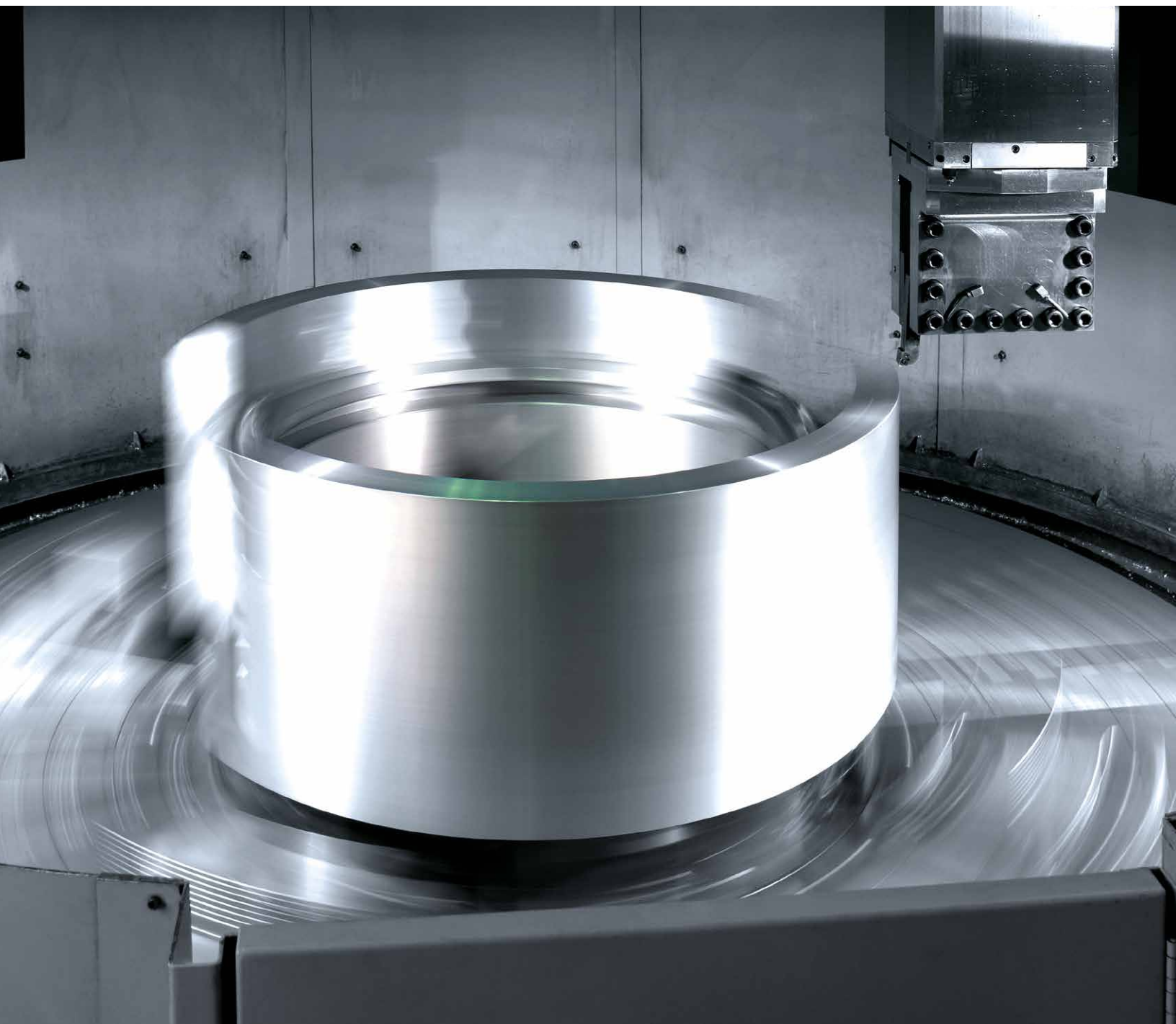
