



LANDIS FLEX

Traverse / Plunge / Contour grinding

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LANDIS FLEX

Benchmark for sustainable productivity, precision and flexibility

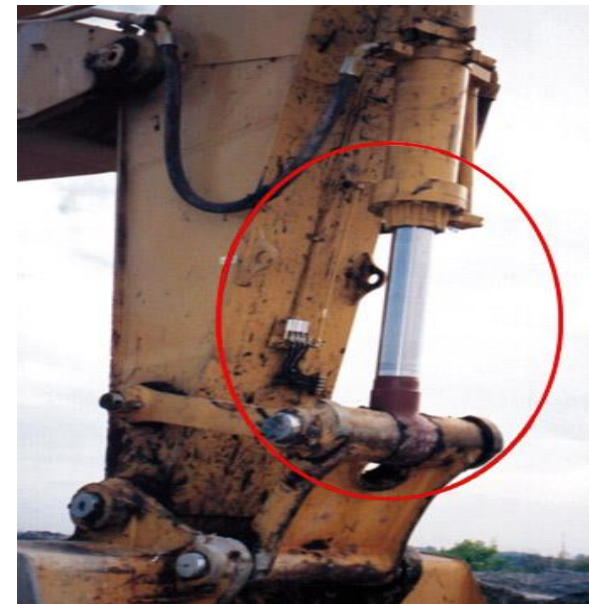
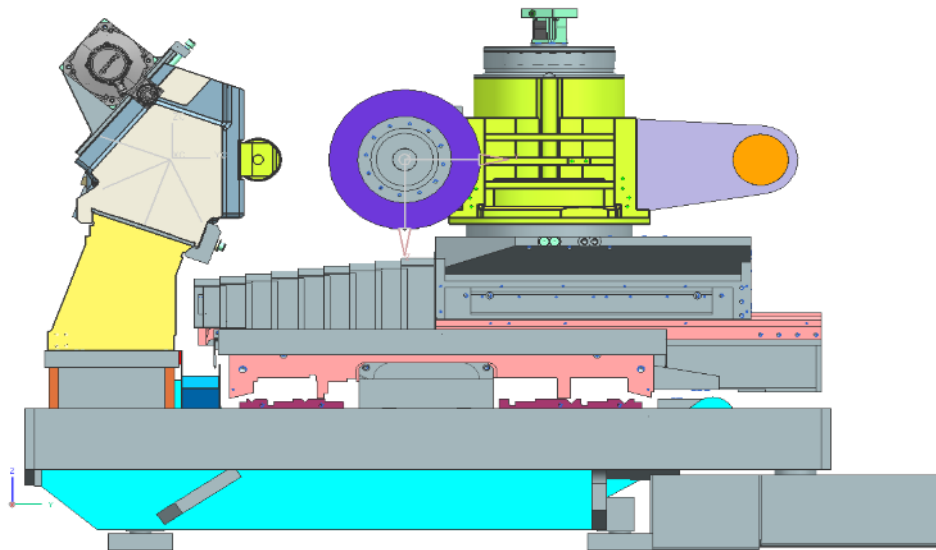
- Linear motors on all feed and traverse mechanisms
- Hydrostatic wheel spindles
- Meets micron level dimensional & geometric part tolerances
- Aluminumoxide, CBN, ceramic or diamond wheels
- Reduced power consumption
- Left or right hand headstock available
- Optional features include: polishing head, protomar gauge, gauging, probing, hydrostatic workheads & finisher attachment



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The need for flexibility

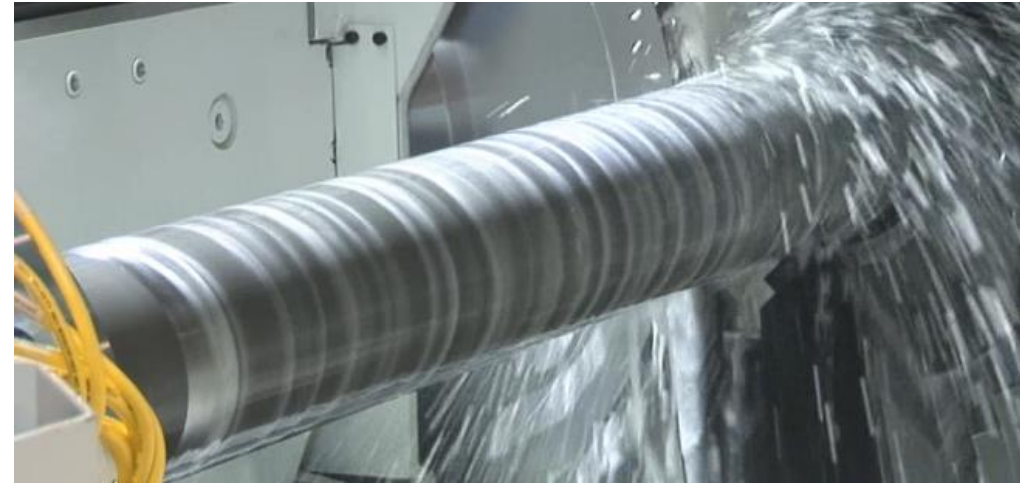
- Traverse, plunge or contour grinding
- Custom gauging
- Pushbutton flexibility; absolute precision and reliability



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Features

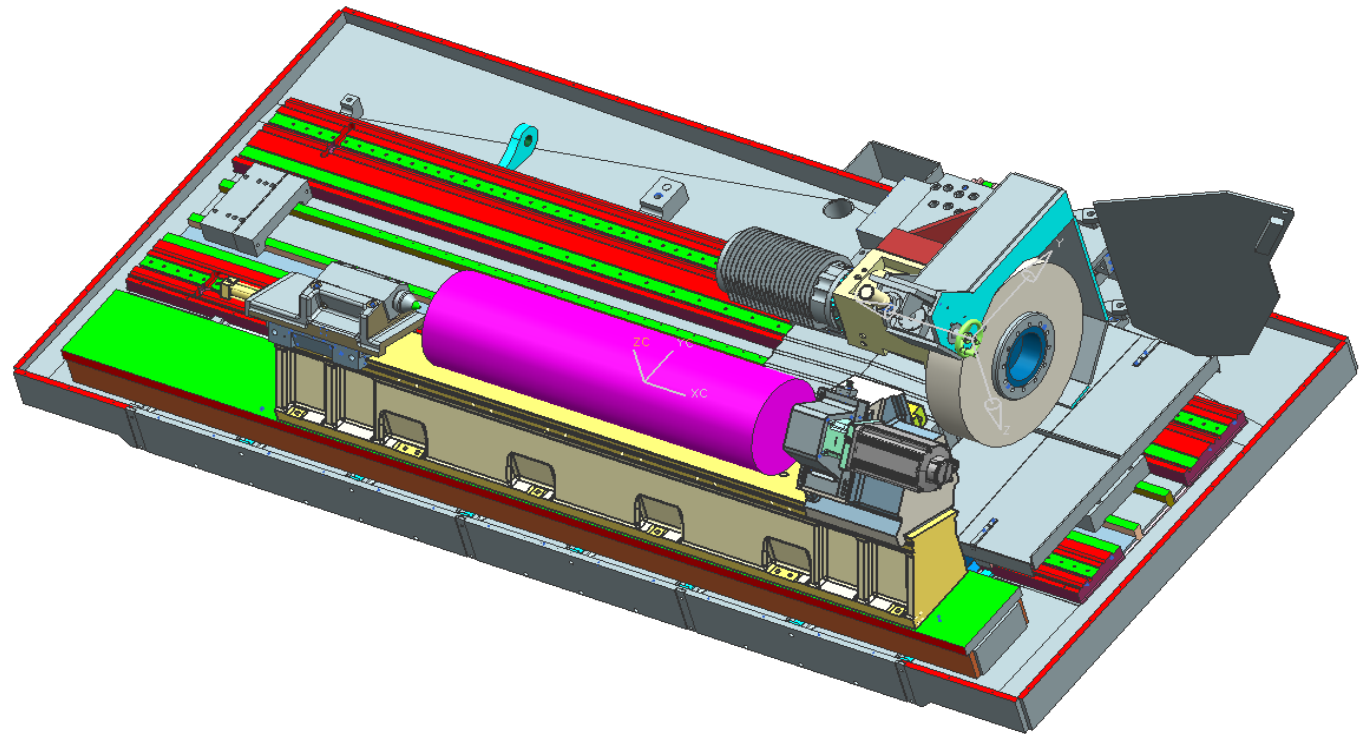
- Landis 6400 Open Architecture control
- Anti-friction linear guideway wheelhead feed
- Anti-friction linear guideway cross slides
- Hydrostatic wheel spindles
- Conventional or CBN grinding wheels
- CNC wheel dressing
- Integral wheel spindle drives
- Variable speed workdrive
- Work supported by centers
- Fixed rigid work axis
- Brushless servos on all axes
- Linear motor technology



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Machine configuration

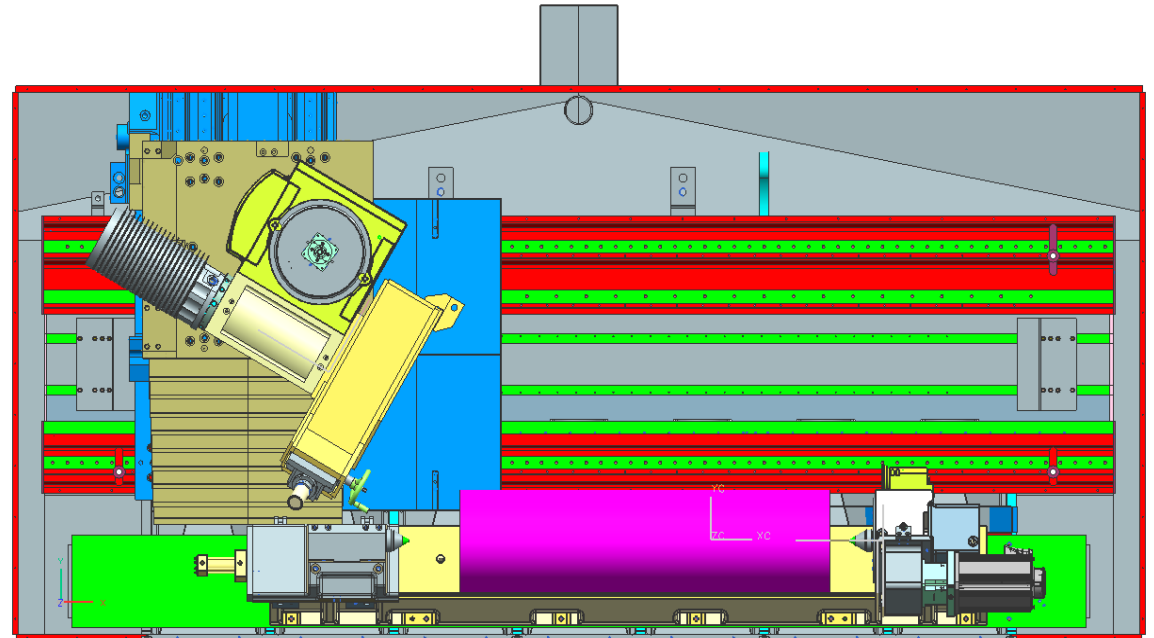
- Dedicated Straight
 - 760 OD x 150 face (standard)
 - 610 OD x 150 face (optional)



