

TD SERIES

TD Z2200 / TD Z3200 MODELS



CMZ

Turning the world

MODEL RANGE

TD SERIES TD Z2200

TD Z2200 MODEL

(15/20/25/30/35/45/55)
/- M-Y-



MODEL RANGE

TD SERIES TD Z3200

TD Z3200 MODEL

(15/20/25/30/35/45/55)
/- M-Y



TECHNICAL CHARACTERISTICS

TD SERIES TD Z2200

1 TD Z2200 MODEL

Front and rear roller spindle bearings cooled by oil

Hydraulic cylinder operating at 45kg/cm²

Integrated spindle motors with oil cooling

Smart automatic lubrication system.

Savings and reliability.

Thermal sensor in the bedplate

It controls the temperature of the oil that cools:

- The Spindles.
- The Screw nuts.
- The ballscrew mounts.
- The turret.

Highly rigid cast iron monobloc machine bed.

Oil-cooled X and Y axes ballscrew nuts

High quality double anchor pre-tensioned ballscrews provide high thermal stability.

Prismatic guide ways

Acceleration of 1g. Rapid traverse rate of 30 m/min.

Ball screw steadies allow 30 m/min rapid travels in Z axis.

Electric cabinet totally sealed (IP55 protection).

12.000 rpm

Oil cooled turret with integrated motor. Hydraulically clamped with curvic coupling. Rigid tapping.

Ballscrew mountings are cooled by oil.

Oil-cooled X and Y axes ballscrew nuts

Bi-directional and interpolated laser compensation in all axis, including C axis

Live tailstock.

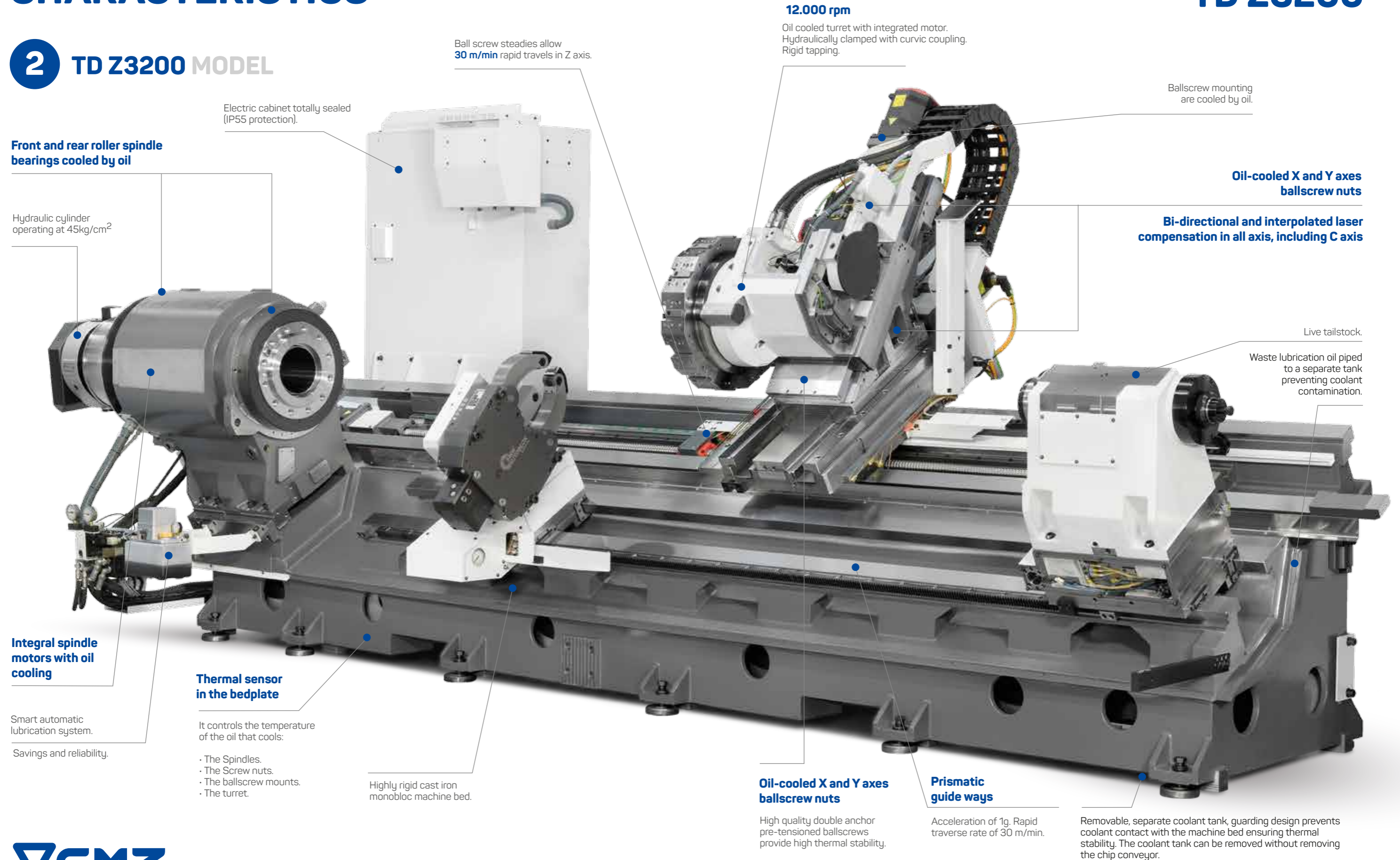
Waste lubrication oil piped to a separate tank preventing coolant contamination.

Removable, separate coolant tank, guarding design prevents coolant contact with the machine bed ensuring thermal stability. The coolant tank can be removed without removing the chip conveyor.

TECHNICAL CHARACTERISTICS

TD SERIES TD Z3200

2 TD Z3200 MODEL



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Ballscrew mounting are cooled by oil.