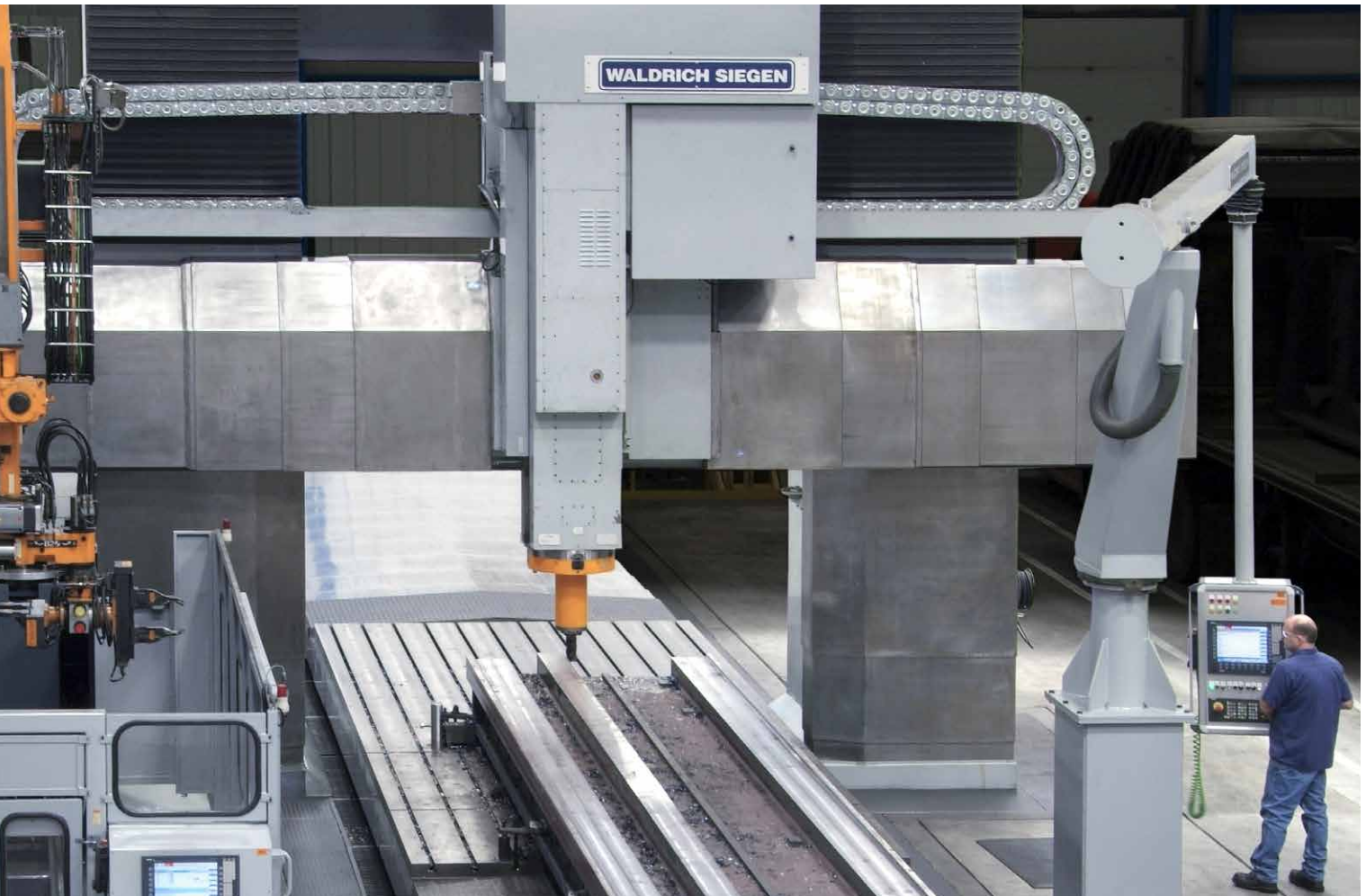