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Machine configuration

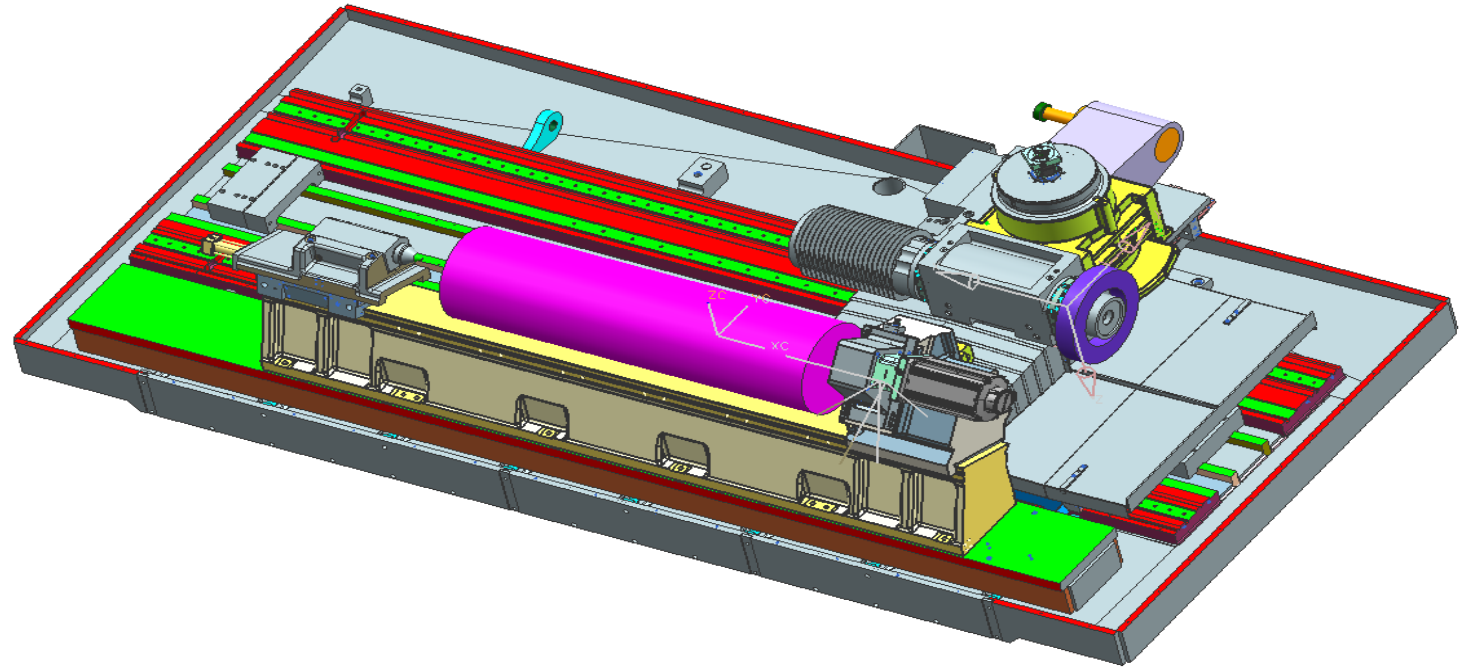
- Single Spindle Swivel
 - -5 to 30 degrees / infinite adjustment within range
 - 610 OD max. wheel diameter



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Machine configuration

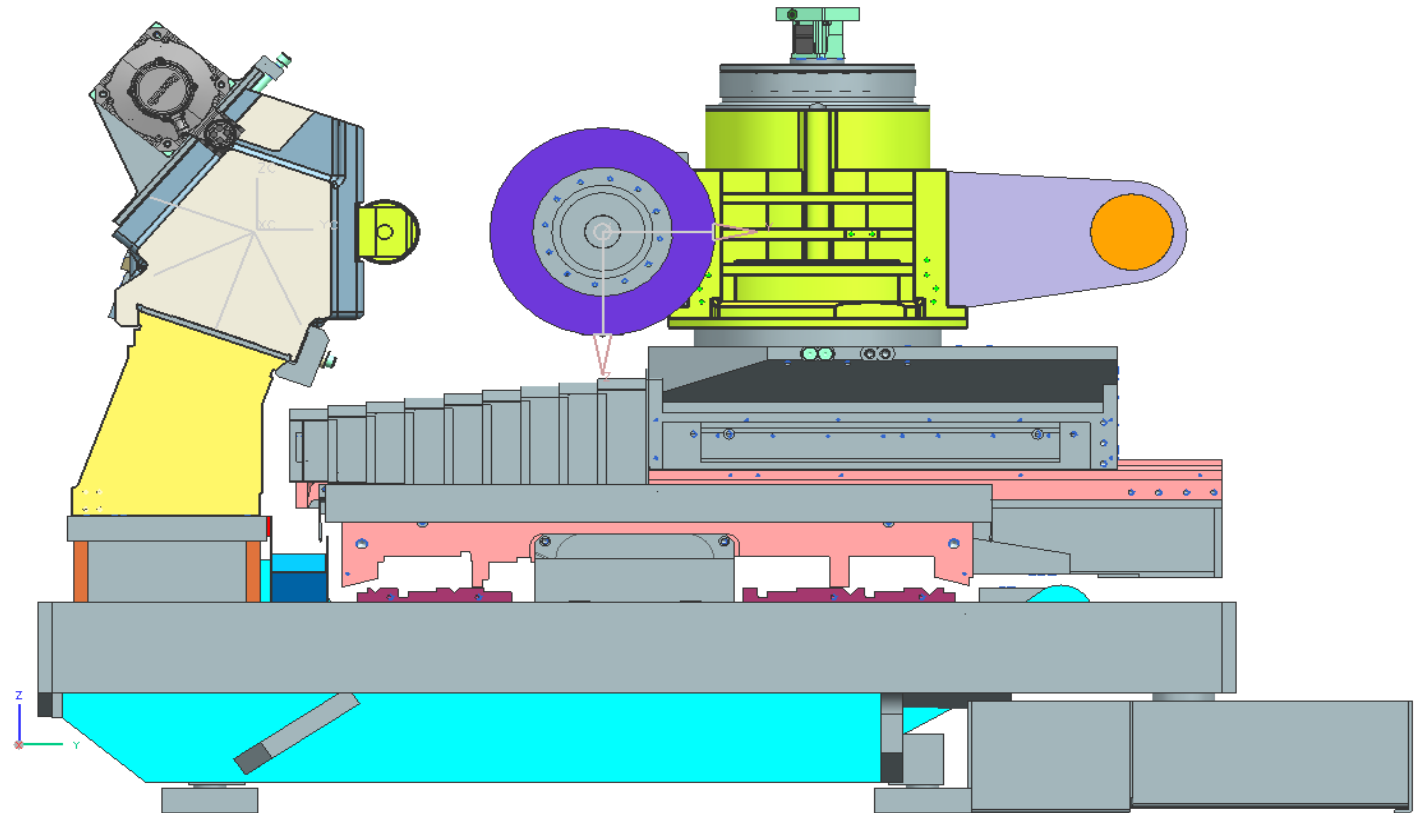
- Dual Spindle Swivel (OD/OD) or (OD/ID)
 - 225 degrees / infinite adjustment within range
 - 490 OD max. wheel diameter



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Machine configuration

- Dual Spindle Swivel – RH End View
— 225 degrees travel



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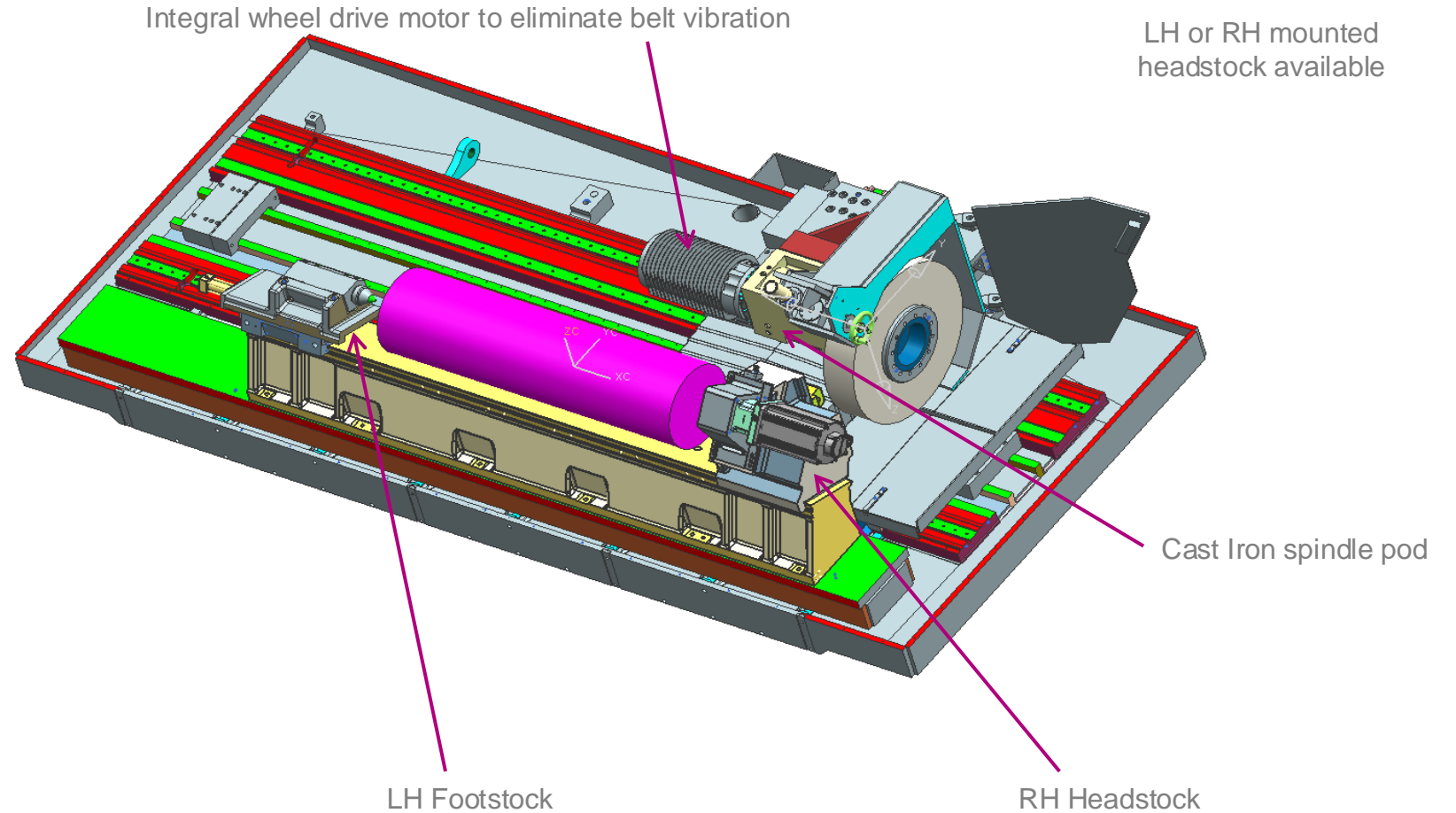
Machine configuration

- Part length
 - 1.5m or 2.5m between centers
- Abrasive Type
 - CBN, Diamond or Conventional
- Work Part Swing
 - 400mm or 750mm