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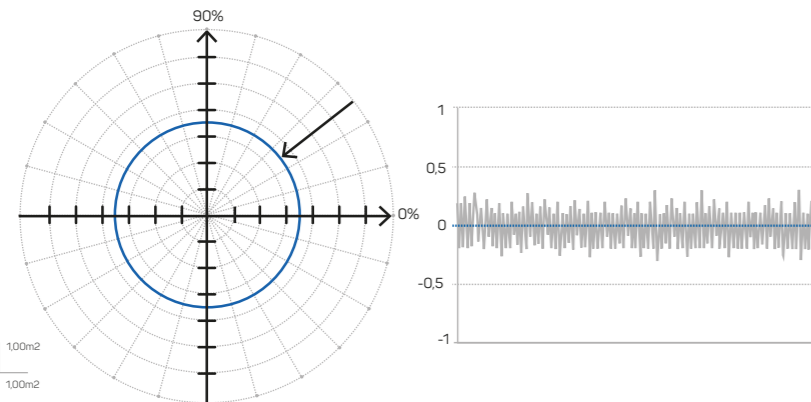
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INTEGRATED SPINDLES

INTEGRATED SPINDLE MOTORS INCREASE ACCURACY AND REDUCE MACHINING TIMES

The spindle is driven through a motor integrated in the headstock body itself. This construction ensures an outstanding spindle robustness and vibration dampening that significantly improves surface finish and roundness.

Additionally, spindle acceleration and braking times are shortened by about 20-50% because of the reduced inertia and higher loading capacity of oil-cooled headstocks.



Roundness

- MACHINE: TD 15
- MATERIAL: ALUMINIUM
- Ø 60 mm.
- ROUNDNESS ACHIEVED: 0,3 µm
- FILTER: 150 P/R (50%)
- MEASUREMENT RANGE: 0,10°

Surface finish

- MACHINE: TD 15
- MATERIAL: ALUMINIUM
- Ø 60 mm.
- ROUGHNESS ACHIEVED: R_{max} 0,6 µm
- FILTER: 150 p/r (50%)

* The results obtained herein may not be attainable due to environmental and measuring differences.

No pulleys or belts

- No belt slipping.
- Better surface finish.
- Lower noise level.

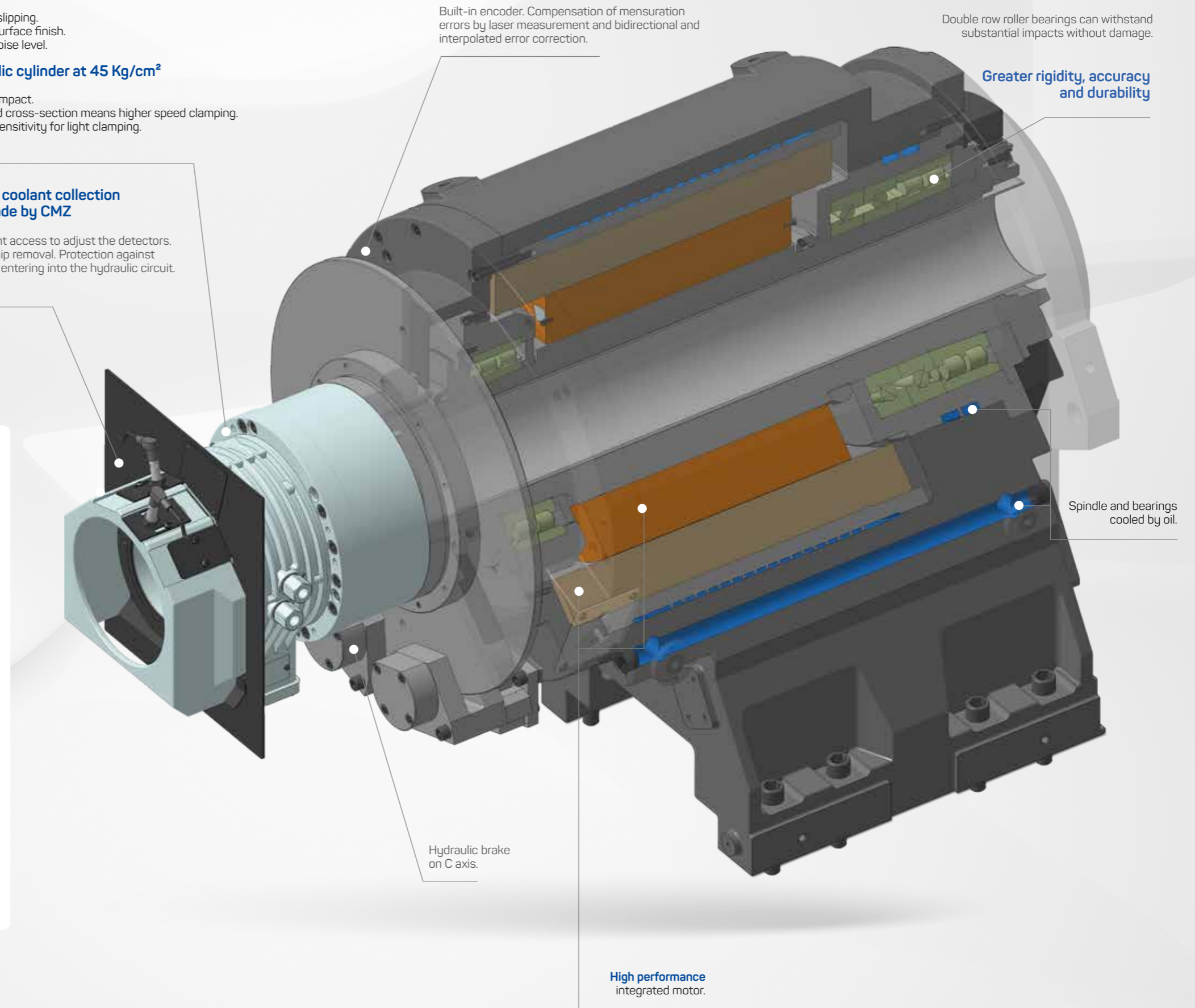
Hydraulic cylinder at 45 Kg/cm²

- More compact.
- Reduced cross-section means higher speed clamping.
- Higher sensitivity for light clamping.

Special coolant collection tray made by CMZ

Excellent access to adjust the detectors. Easy chip removal. Protection against coolant entering into the hydraulic circuit.

