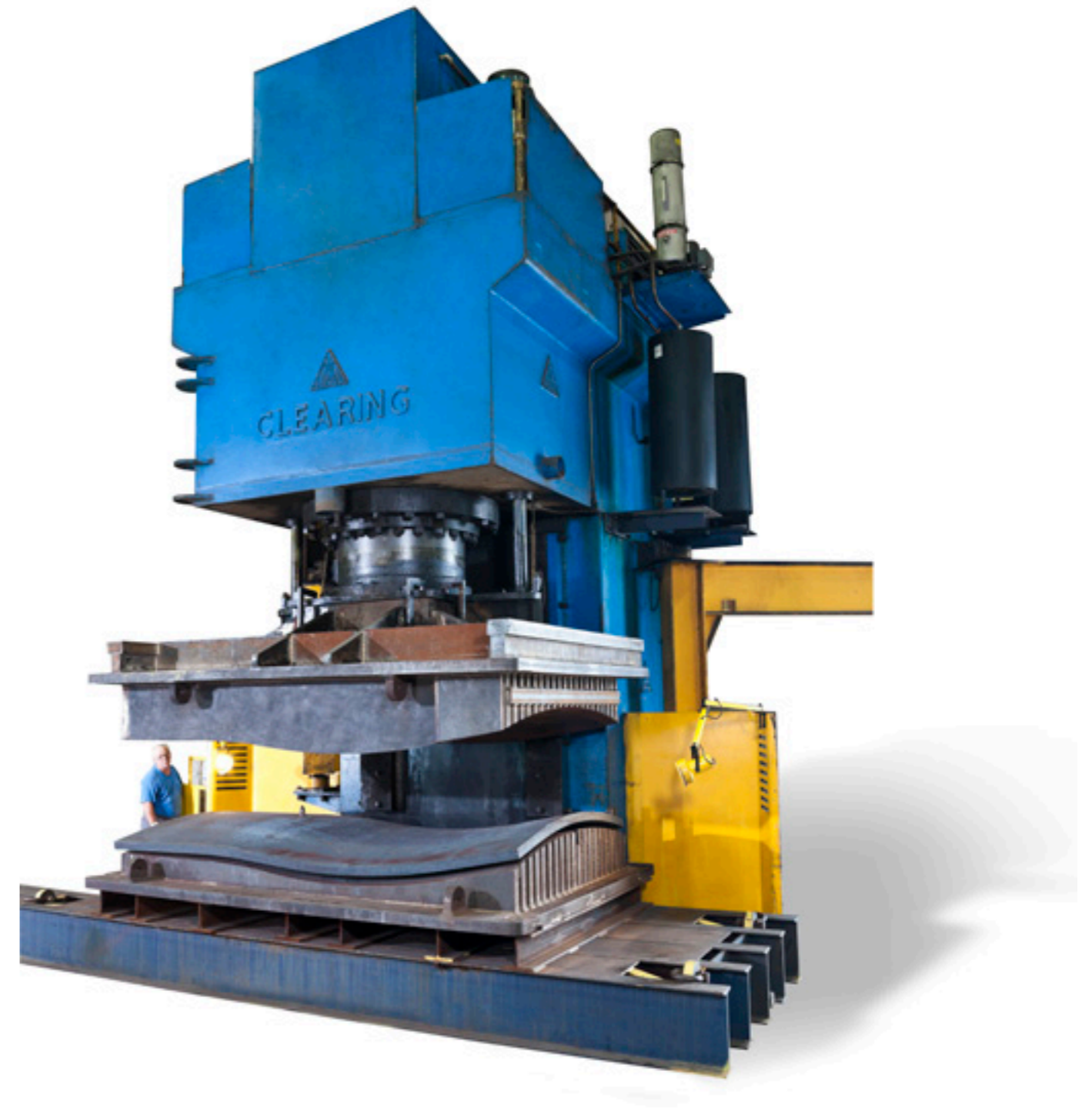




1 WilhelmsburgerRolls can shape plates as thick as 13 inches

### Metal Forming

Cutting, rolling and forming: a huge piece of metal needs sophisticated, versatile machinery to become a high-quality component at Voith. Employees steer the processes with gigantic engines, such as the Wilhelmsburger Roll which can shape parts with a capacity of 2,200 tons. The vertical press can form metal with a capacity of 1,800 tons.



Clearing Vertical press used for forming



1



2



3

- 1 Journeyman boilermaker laying out fabrication
- 2 Employee operating the 3 meter Dorries VMC
- 3 Verifying measurement after welding

### Skilled Craftsmen

Voith makes a difference by keeping its workforce skillful with continuous training programs, state apprenticeships and weld training school, all which help to raise the standard of production.

### A Union of Professionals

Voith Hydro, Inc. is proud to be a member of Local Lodge 1400 of the International Association of Machinists and Aerospace Workers.

The IAM has represented the workers in York for more than 70 years. First implemented in 1939, all Voith manufacturing employees are members of the IAM.

### International Association of Machinists