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Machine configuration

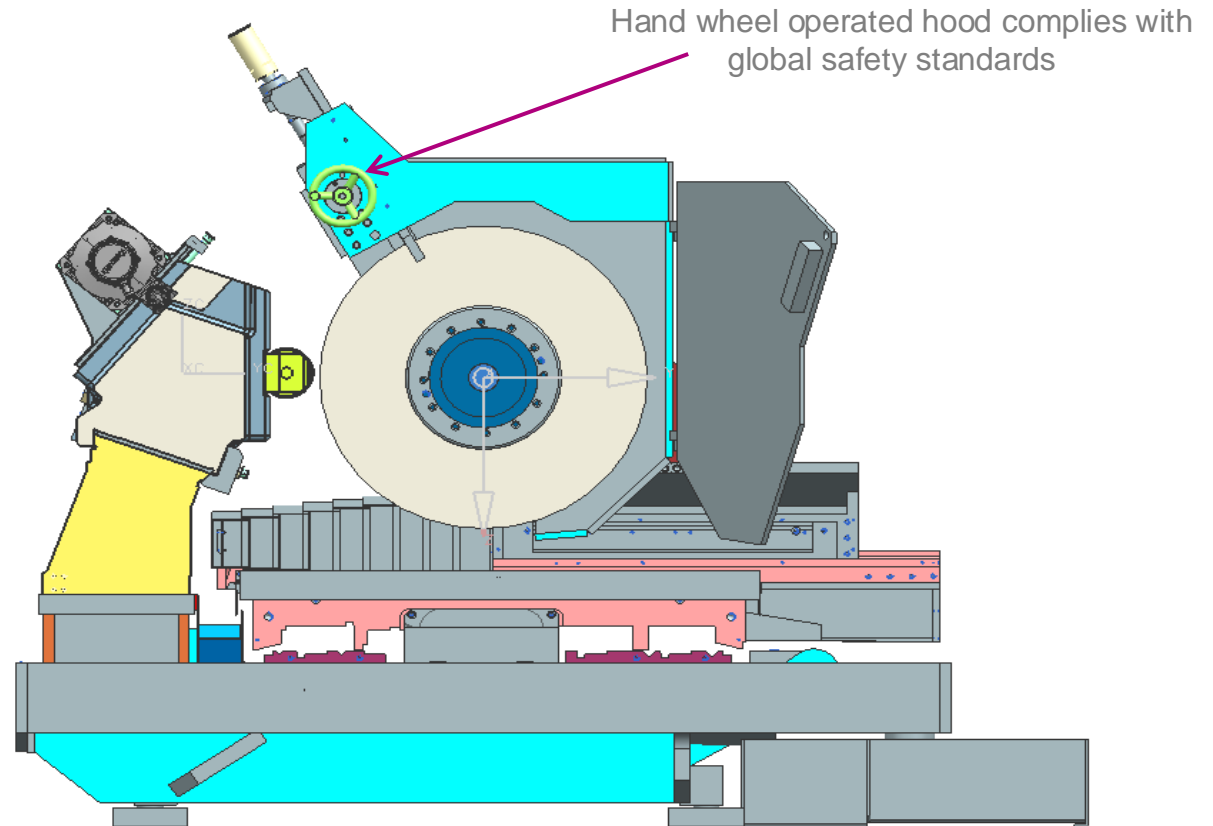
- Dedicated Straight Machine – Wheelhead RH Working position



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Machine configuration

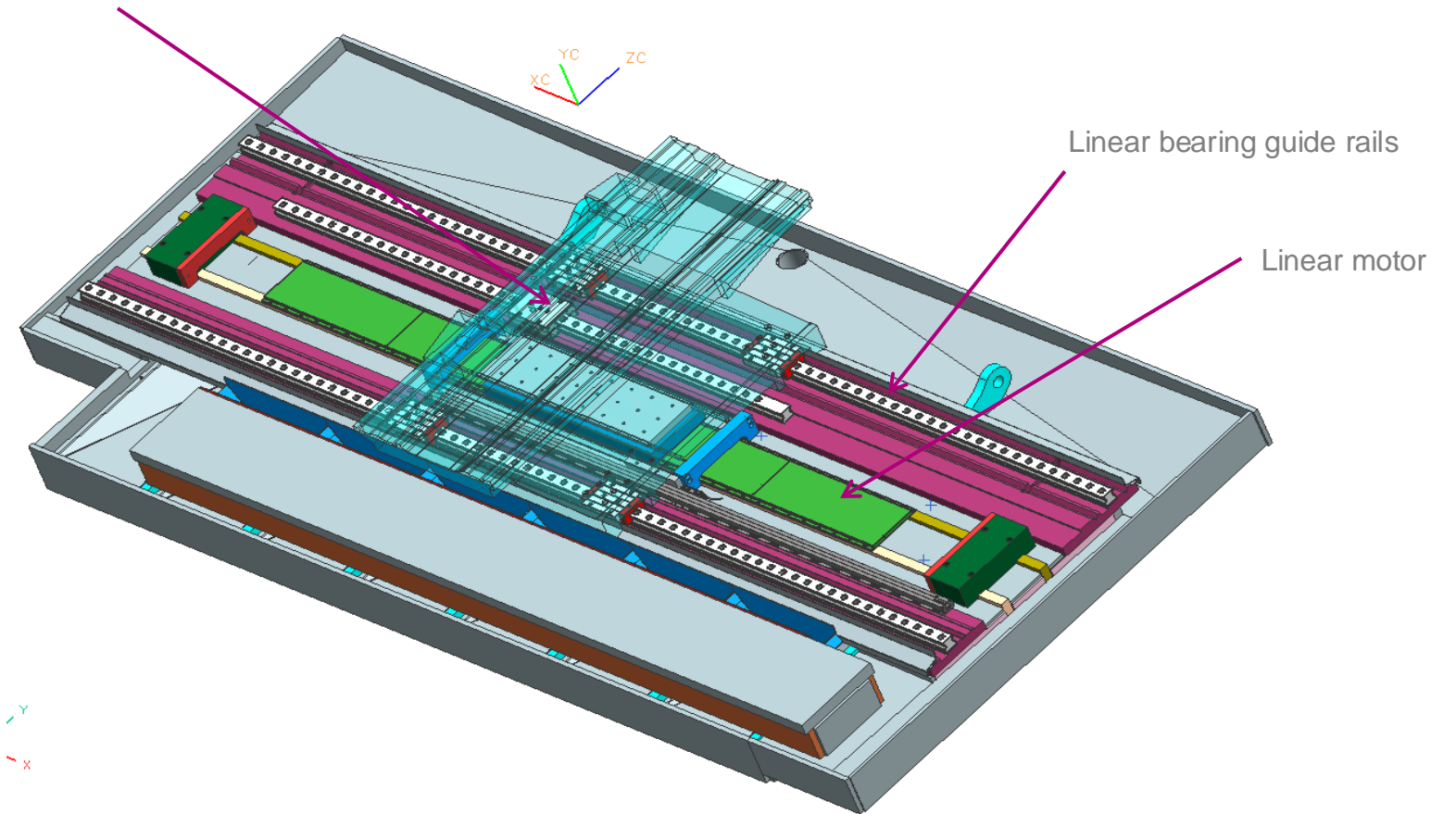
- Dedicated Straight Machine – RH End View



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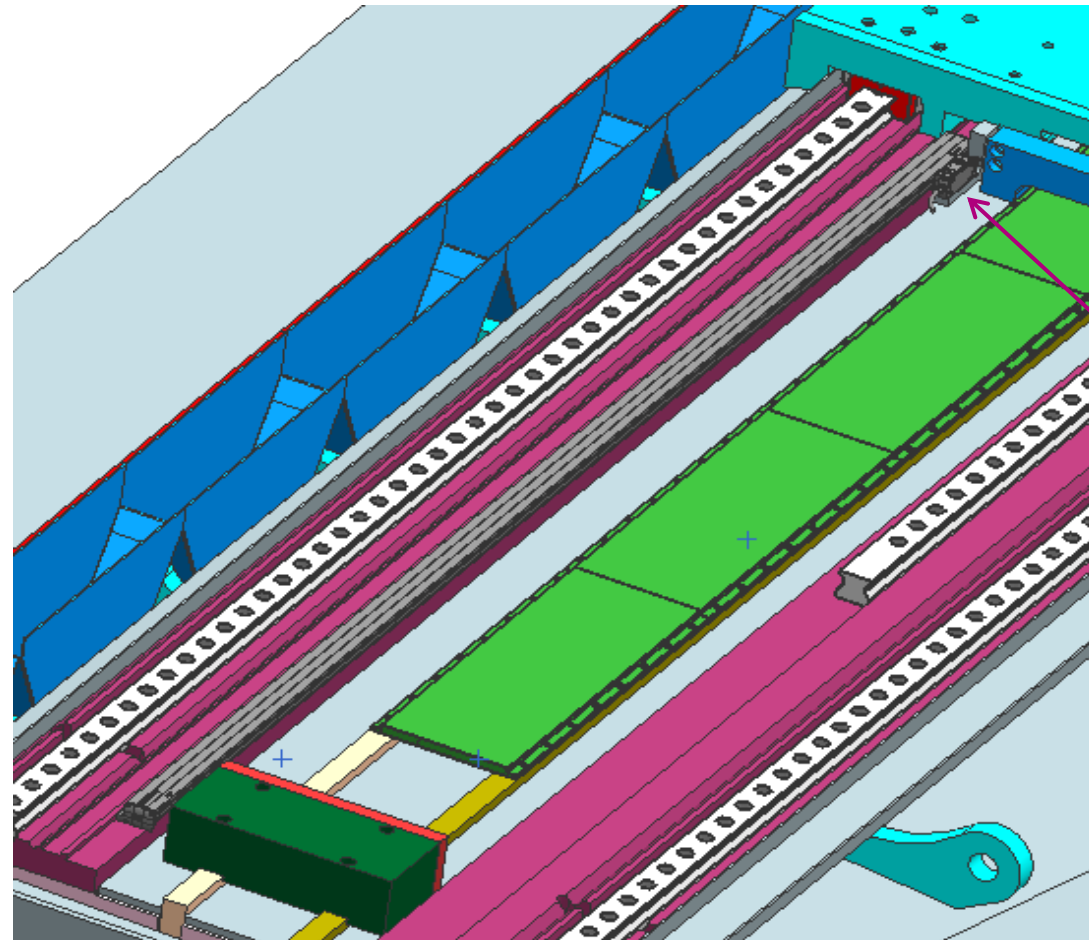
Z-Axis Overview

Rail clamp located on separate rail to allow for a wider spectrum of purchasing options



