LWN 190 for Ball Screws -Trapezoidal screws

Leistritz Whirling Machine

Machine sizes

LWN 190 with AWS 240 is designed for the machining of ball screws with:

32 – 160 mm external diameter
and up to 12.000 mm total length

Leistritz Whirling machines:

- Many years of practical experience
- Incorporate the latest technical developments
- Fulfil highest demands of technical and ergonomic performance
- Deliver high productivity, high precision, and ease of use

LWN 190.8.000

LWN 190.10.000

LWN 190.12.000

Performance data

Diameter	32-160 mm
Length	max. 12.000 mm
Ball size	25 mm

Ball circle diameter:

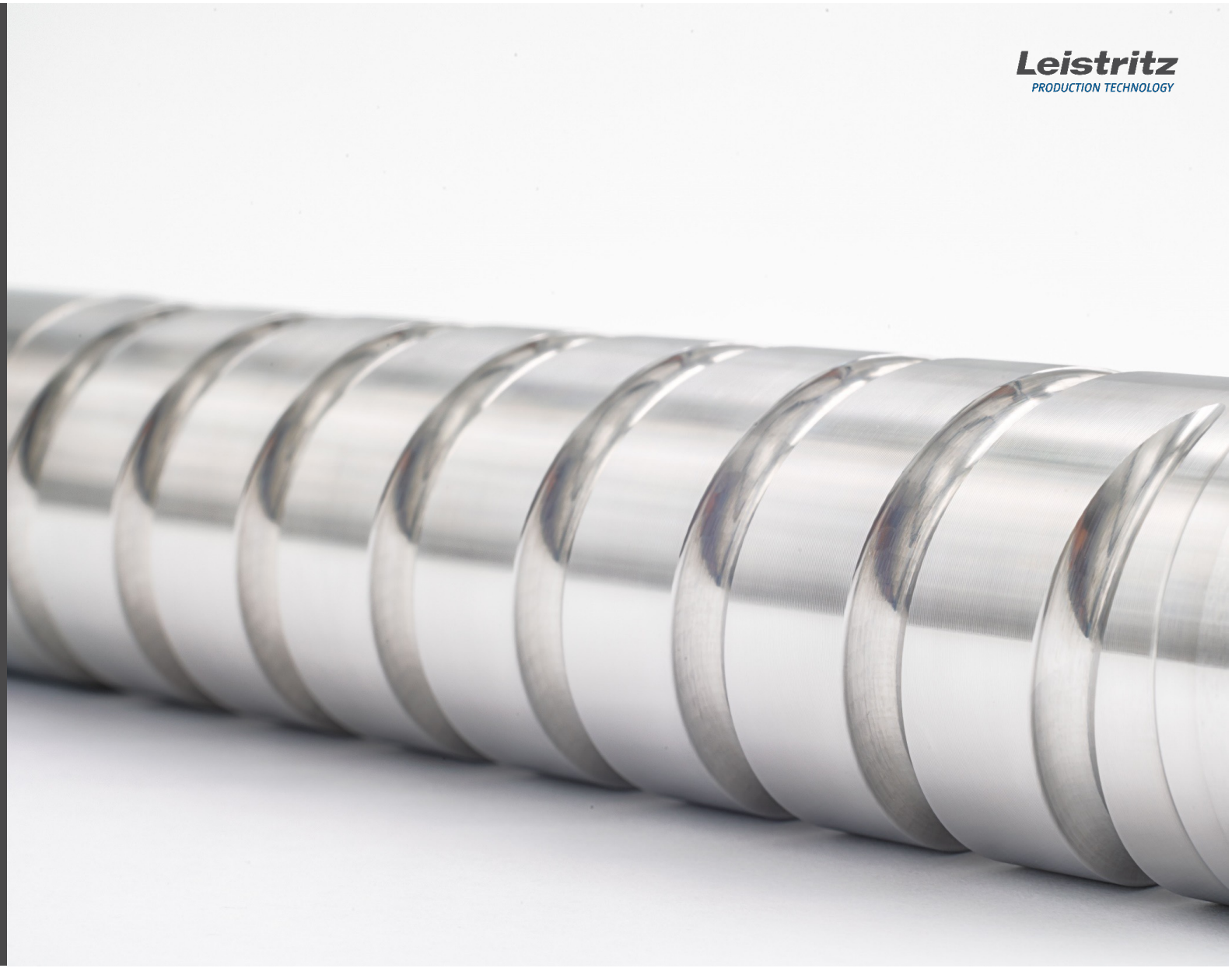
< 0,008mm over 10.000 mm

Lead:

IT 5 according to ISO 69 051

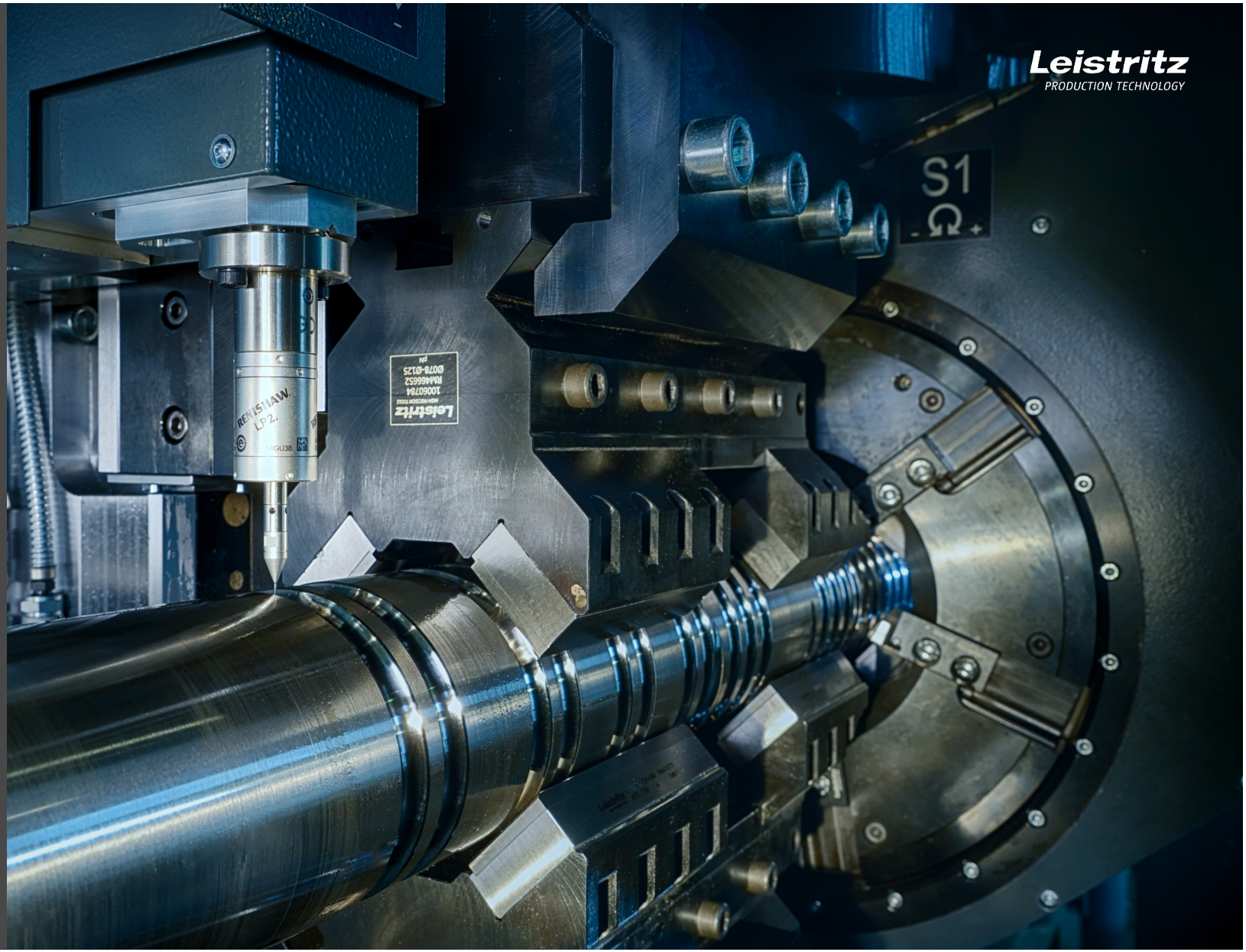
Surface Quality:

Ra < 0,4



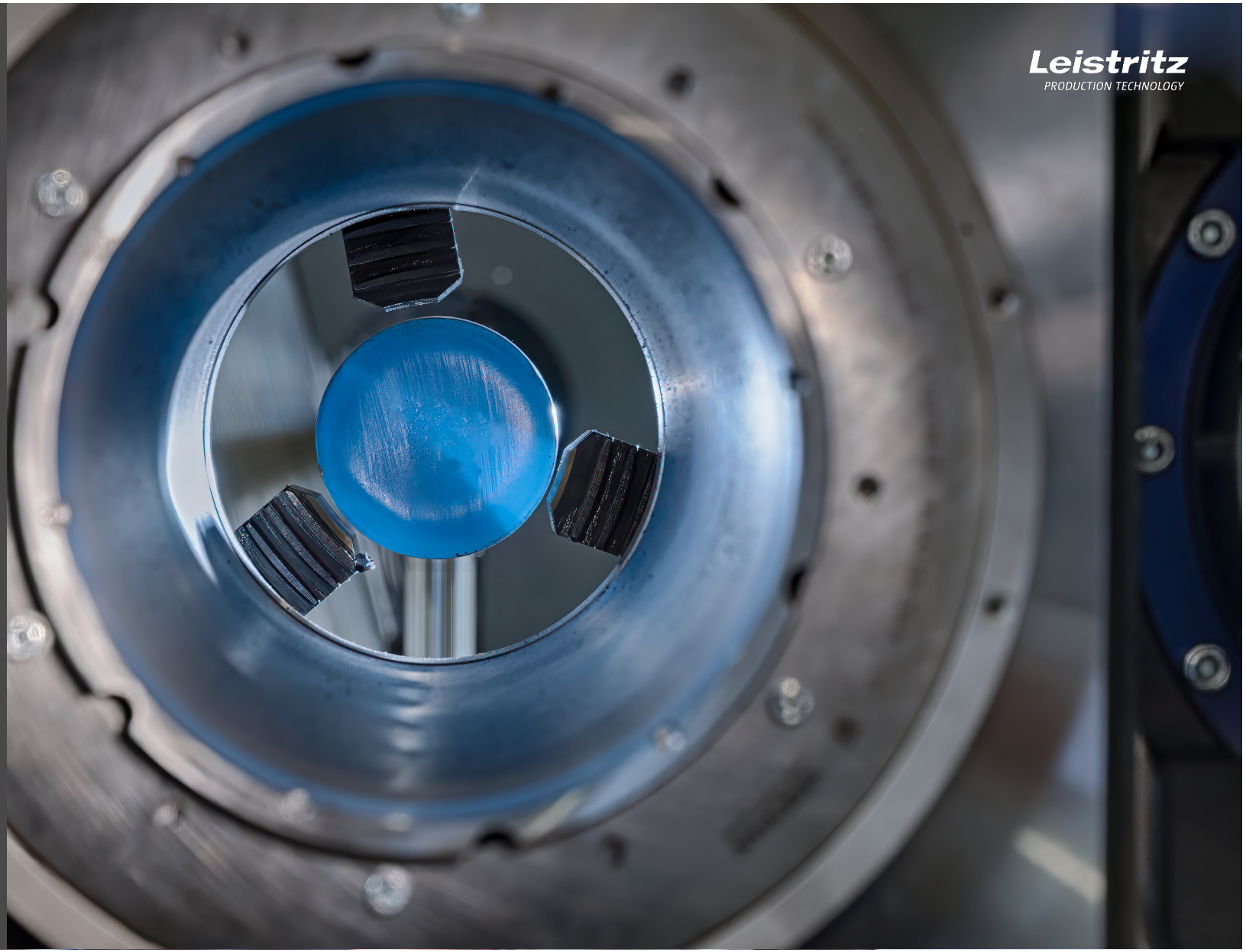
- To ensure high quality, the whirling unit is equipped with a short taper tool interface
- The whirling ring accepts 4 – 8 fine adjustable whirling inserts
- Air nozzles on the whirling unit support the chip removal

- Massive and self centering steady rest
- Take up the radial cutting forces
- Ensure that the workpiece remains concentric to the axis during whirling
- Steadies are mounted on the left and right side of the whirling head
- Clamping jaws can be adjusted over prismatic guides to be positioned close to the whirling ring.