# Contract manufacturing – Large scale CNC machining





The WaldrichSiegen planer mill machines large parts up to 450,000 lbs

## Straightforward service and reliable Herkules quality

120 dedicated and highly-skilled employees design and manufacture roll grinders and lathes, HBMs and planer mills/bridge mills in Ford City, Pennsylvania. Besides manufacturing new machines, Herkules USA specializes in the modernization of machines and machining services for individual applications. The spacious, fully temperature controlled production area of 81.000 ft<sup>2</sup> (7,525 m<sup>2</sup>) offers an ideal environment for the highly precise manufacturing of all machine components.

A comprehensive range of lathes, milling and grinding machines, along with measuring devices, many of which are developed within the group of companies, guarantee manufacturing to the highest quality standards.

The American engineers and technicians are trained at the German production companies. Their wealth of experience guarantees reliable manufacture and assembly of all machine tools according to customer requirements. Continuous staff training ensures that the engineers are always on top of technological developments and able to quickly adapt to clients' demands.

Absolute precision, individual services and quality performance – Herkules USA offers a great variety of large machining services for your individual applications. Values such as quality and efficiency have been characteristic features of Herkules machines for more than 100 years.

# High performance with the highest levels of accuracy

State of the art equipment and a skilled team of machinists guarantee high quality craftsmanship and excellent machining work. Herkules is experienced in managing complex machine projects thanks to our large variety of machines and tools. Our modern workshop is dedicated to producing core products and components for Herkules-Group machines of all kinds. This shows our ability and knowledge to take on external production orders with specific needs.



Horizontal boring mill from Lucas for top performances

## Materials & services

### We process the following materials

- Carbon steel
- Castings
- Forgings
- Aluminum
- Stainless steel
- 3D printed material
- Tool steel, etc.

### Our services include

- Turning
- Milling
- Blasting
- Painting
- Sawing
- Shearing
- Break press
- Welding
- Inspection

## Engineering & quality assurance

### Engineering

- Autodesk® Inventor®
- GibbsCAM CAD/CAM Software

### Quality Assurance

- Faro Arm Quantum S
- Faro Arm Platinum
- Micrometers up to 48" (1,2 m)
- Annual Inspection of gauge blocks and measuring rods calibrated from an outside source (accredited to ISO 17025 and ANSI/NCSL Z540)

### You can contact our service team at:

T: +1 724-763-2066  
info@herkulesUSA.com



TOS VTL vertical turning lathe for machining mid- to large-sized workpieces

<b>Machining</b>	<b>Equipment overview</b>	<b>Capacity</b>	
<b>Turning</b>			
Horizontal	Herkules P300 – 400	28" (2.3') dia × 120" (10')	0,7 m × 3 m
Vertical	TOS VTL	86" (7') dia × 48" (4')	2,2 m × 1,2 m
<b>Milling</b>			
Horizontal	Union Millforce Union PCR 160 Lucas HBM	138" (11.5') × 157" (13') × 59" (4.9')	3,5 m × 4 m × 1,5 m
Vertical	WaldrichSiegen planer mill (large parts) WaldrichSiegen planer mill (mid-sized parts) RD&D Gantry	590" (49') × 137" (11.4') × 68.8" (5.7')	15 m × 35 m × 1,8 m
<b>Blasting</b>	Soda blast booth	20' Wide × 38' Long × 15' High	6 m × 12 m × 4,5 m
<b>Painting</b>	Paint booth	18' Wide × 32' Long × 15' High	5,5 m × 9,8 m × 4,5 m
<b>Sawing</b>	Behringer HBP430	17" round × 17' Long	0,4 m round × 5 m long
<b>Shearing</b>	Wynsong metal shear	½" × 10' mild steel (non harden) Up to ¼" × 10' 304 stainless steel	1,3 cm × 3.000 cm Up to 0,6 cm × 3.000 cm
<b>Forming</b>	Guifil PE 30 – 100 press break	20 gauge & up to ¼" radius × 96" (8')	20 gauge & up to 6 mm radius 2,5 m
<b>Welding</b>	Burn table	4' × 8' sheet	1,2 m × 2,5 m sheet



The turning lathe P300 rounds off the portfolio of heavy-duty lathes for medium-sized and large workpieces

## Turning equipment

### Herkules P300 – 400

#### Key features

- Siemens control
- 80 hp spindle power (60 kW)
- Spindle = 0 – 500 rpm
- General part tolerances  $\pm 0.002''$  ( $\pm 0,00007$  m)

#### Capacity

- Diameter 28" (2.3')  $\times$  120" (10')  
(0,7 m  $\times$  3 m)
- Weight (max.) 11,000 lbs (5 t)