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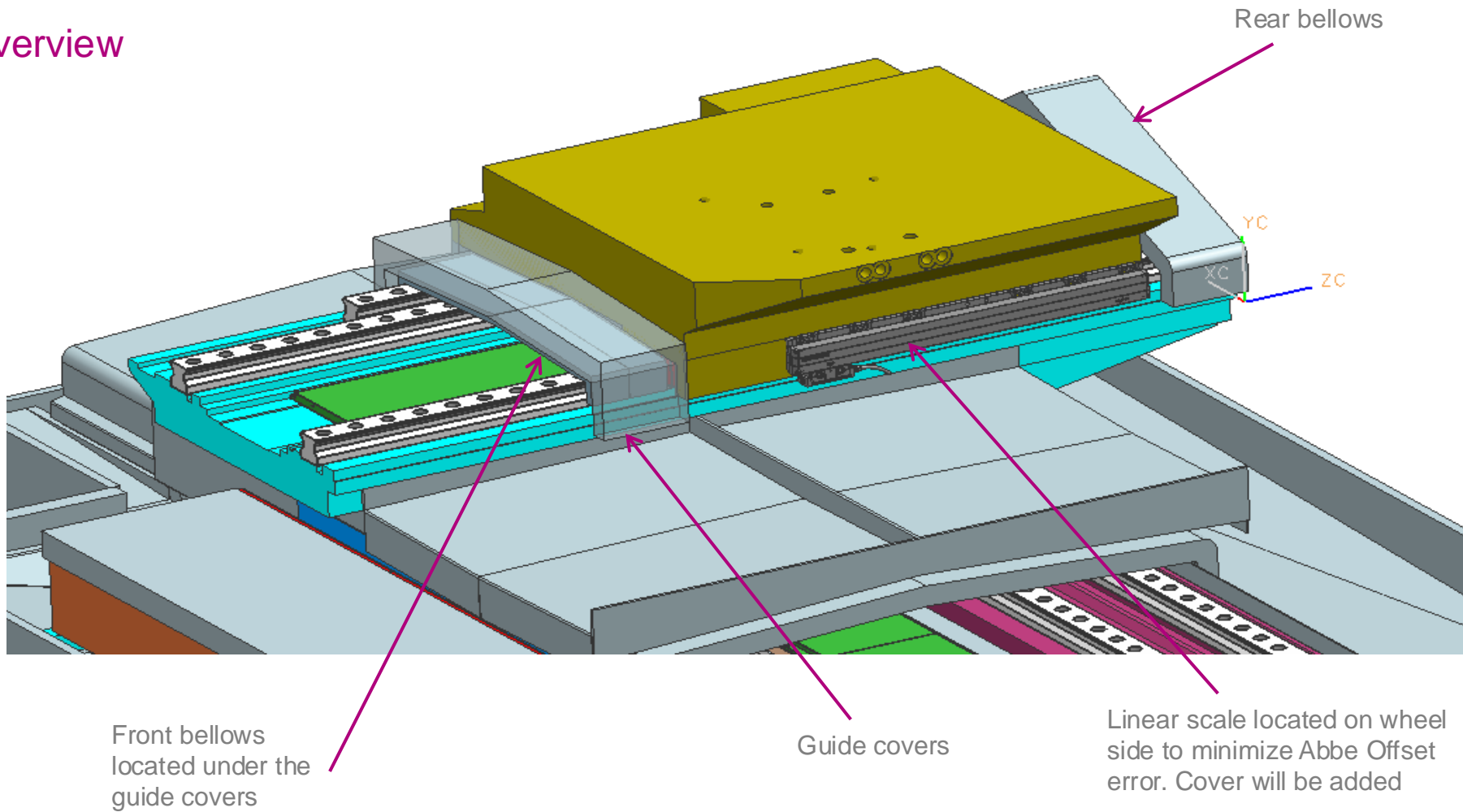
Z-Axis Overview



Linear scale is located under grinding wheel to minimize Abbe Offset error. The scale is protected by the traveling sheet metal drain trough and the Z-axis bellows.

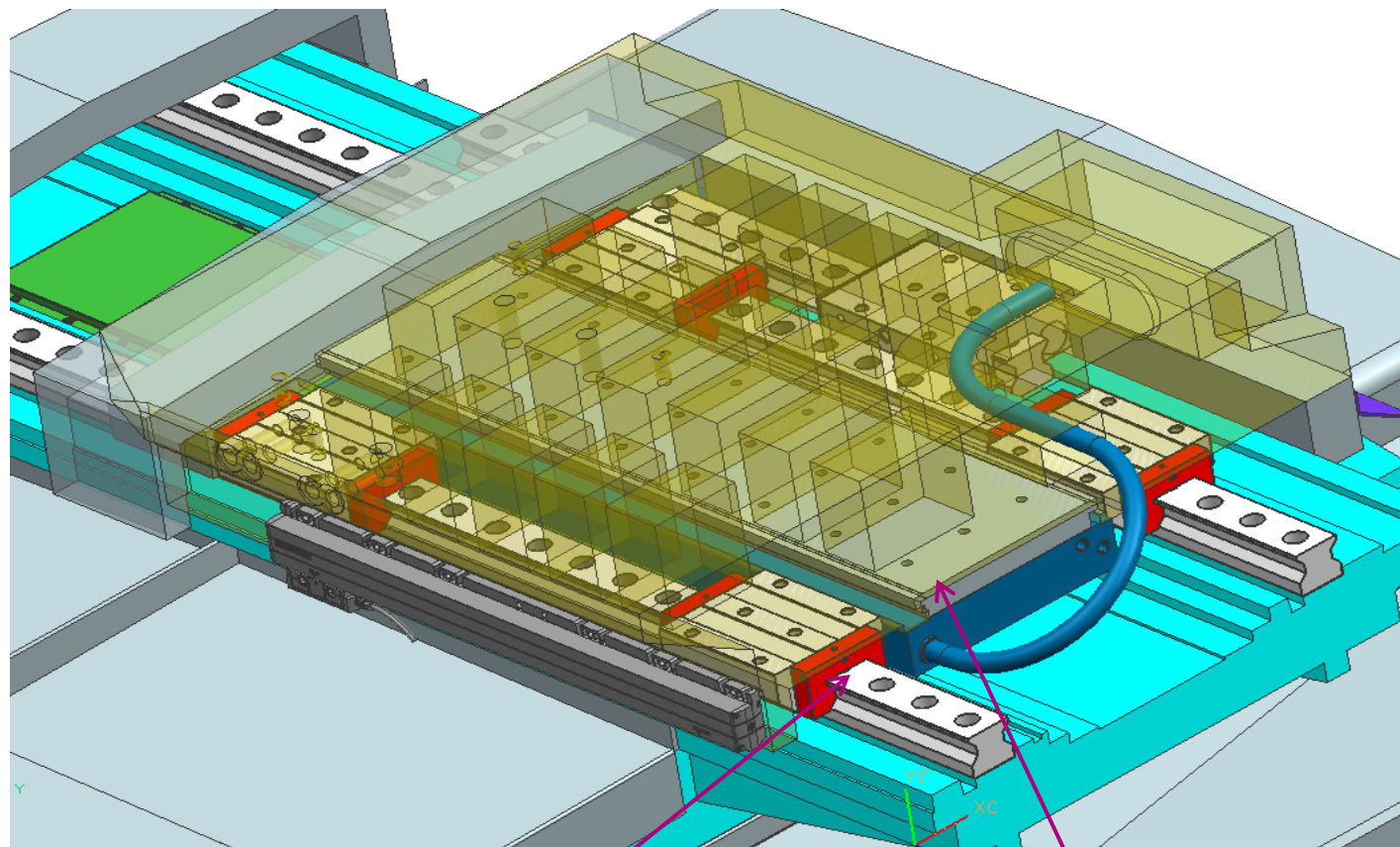
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X-Axis Overview