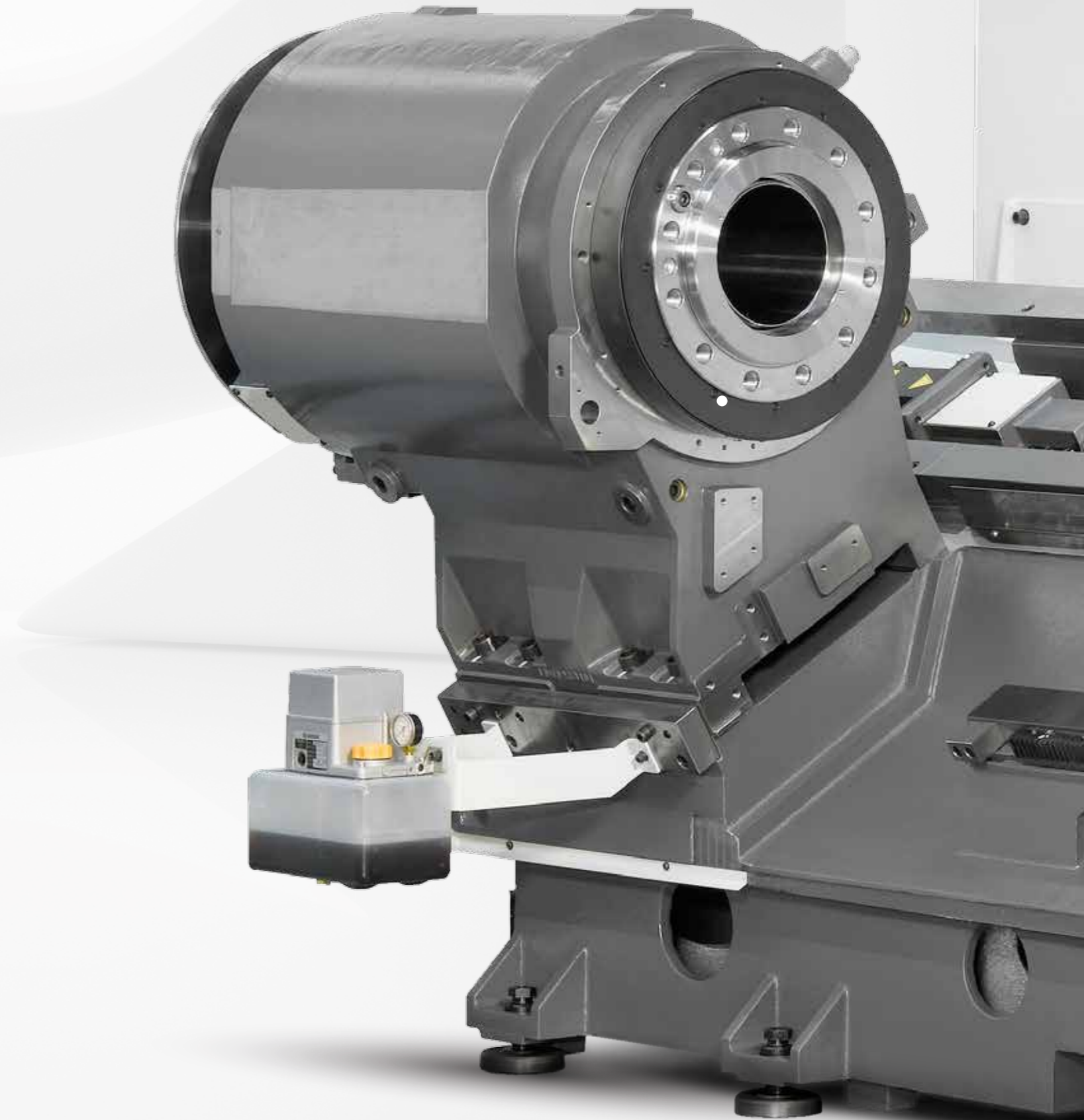
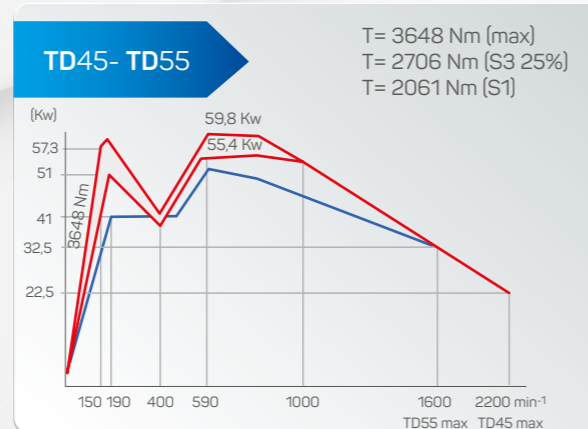
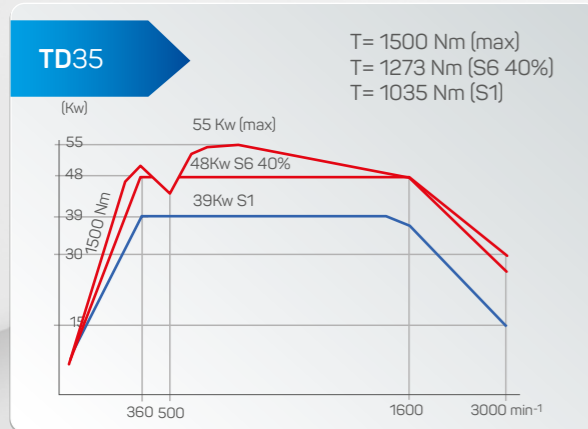
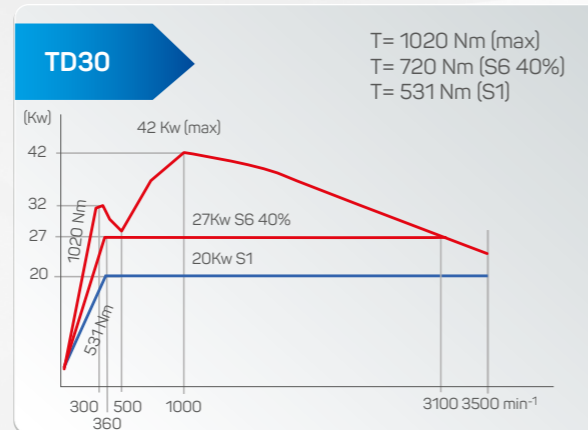
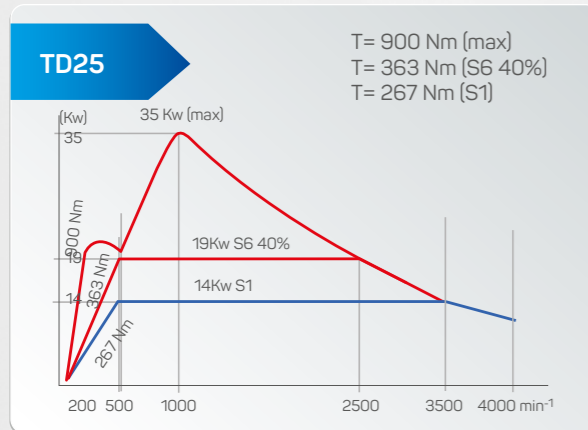
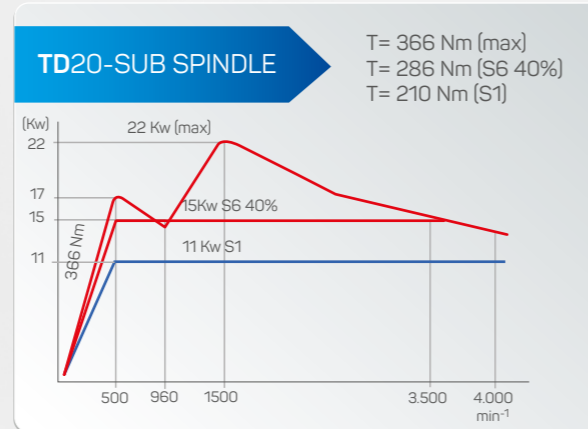
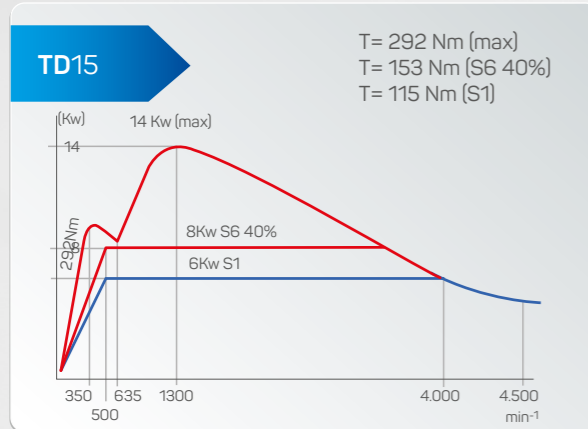
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INTEGRATED SPINDLES