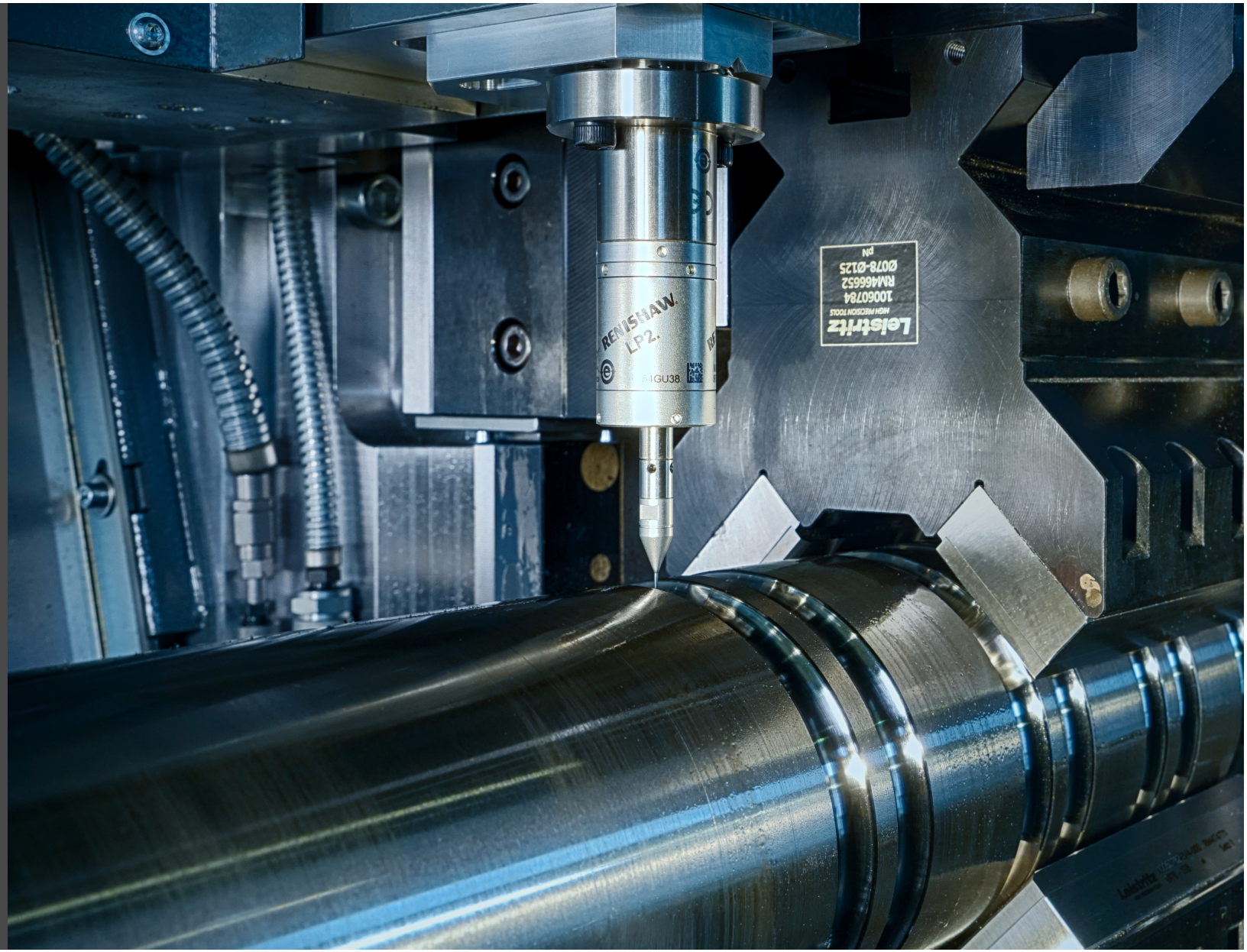
- Supporting steady rests facilitate loading long workpieces and prevent them from sagging during processing.
- Steady rests are automatically moved to the parking position when the slide unit approaches
- After the unit has passed the support steady, it moves back to its support position.
- Lifting movement is controlled via the CNC, achieving a position accuracy of 0.01 mm
- Depending on values entered in the CNC program, the steady rests are automatically moved to the exact support height

- The machine is equipped with a 3 Jaw chuck or hydraulic collet chuck
- Large contact area between chuck and workpiece allows high torque to be transmitted and provides high concentricity
- Short set up time less than 1 minute for the collet change
- Main spindle bore 162 mm



Track finding system

- Track finding to machine ballscrews in over length
- Fully integrated system with linear guide and cnc axes
- Lead measurement of the ball screw
- Track finding after tool breakage
- Track finding for pre-machined ball screws



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PRODUCTION TECHNOLOGY

Workpiece support

CNC control FANUC 31i-B Plus

- compact design of CNC control with 1 NC channel integrated in screen unit
- digital interface to spindle and drives
- memory card and USB interface on the screen unit for data transfer
- CNC part program memory
- absolute and relative zero offsets
- CNC programming according to DIN/ISO 66025
- parameterizable creation of part programs
- calculation functions
- programming functions

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Thank You.

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