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X-Axis Overview

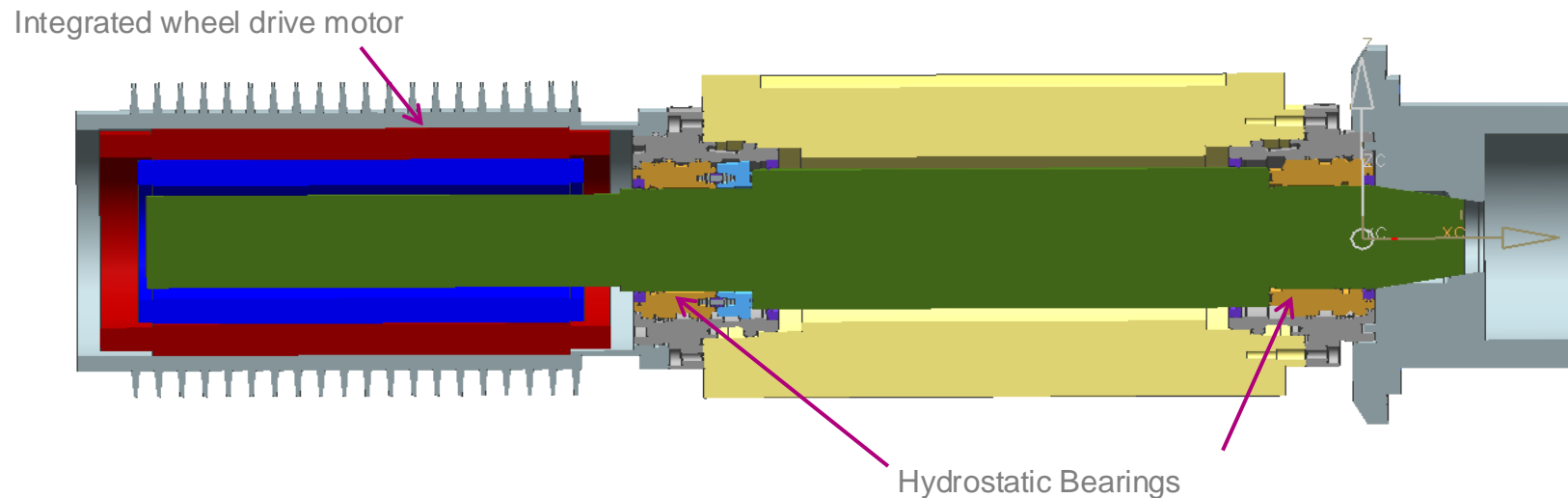


Linear bearing guides

Linear motor

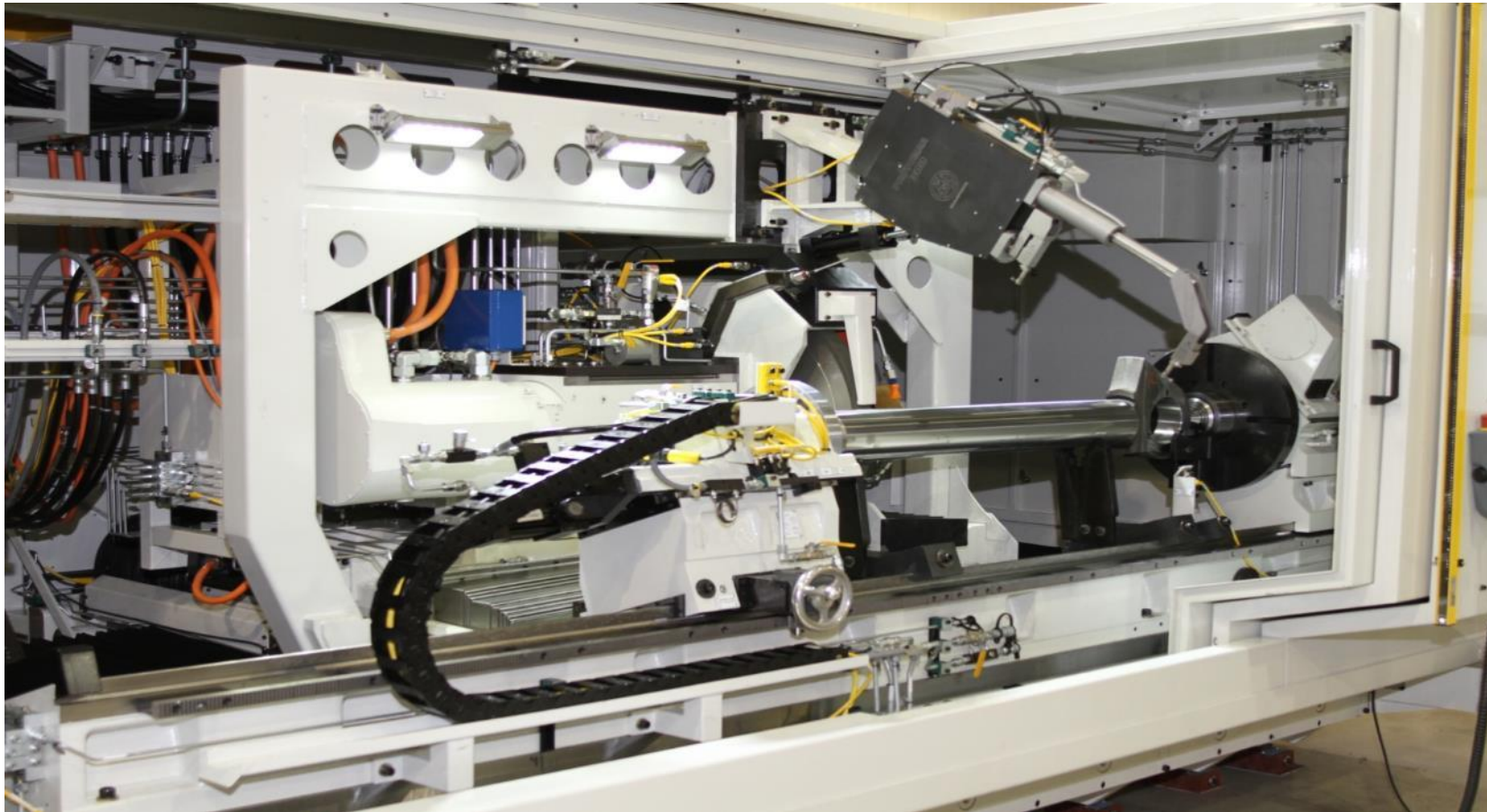
X-Axis Overview

- Hydrostatic Stiffness Allows Higher Feed Rates
- Higher Consistent Accuracy, Longer Accurate Life
- Improved Vibration Damping: Improved Finishes
- Friction Free Operation: Maintenance reduced or eliminated



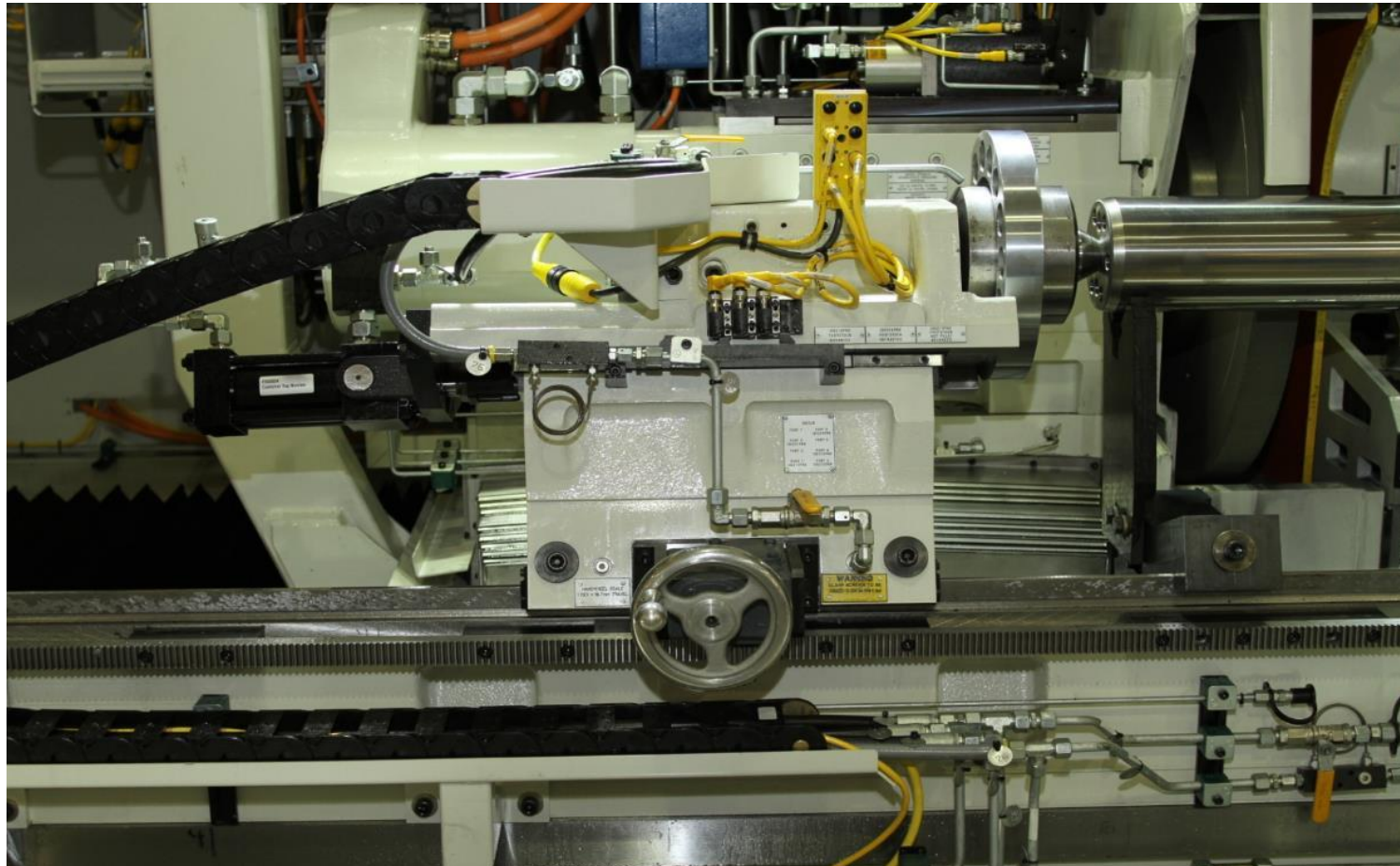
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Polish Attachment



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2500 Landis Flex Footstock with Gauge Master



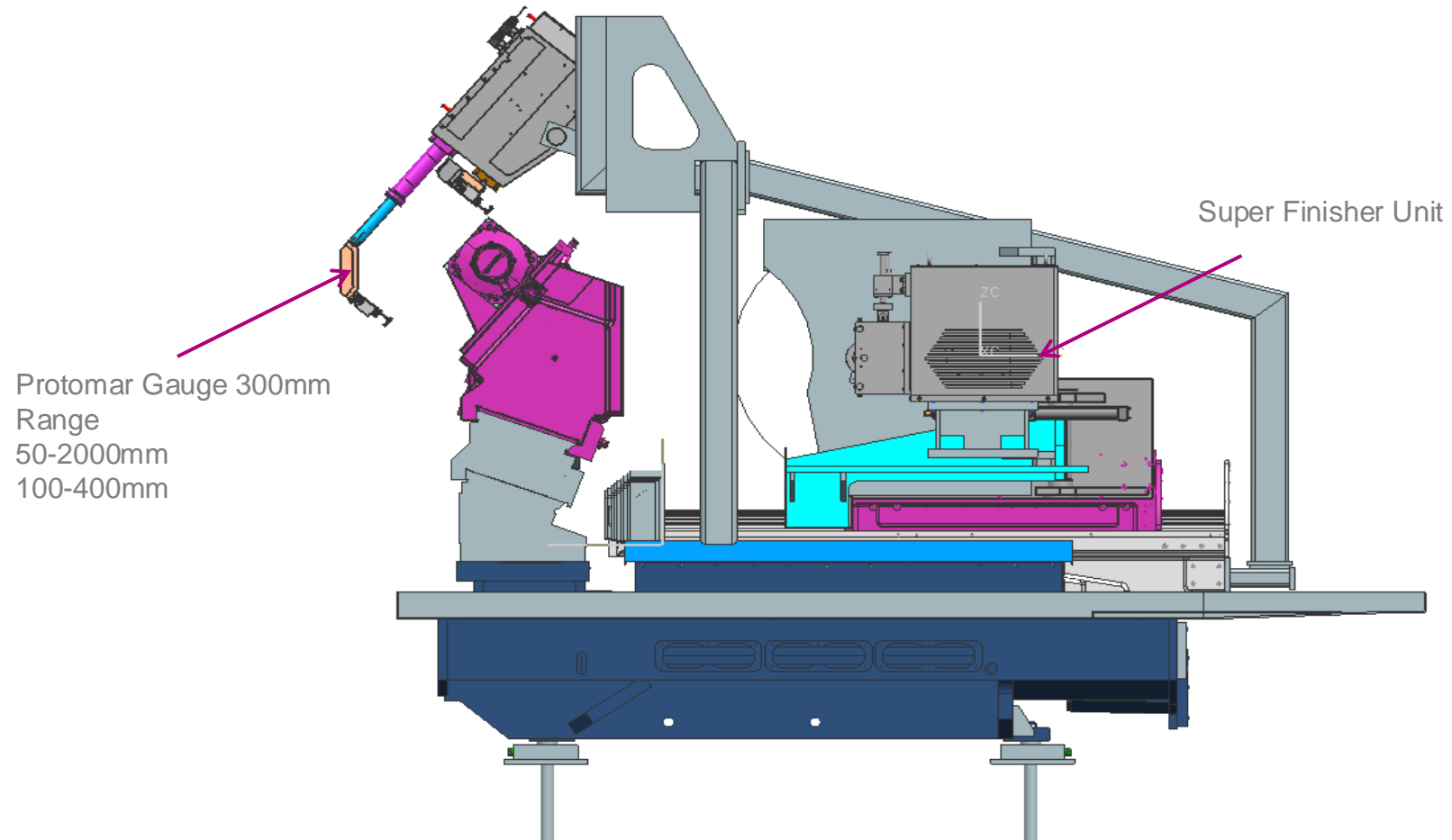
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2500 Landis Flex Headstock with Rotary Dressing



