# **VOITH**

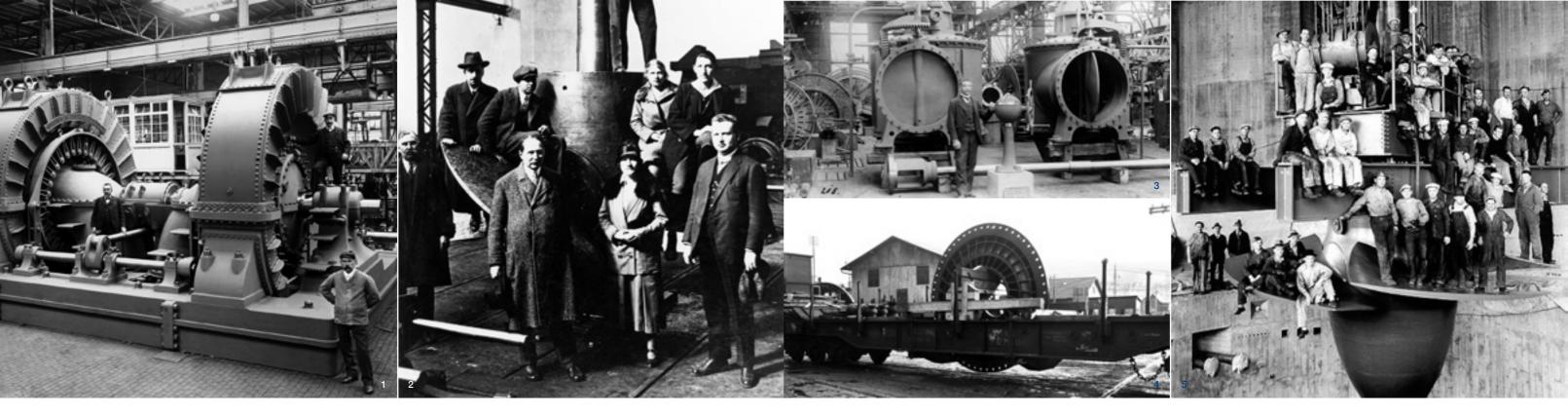
# Precision Heavy Manufacturing in the United States

VOITH

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A Voith and Siemens Company





Voith Hydro, Inc. York, PA

#### Location



1-5 Historical photos of Voith employees and equipment

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.







- 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



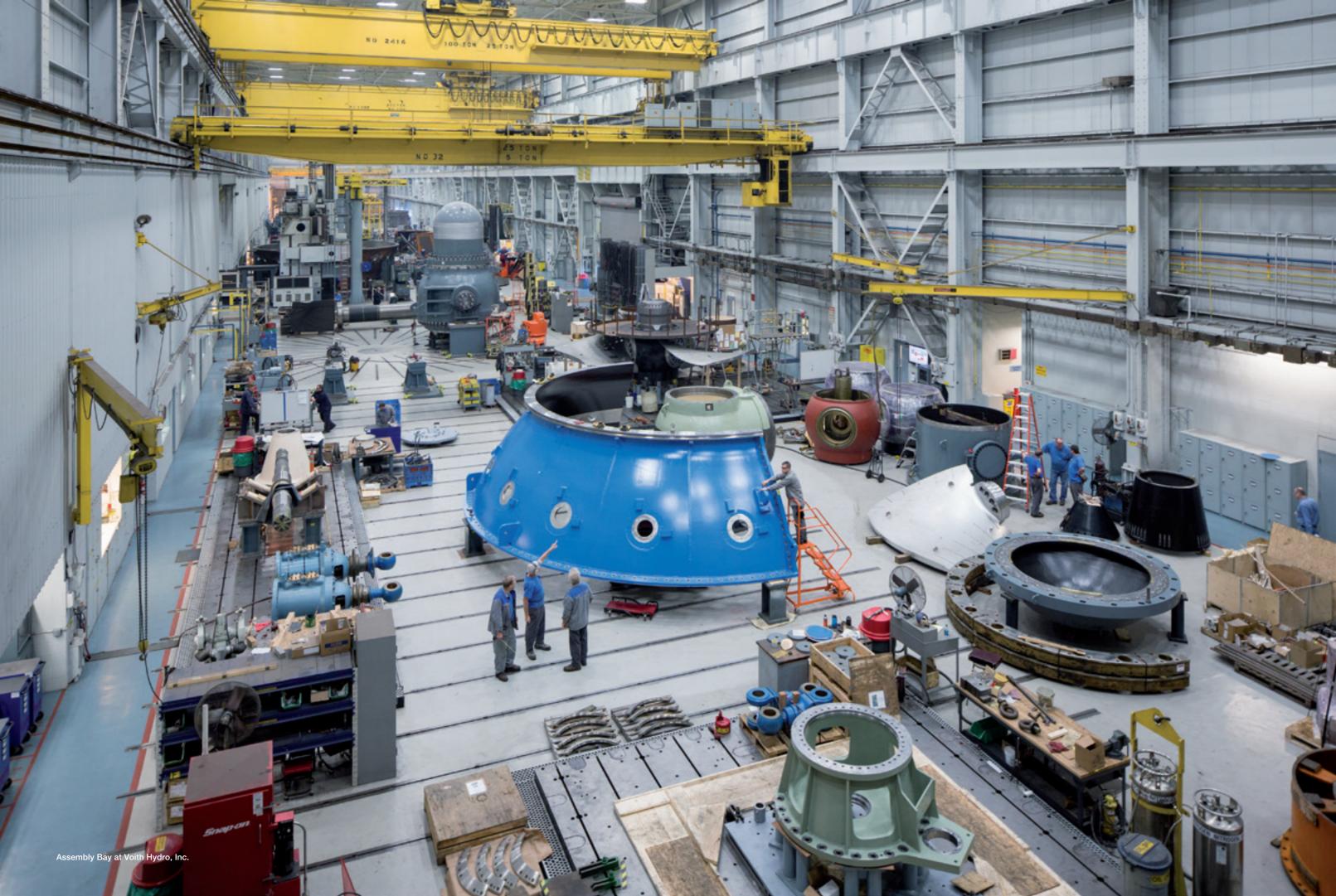


- 1 DMC 340U 5-Axis Machining Center
- 2 124 inch Farrel Lathe

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#### **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.

14 15



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

16 17



- 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



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