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POWER AND TORQUE DIAGRAM OF SPINDLES

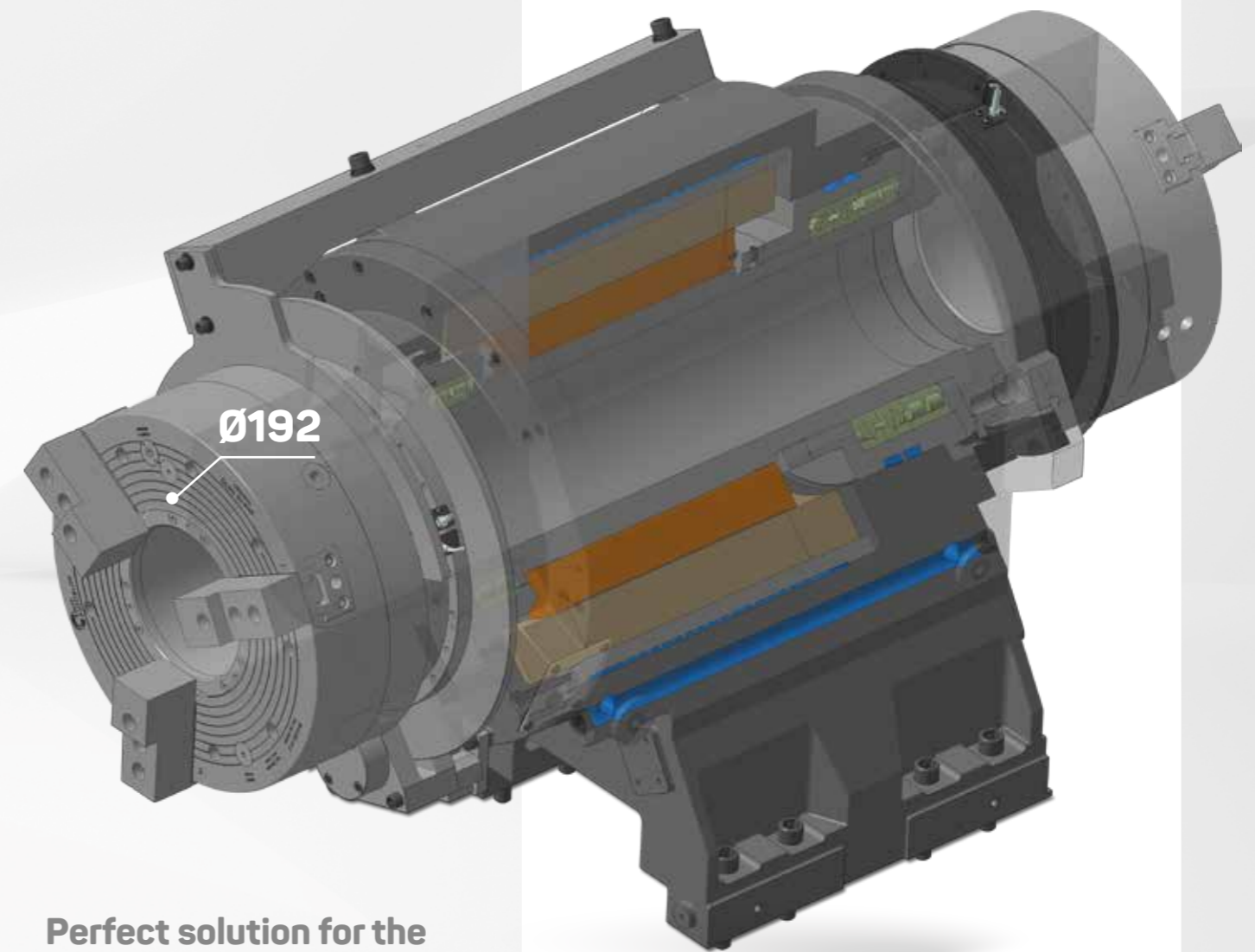


DOUBLE PNEUMATIC SPINDLE CHUCKS

TD SERIES



Double pneumatic spindle chucks with an inner through hole of $\varnothing 192$



Perfect solution for the machining of large diameter tubes

2 equal chucks SMW Autoblok model BB-N 470 $\varnothing 192$

Distance between chuck faces: 1401 mm

TURRET WITH A BUILT-IN MOTOR

AND HYDRAULIC
CLAMPING

12.000 rpm /105 Nm

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Turret

Sturdily-built turret, incorporating a large diameter turret disk which enables the interferences between tools and chuck to be reduced.

Indexing

Bi-directional high-speed indexing is driven by a servomotor. The motor used for turret rotation is similar to motors used for axis movement, thus achieving high rotation rigidity and smoothness.

Indexing time

The indexing time is 0.2 seconds for adjacent turret positions and 0.5 seconds for 180 degrees.