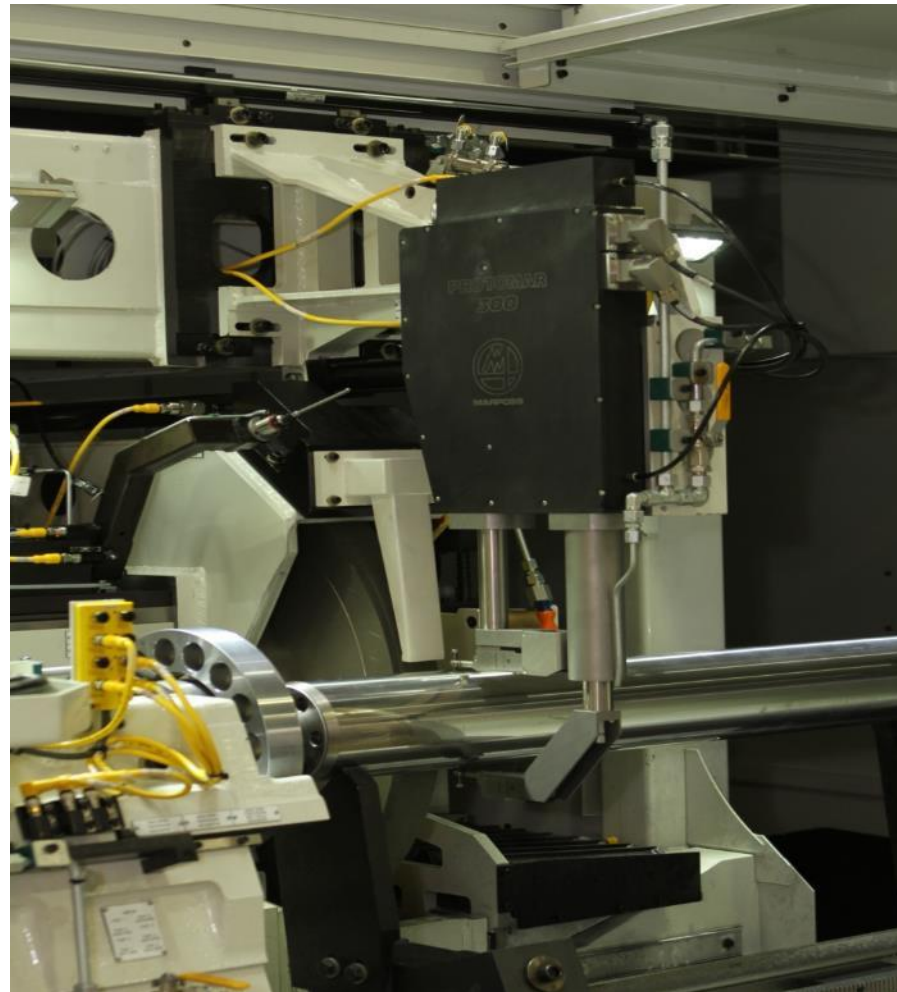
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2500 Landis Flex RH End View Load/Unload Position



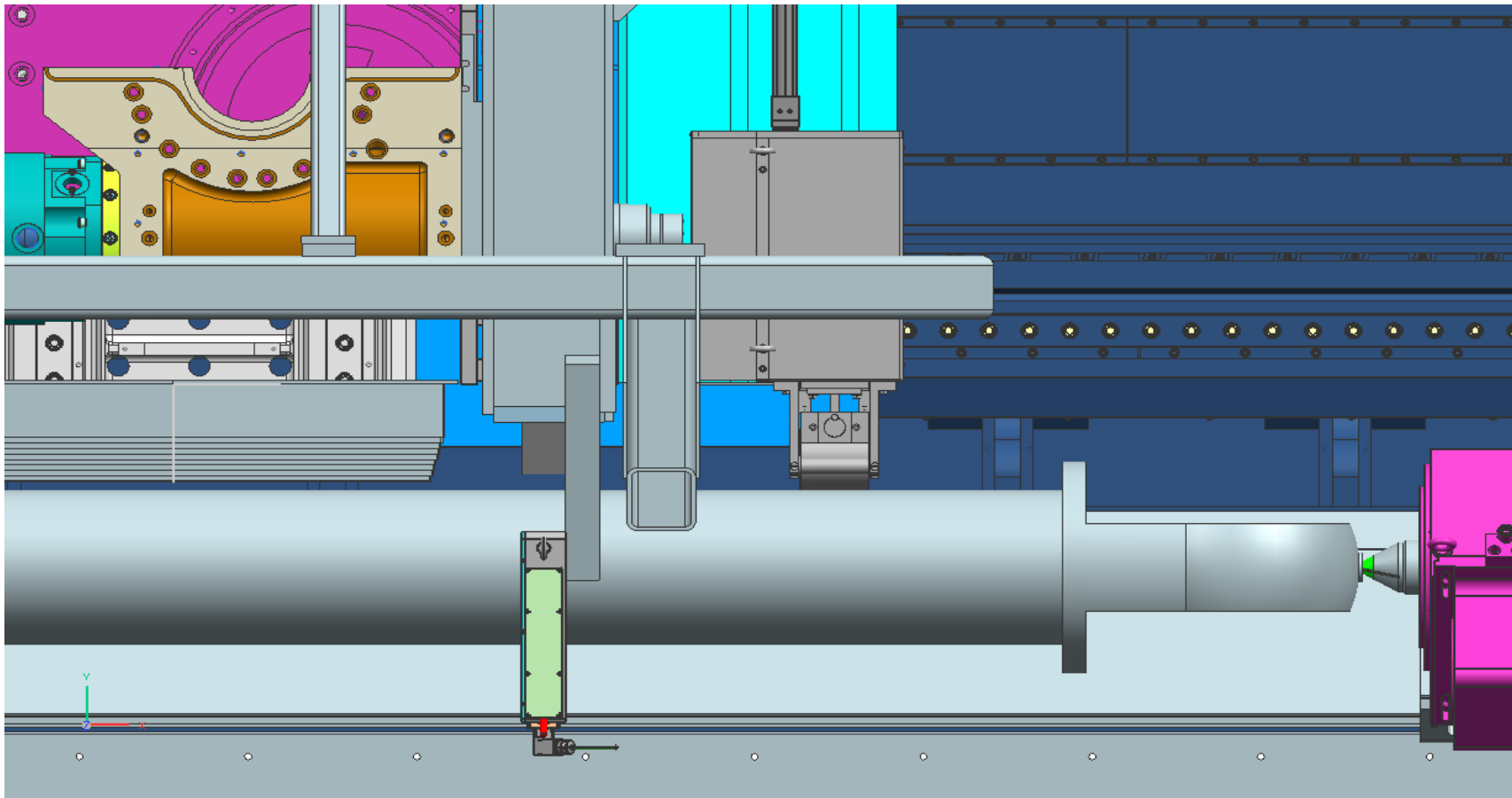
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2500 Landis Flex Protomar Gauge
in Grind Position



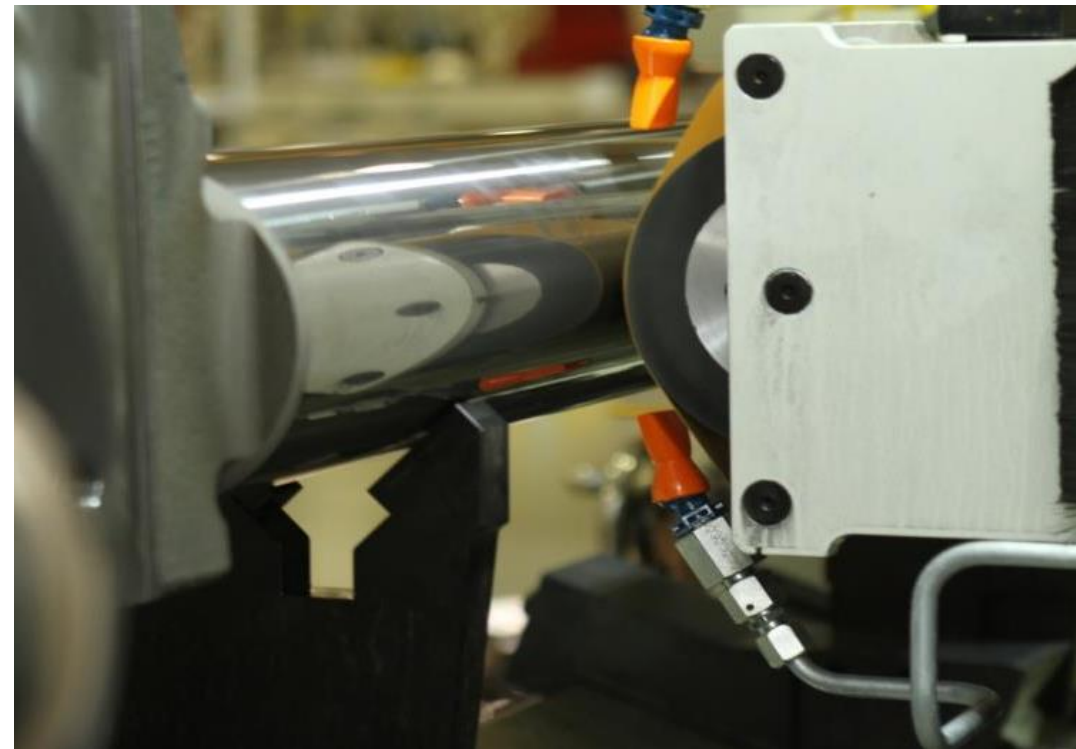
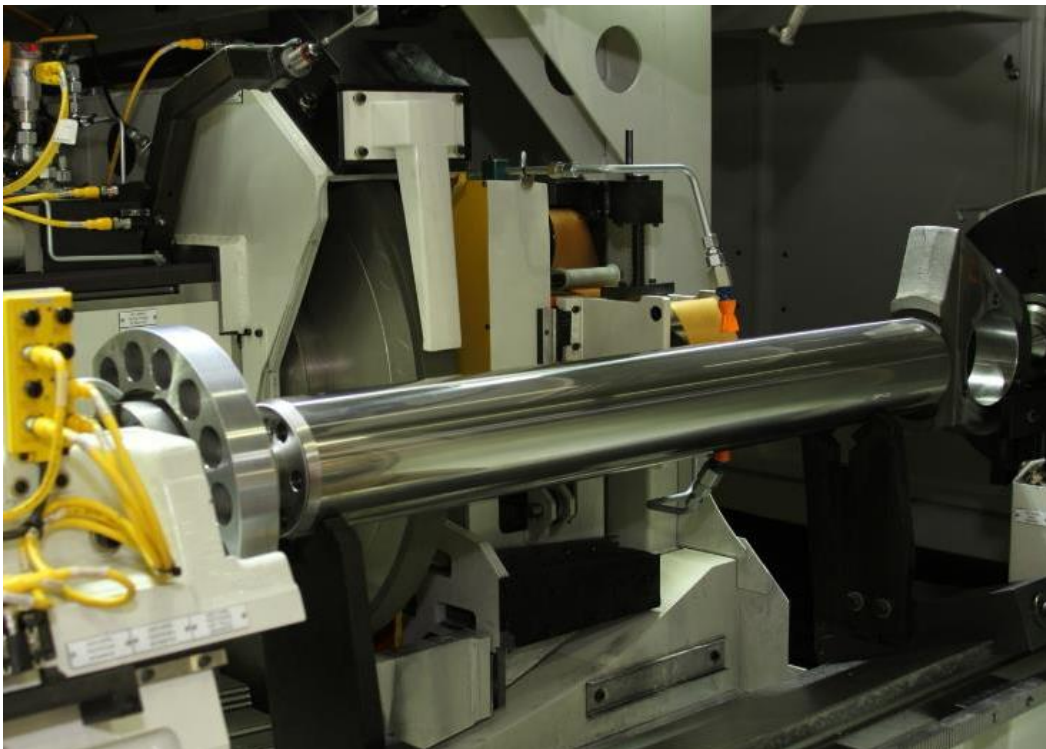
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Super Finisher Advanced