### TOS VTL

#### Key features

- Siemens 840D control
- 148 hp spindle power (110 kW)
- 12 tool turret
- Spindle = 0 – 300 rpm
- General part tolerances  $\pm 0.002''$  ( $\pm 0,00007$  m)

#### Capacity

- Swing 86" (2,2 m)
- Part height 48" (1,2 m)
- Chuck 78" (2 m)
- Weight (max.) 44,000 lbs (20 t)



The Union PCR horizontal boring mills guarantee precise complete machining

## Horizontal milling equipment

### Union Millforce

#### Key features

- Heidenhain TNC 530 control
- Angle head
- 98" × 78" rotary table (2,5 m × 2 m)
- 40 pocket tool changer
- 94 hp spindle power (70 kW)
- Spindle = 0 – 5.000 rpm
- General part tolerances ± 0.0005" (± 0,00001 m)

#### Capacity

- X axis 157" (4 m)
- Y axis 102" (2,5 m)
- Z axis 63" (1,6 m)
- V axis 59" (1,5 m)
- Weight (max.) 44,000 lbs (20 t)

### Union PCR 160

#### Key features

- Heidenhain TNC 530 control
- 98" × 78" rotary table (2,5 m × 2 m)
- 60 pocket tool changer
- 94 hp spindle power (70 kW)
- Spindle = 0 – 2.200 rpm
- General part tolerances ± 0.0005" (± 0,00001 m)

#### Capacity

- X axis 138" (3,5 m)
- Y axis 157" (4 m)
- Z axis 59" (1,5 m)
- W axis 27" (0,7 m)
- V axis 59" (1,5 m)
- Weight (max.) 44,000 lbs (20 t)

### Lucas HBM

#### Key features

- Heidenhain TNC 530 control
- 96" × 60" manual rotary table (2,5 m × 1,5 m)
- 67 hp spindle power (50 kW)
- Spindle = 0 – 1.200 rpm
- General part tolerances ± 0.001" (± 0,00003 m)

#### Capacity

- X axis 144" (3,5 m)
- Y axis 120" (3 m)
- Z axis 72" (1,8 m)
- W axis 58" (1,5 m)
- Weight (max.) 44,000 lbs (20 t)

# Vertical milling equipment

## WaldrichSiegen planer mill (large parts)

### Key features

- Siemens 840D SL control
- 135 hp spindle power (100 kW)
- 94 Tool capacity tool changer
- 6 heads
  - A1 plate w/60 deg taper
  - A2 90 deg right angle high torque
  - A3 straight
  - A4 90 deg right angle
  - A5 B axis (servo operated)
  - A6 manual gimbal B axis
- Spindle = 0 – 2.000 rpm
- General part tolerances  $\pm 0.001"$  ( $\pm 0,00003$  m)

### Capacity

- X axis 590" (15 m)
- Y axis 137" (3,5 m)
- Z axis 68.8" (1,7 m)
- W axis 137" (3,5 m)
- Weight (max.) 450,000 lbs (204 t)

## WaldrichSiegen planer mill (mid-sized parts)

### Key features

- Siemens 840D control
- Universal milling head
- 80 hp spindle power (60 kW)
- Spindle = 0 – 1.500 rpm
- General part tolerances  $\pm 0.002"$  ( $\pm 0,00005$  m)

### Capacity

- X axis 216" (18') (5,5 m)
- Y axis 78" (6.5') (2 m)
- Z axis (with head) 37" (3') (1 m)
- Z axis (without head) 55" (4.5') (1,4 m)
- Weight (max.) 66,000 lbs (30 t)

## RD&D Gantry

### Key features

- Fanuc 15M control
- Angle head
- 80 hp spindle power (60 kW)
- Spindle = 0 – 1.500 rpm
- General part tolerances  $\pm 0.002"$  ( $\pm 0,00005$  m)

### Capacity

- X axis 540" (13,7 m)
- Y axis 162" (4 m)
- Z axis (with head) 39" (1 m)
- Z axis (without head) 59" (1,5 m)
- Weight (max.) 130,000 lbs (59 t)

**Our service team is here to help you:**

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**The specialist for roll machining**