Unclamping

The turret is unclamped on retract and clamped on approach, thus ensuring an effective tool changing time of 0.2 s.

Clamping

The clamping is done by means of a hydraulic system. The locking rings are 220 mm diameter and are a curvic coupling.

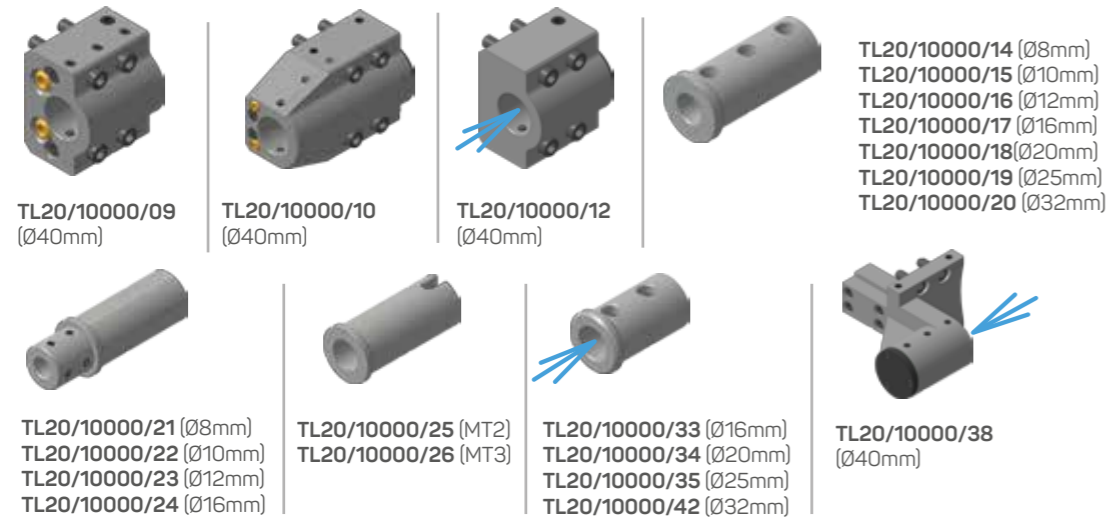
Transmission

The transmission of driven tools is fitted with Gleason type conical spiral gears, hardened and ground giving high accuracy when rigid tapping.