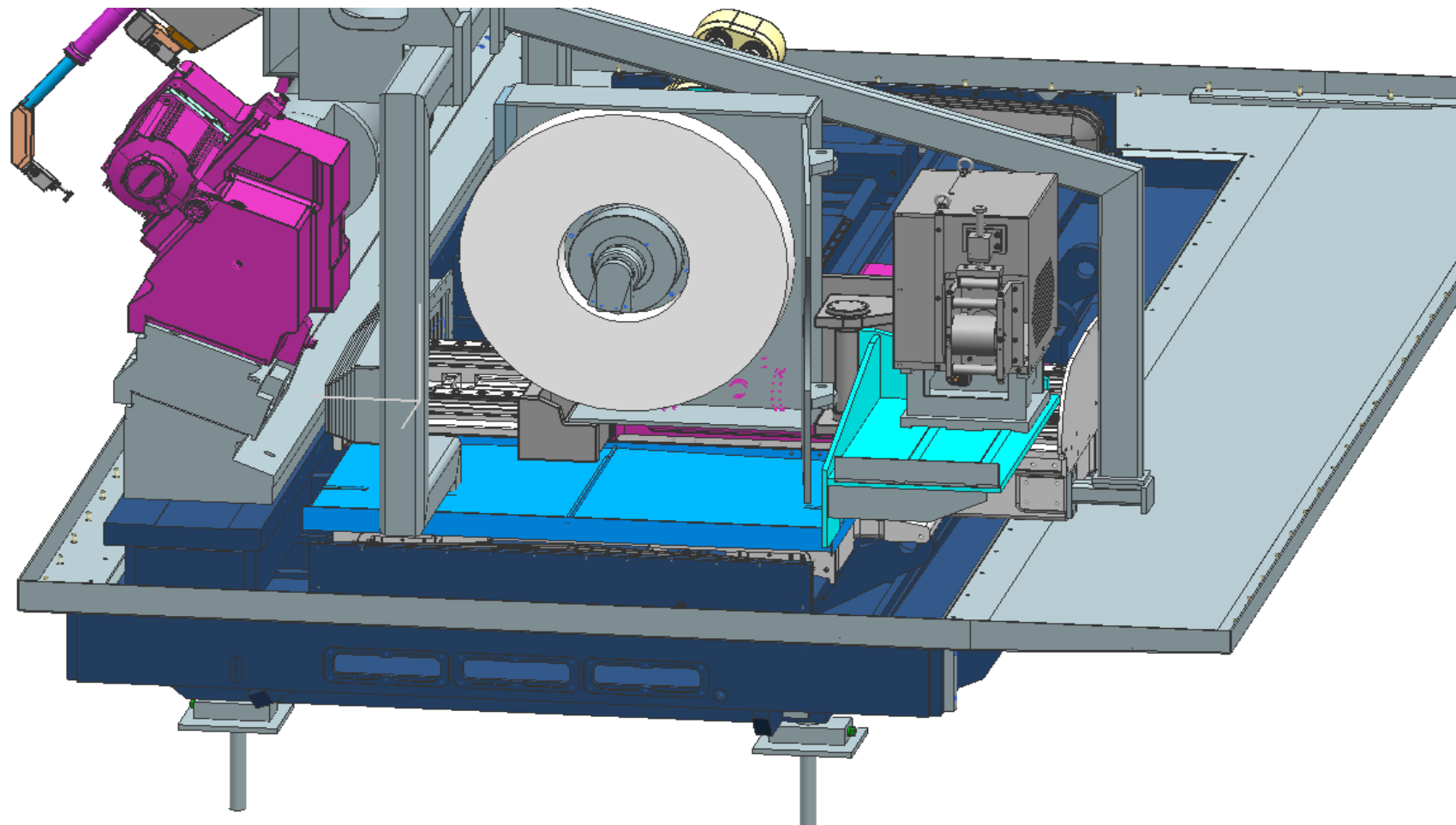
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Super Finisher Advanced



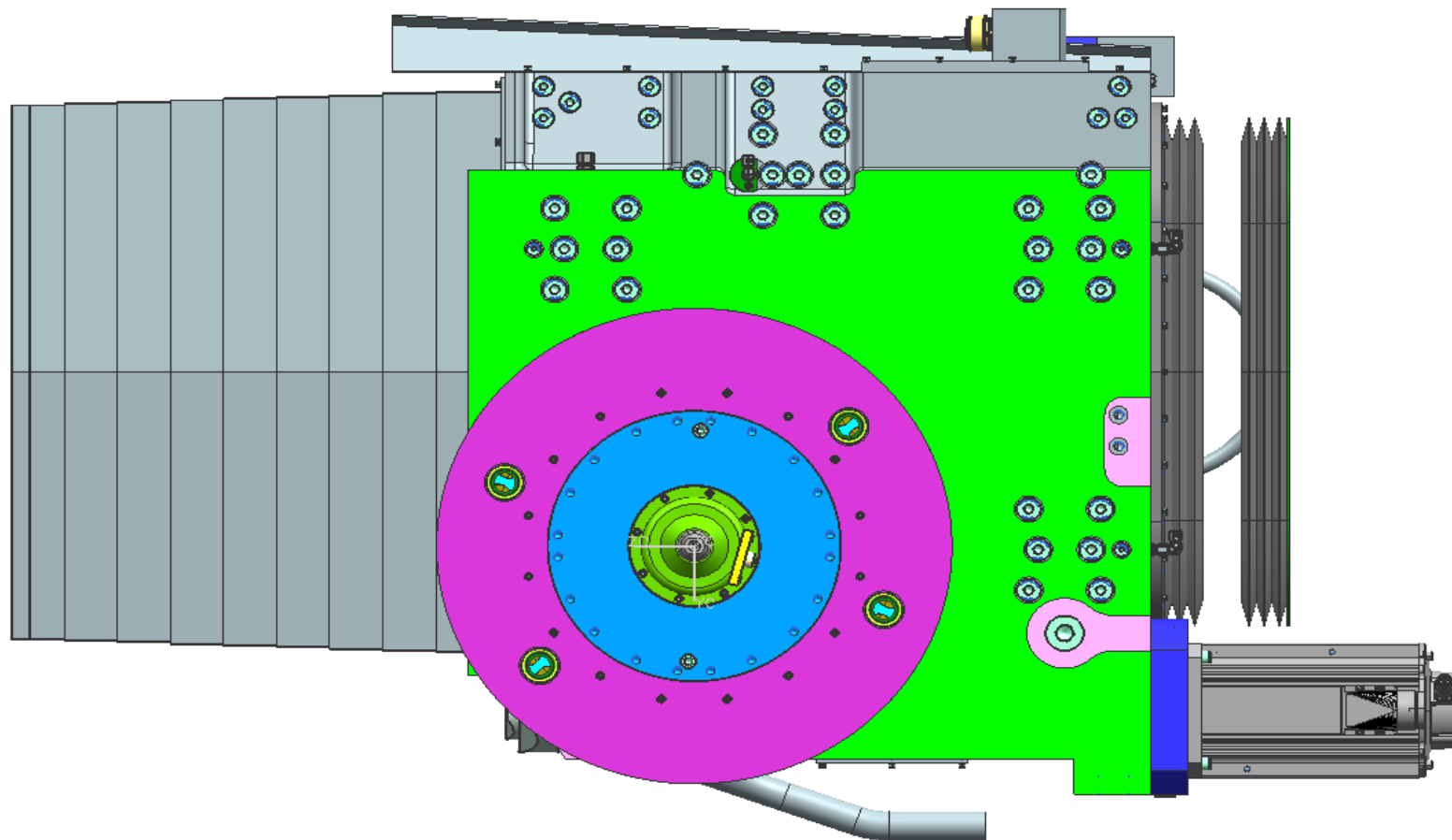
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Wheel Change Access



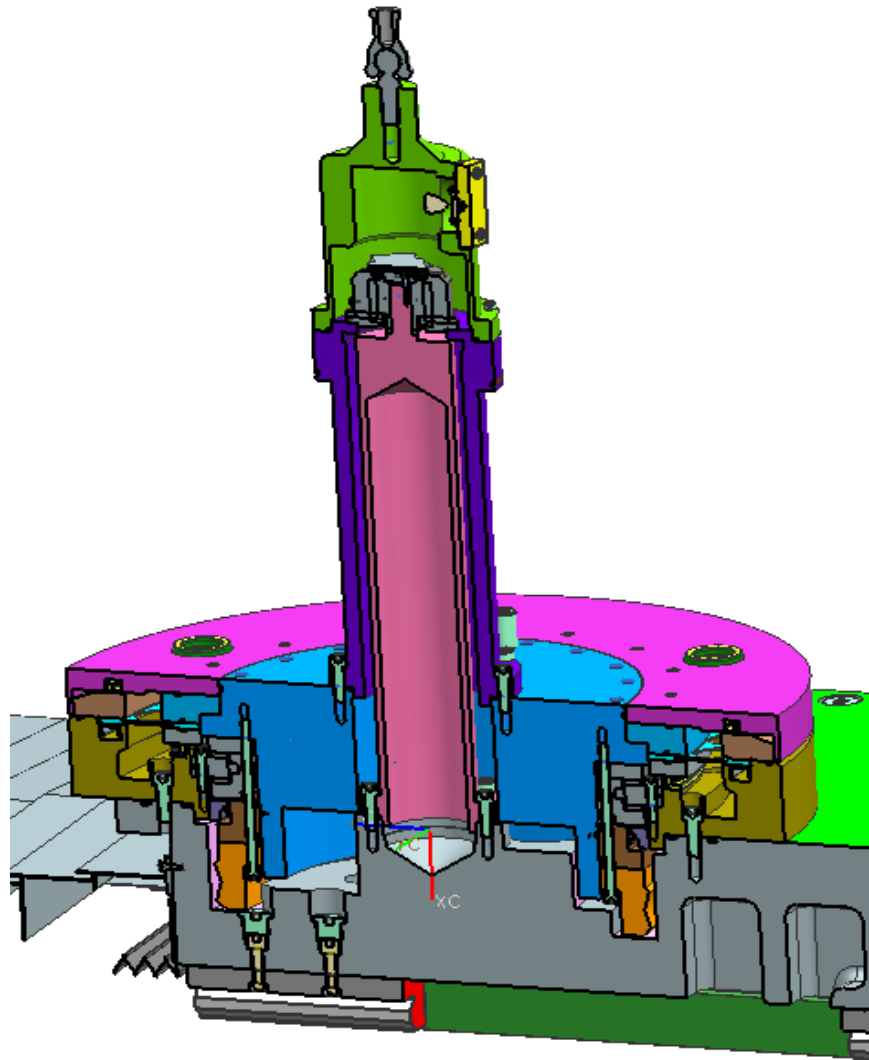
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Plan View



