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- Bar clearance up to 32 mm in diameter

# Best performance at the smallest footprint

Is available production area a valuable asset to you? Then, we recommend our a new sliding/fixed headstock automatic lathe **TRAUB TNL32 compact**. Its work area—which is unique in its class—and its compact installation dimensions guarantee a huge power density and thus a particularly efficient production.



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When fully equipped, the TRAUB TNL32 compact sliding/fixed headstock automatic lathe combines the productivity of a very high-performance automatic lathe with the ability to produce even the most demanding workpieces accurately and economically. This is ideal for many components used in medical technology, hydraulics/pneumatics, electrical engineering, optics, mechanical engineering, and the automotive industry.

#### Lutz-Michael Leschewsky Sales for single spindle

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#### Sliding/fixed headstock automatic lathe TRAUB TNL32 compact

As the name suggests, our new TRAUB TNL32 compact has a smaller footprint than the successful TNL32. Its width has been reduced by 1,120 mm, giving the compact sliding/fixed head-stock automatic lathe essentially the same footprint as the TRAUB TNL20. Its chip conveyors and cooling unit also require less space.

Despite its size, the TNL32 compact comes very close to the TRAUB TNL32 in terms of working area dimensions. The Z stroke of the main spindle is 220 mm when performing sliding headstock turning—as opposed to 305 mm for the TRAUB TNL32. This ensures smooth bar movement—a clear advantage.

The main and counter spindles, which are identical motorized spindles, no doubt make for one of the strengths of the TRAUB TNL32 compact. They feature a high dynamic response, which is reflected in a 20 percent shorter rampup time to the maximum speed of 8,000 rpm compared to the first generation TRAUB TNL32. Hydraulic hollow clamping cylinders allow for the use of a wide range of chucks and collets on both work spindles.

#### Live tools

The two tool turrets deserve special attention, as they each feature eight stations and can be equipped with double and triple holders, which provides a decisive advantage.

When using live tools, there's an option to choose between overall and individual drive. This eliminates any influence from rotating adjacent tools. Advantages include less heat buildup, extremely smooth running, in some cases higher cutting speeds and improved surface finishes.

Another novelty compared to the TRAUB TNL32 is the considerably improved Y travel of +/-50.8 mm at the upper turret. In connection with the single drive, this allows for all workpieces to be milled around the entire circumference even with double tool holders.

The compact TRAUB sliding/fixed headstock automatic lathe is available in three configuration variants. While the TNL32-9 compact features nine linear axes, two turrets, a rear end machining unit with four stations and an autonomous counter spindle, the upper tool turret on the TNL32-9B







TNL32-9 compact

TNL32-9B compact

TNL32-11 compact

The TRAUB TNL32 compact was often at the center of our customers' attention at the machine's premiere during our Open House in April 2023.

compact is equipped with an additional B axis. The TNL32-11 compact variant includes an additional front end machining unit with autonomous compound slide in Z and X directions as well as an NC swivel axis.

## Automation entirely according to the customer's requirements

To enable automated operation, we offer both a bar loader and various options for workpiece removal. Small workpieces with a diameter of up to 20 mm can be flushed out quickly, safely, and gently from the counter spindle through the indexing shaft of the lower tool turret. For parts up to 700 mm in length, workpiece discharge can take place through the counter spindle. We also offer a standalone discharge unit consisting of a linear and a swivel axis that picks up machined workpieces up to 250 mm in length with a workpiece gripper and places them onto a parts discharge conveyor.

One of its highlights is the iXcenter robot cell that can be integrated as an option to handle insertion and removal of blanks and finished parts via the work area door. As an alternative, the robot cell can also be placed in such a way that it performs a handover with the workpiece gripper. In this case, the work area door remains closed and workpieces are transferred during production. The space-saving pallet storage unit can hold up to 28 pallets for autonomous machining. **X** 

#### Machine highlights TRAUB TNL32 compact

- Small footprint
- Generously dimensioned work area designed for process reliability

TRAUE

FNL 32

**EXPERTS** 

- Bar clearance up to 32 mm in diameter
- Flexible hydraulic hollow clamping unit on main and counter spindles
- Up to three tool carriers and one rear end machining unit, all with Y axis
- Simultaneous machining with two, three or four tools
- Large tool pool for setup-friendly production
- Short tool change times owing to the CNC indexing axis in the tool turrets and the front end machining unit

Find out more:

> www.index-group.com/tnl32compact

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