TOOL HOLDERS

SERIE TD

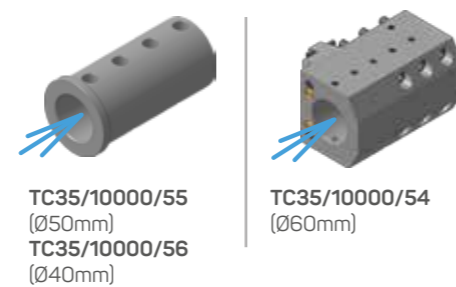
Boring & Drilling holders Ø40



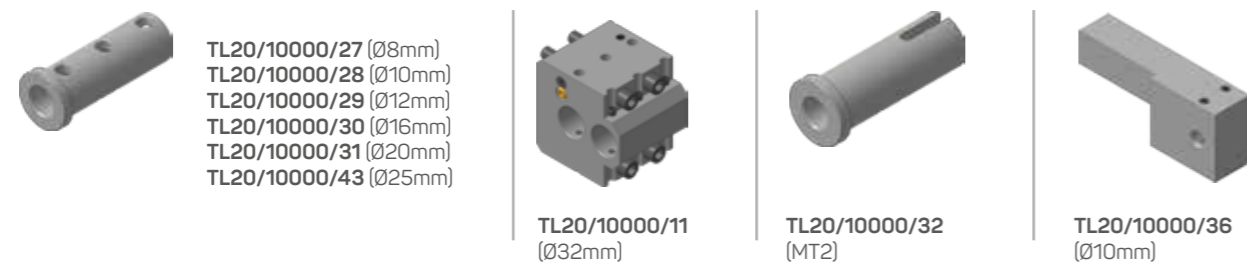
Boring Holders Ø50



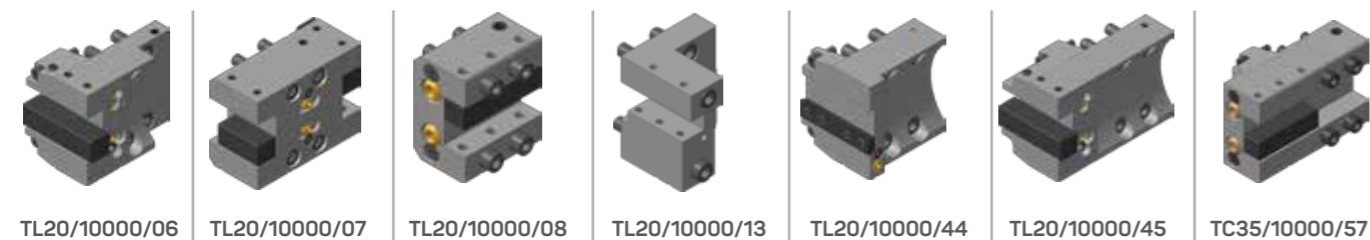
Boring Holders Ø60



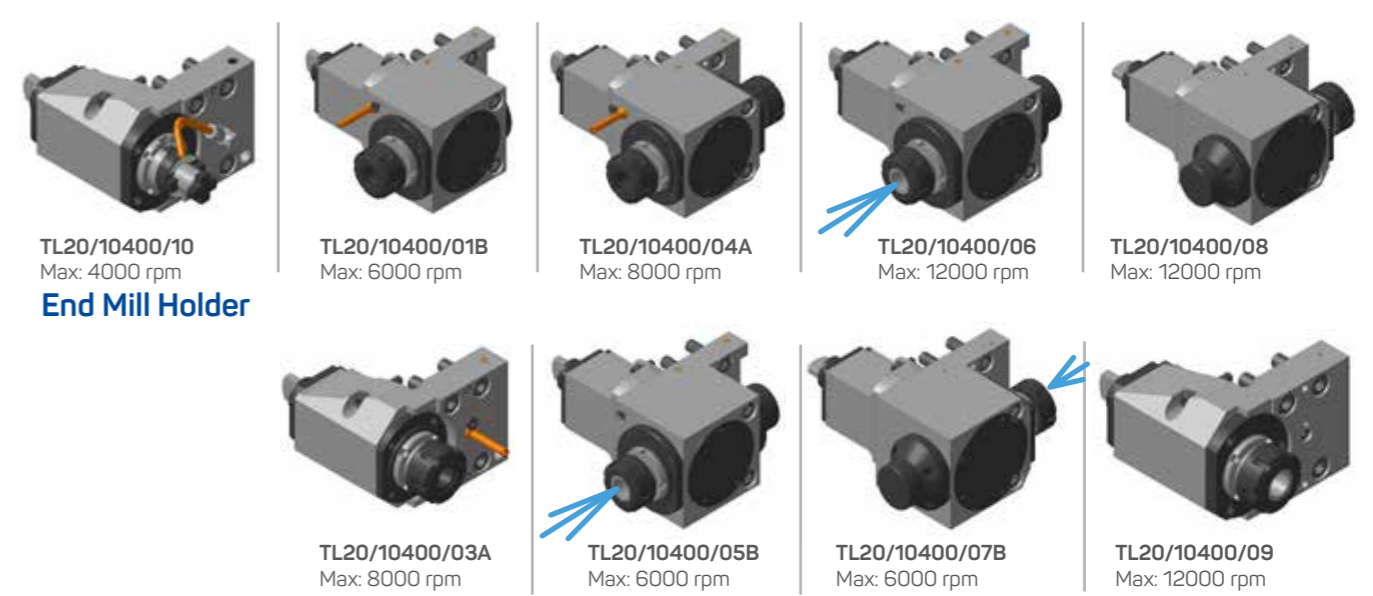
Double Boring Holders Ø32



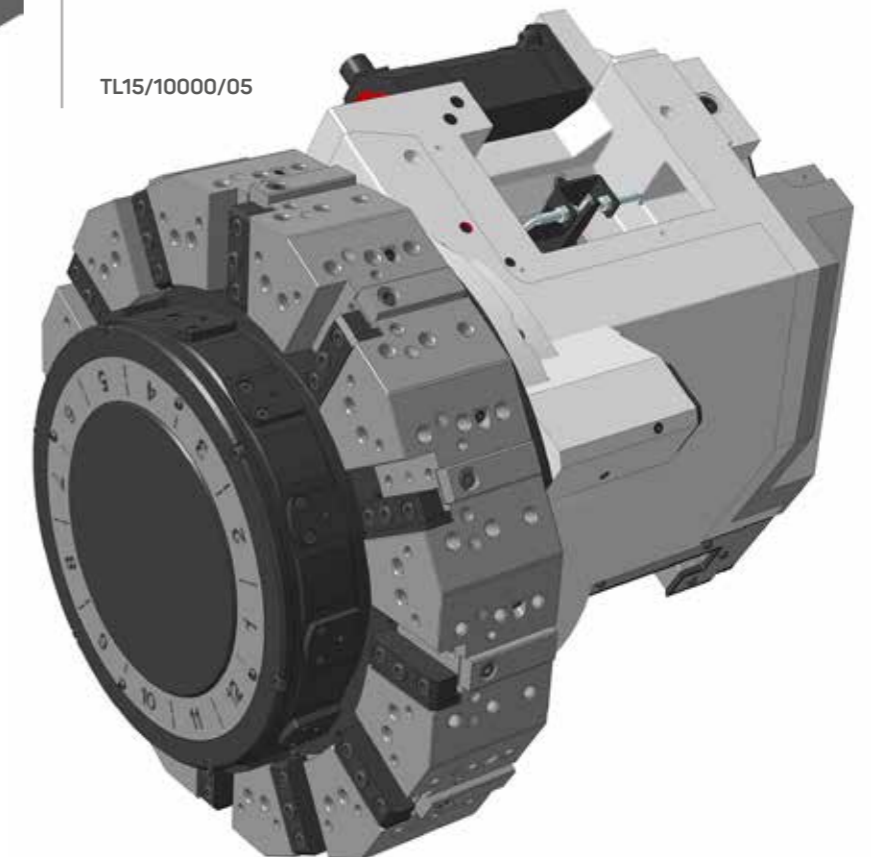
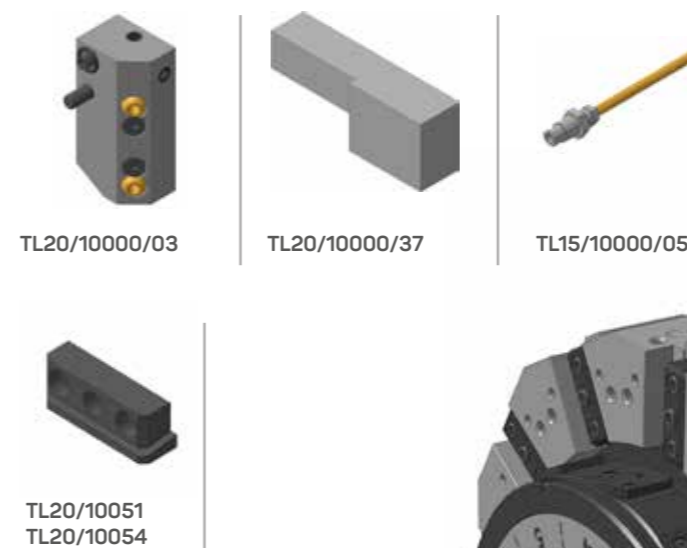
Turning Holders