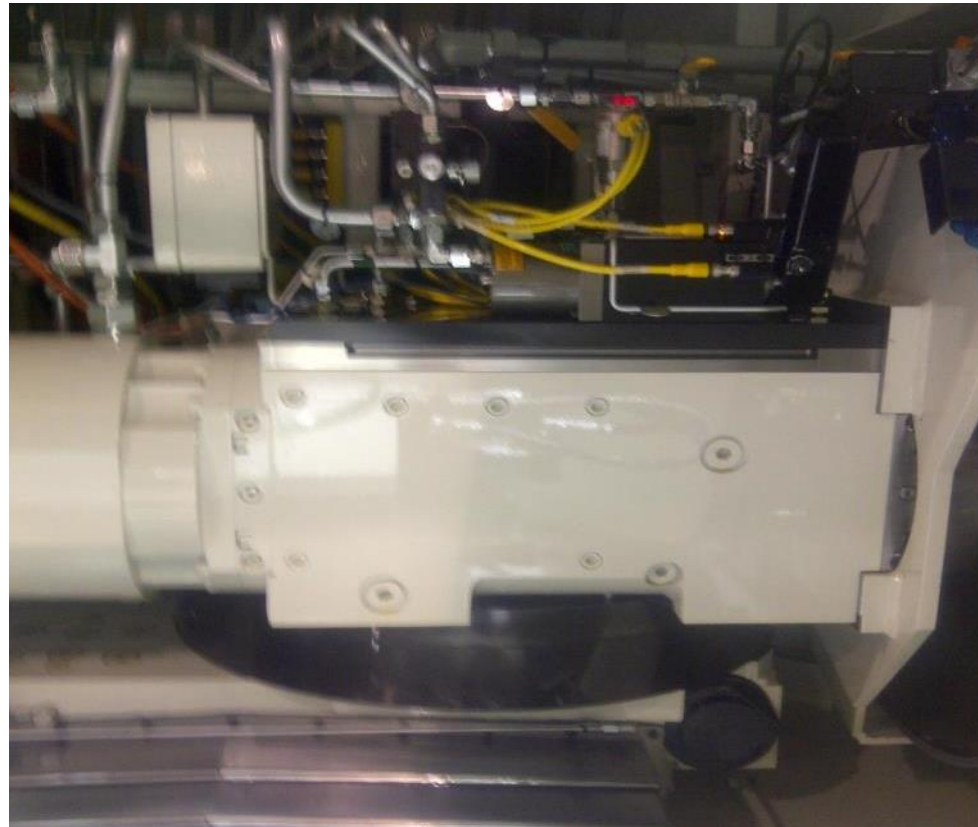
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Section Parallel to X-Axis



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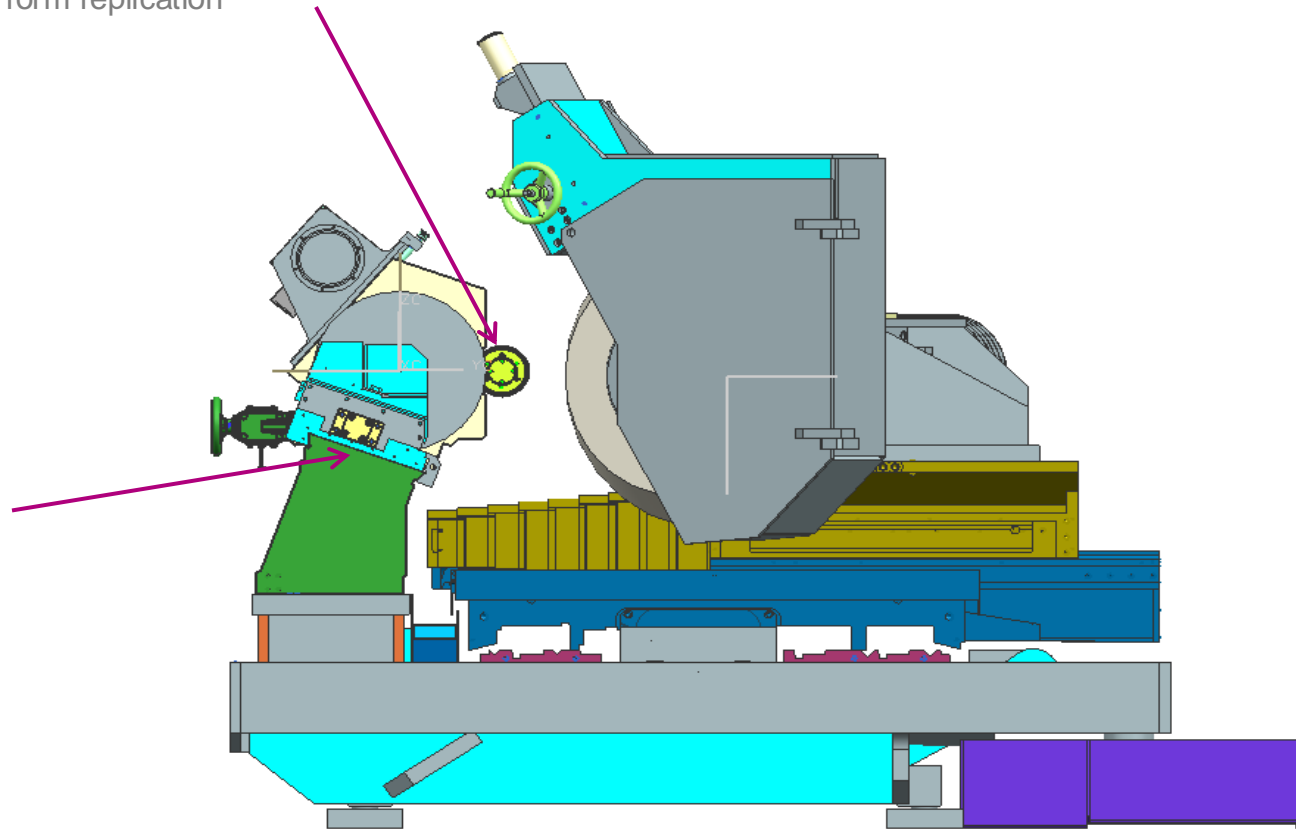
Landis Flex with B-Axis Swivel



Machine – Wheelhead LH End View

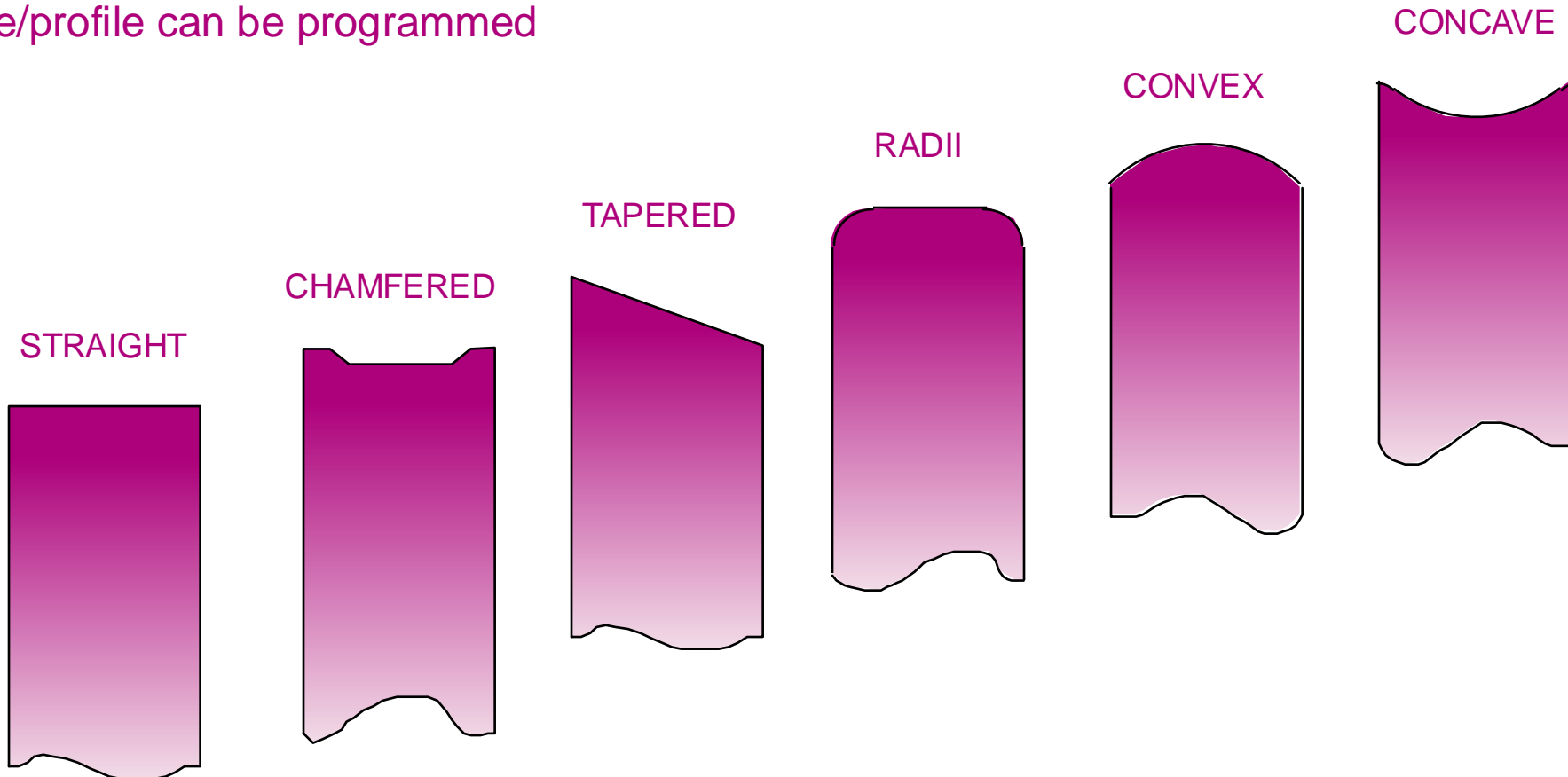
Headstock mounted rotary diamond
for robust form replication

20° slant table top to direct
force vector into bed



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Landis CNC Dressers
Any shape/profile can be programmed



CBN Truing System

- Front Mounted at Wheel and Workpiece “Line of Contact”
- CBN Rotary Diamond Dresser
 - Motorized Spindle
 - Compact Size
 - Eliminates Belts and Pulleys
- Extremely Accurate and Precise Axis of Rotation
- Truing and Dressing Combined Into a Single Process
 - Adaptive Process Minimizes Amount Removed from CBN Wheel via Feedback from Acoustic Emissions Sensor
 - Superior to Systems that use Pre-Programmed Truing Amounts

Specifications

Model	Landis Flex Straight	Landis Flex 30° angle head	Landis Flex Swivel head
Grinding capacity			
Max. component swing	400 (750) mm (15.8")		
Max. grinding length	1,500 / 2,500 mm (59" / 98")		
Max. workpiece weight	1,350 kg (2,976 lb)		
Wheelhead			
Max. number of wheels	1	1	3
Wheel type	Aluminum Oxide, CBN, Ceramic or Diamond		
Max. wheel Ø	760 mm (30")	760 mm (30")	600 mm (23.6")
Max. wheel width	100 (75) mm (3.9")	100 (75) mm (3.9")	100 (75) mm (3.9")
Wheel surface speed	45 (80) m/sec (148 ft/sec)	45 (80) m/sec (148 ft/sec)	45 (80) m/sec (148 ft/sec)
Spindle power	50 kW	50 kW	50 kW

Specifications

Model	Landis Flex Straight	Landis Flex 30° angle head	Landis Flex Swivel head
Workhead & Footstock			
Workhead speed	300 rpm		
Footstock stroke	70 mm (2.8")		
Axes			
Guideways / bearings (linear axes)	Anti-friction bearing		
Grinding spindle	Hydrostatic		
Drive	Linear motors		
Dresser	Rotary diamond dresser standard		
Dimensions			
Dimensions (W x D x H)	5,092 x 4,142 x 3,103 mm / 6,292 x 4,198 x 3,126 mm (16.7' x 13.6' x 10.2' / 20.6' x 13.8' x 10.3')		
Machine weight	15,000 to 19,500 kg (dependent on length) (33,069 to 42,990 lb)		