Live Tool Holders



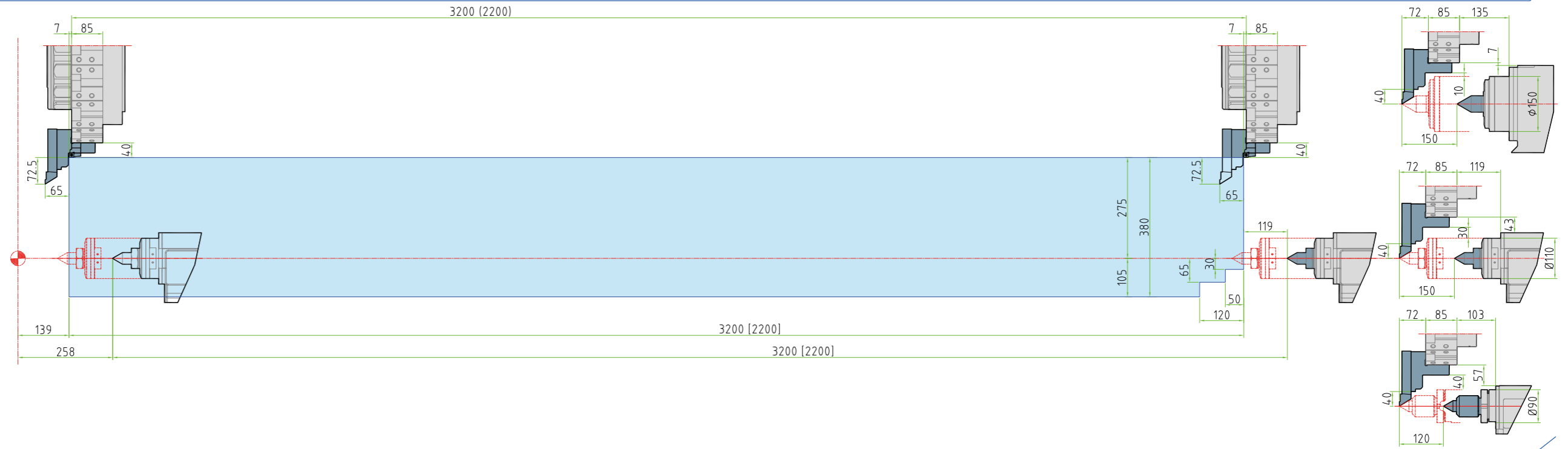
Others



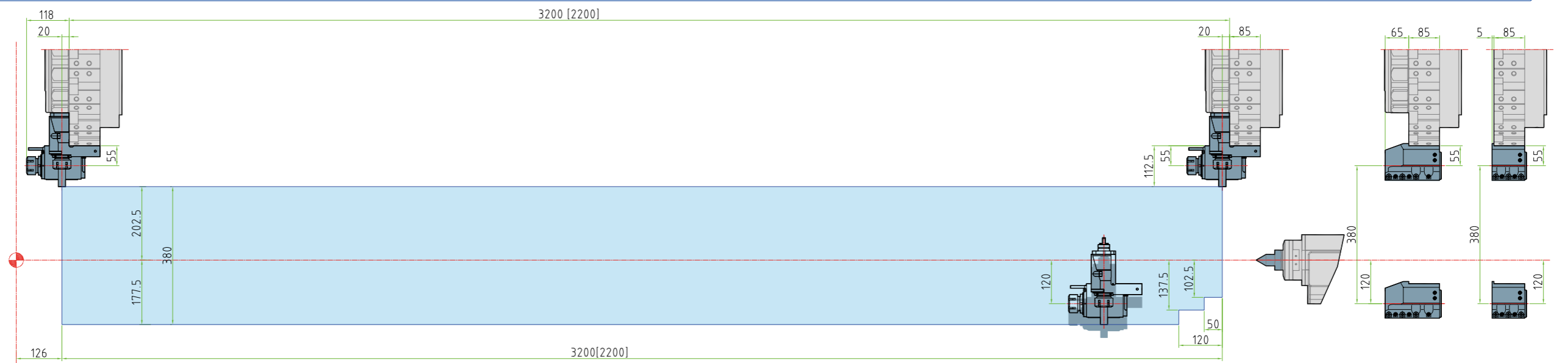
TRAVELS

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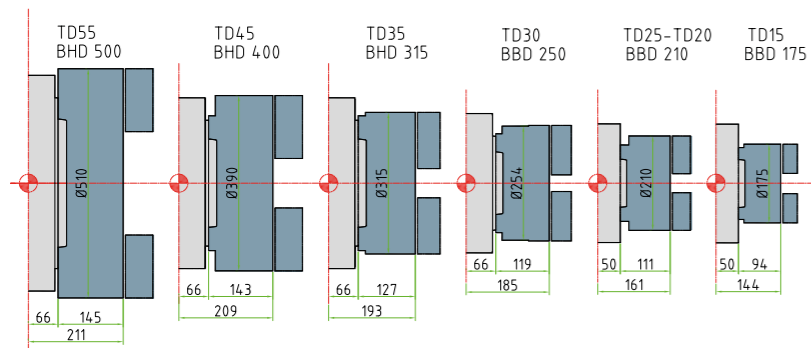
Travels with tailstock



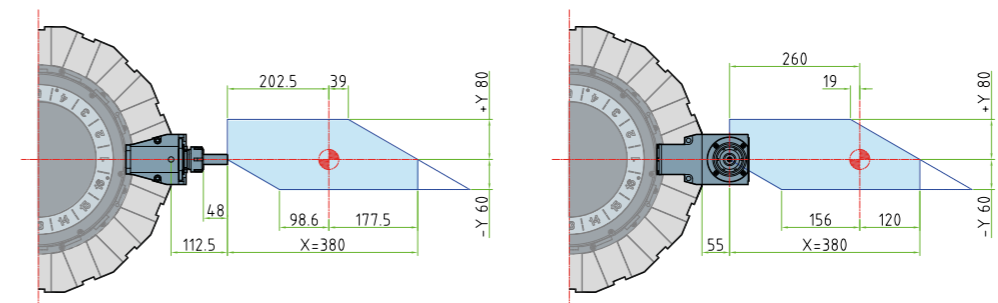
Travels with tailstock and live tooling



Standard chucks dimensions



Y axis travel.

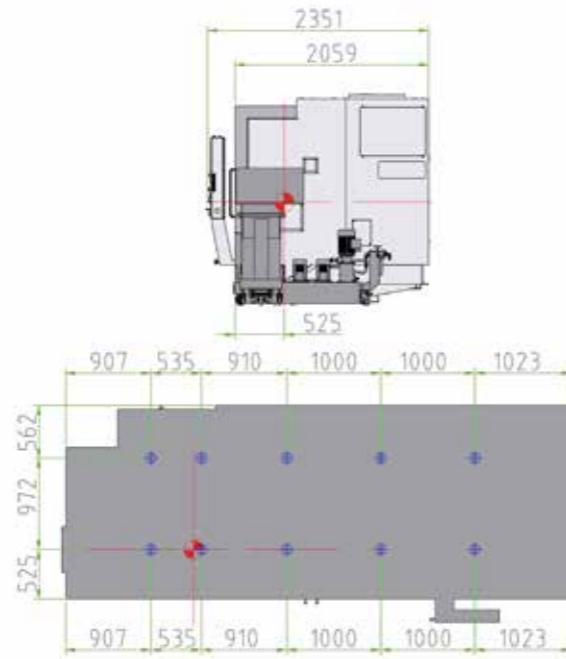


DIMENSIONS

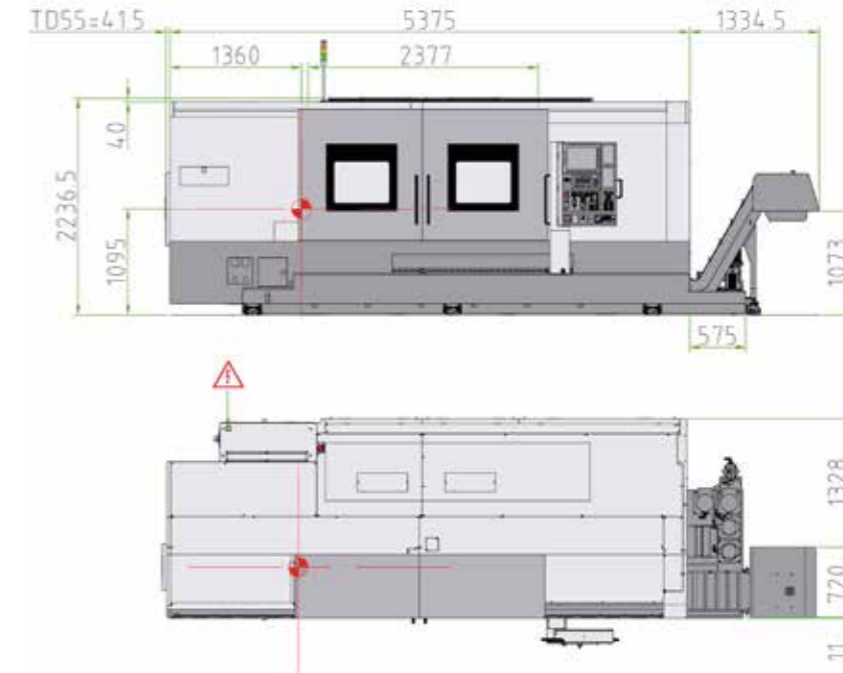
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TD Z2200

MODEL

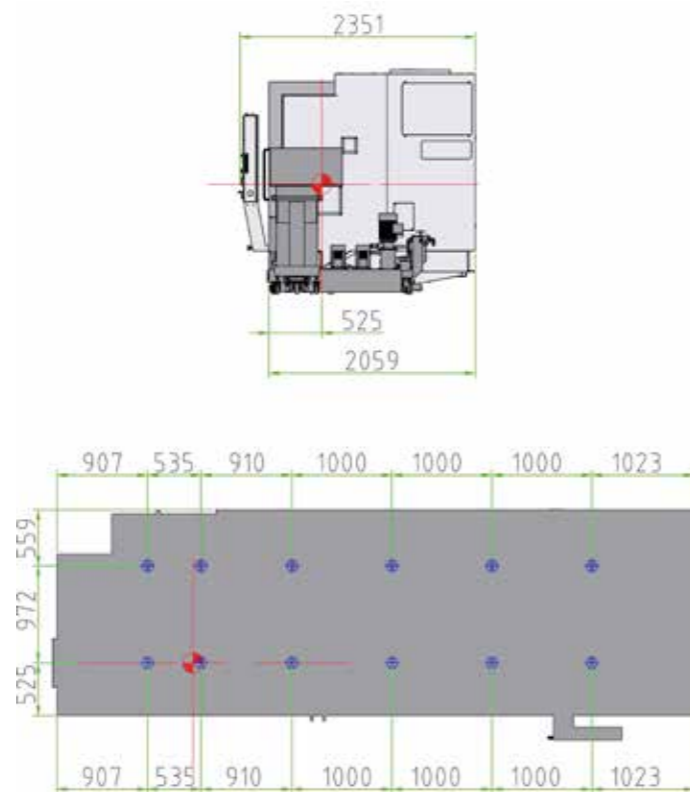


TD Z2200 MODEL

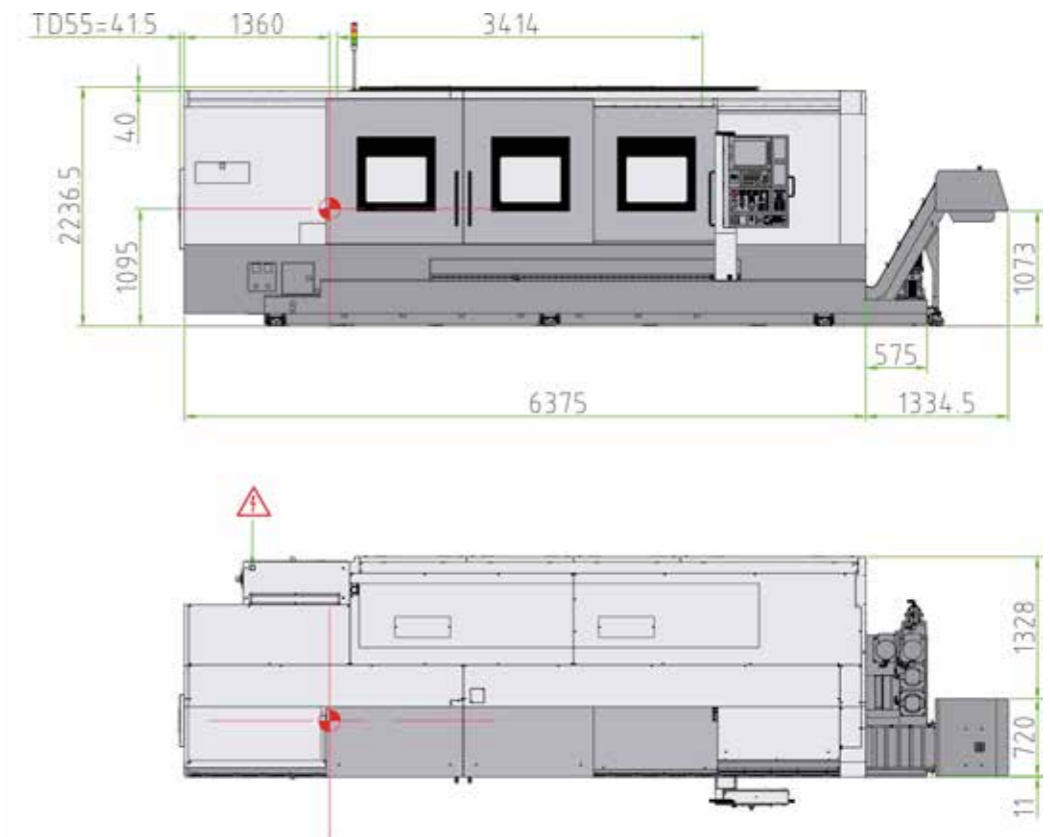


TD Z3200

MODEL



TD Z3200 MODEL



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