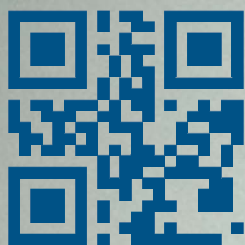


Taurox®

Thread processing

M0,5 - M22



Taurox® 8
M0,5 - M2

Taurox® 25
M0,8 - M6

Taurox® 83
M2 - M10

Taurox® 120
M2 - M12

Taurox® 300
M4 - M18

Taurox® 400
M5 - M18

Taurox® 900
M6 - M22

The force under control

Taurox e. K.: Specialists in thread machining

Taurox e. K. presents Tauro® and Taurox®, an innovation in torque-controlled threading! Our machines are used for thread cutting and thread forming. They also offer solutions for other torque-controlled applications, such as thread gauging, inserting threaded inserts and screw driving. The Tauro® and Taurox® series products cover various power ranges with thread capacities from M0.5 to M22 (0.03 Nm - 90 Nm). In addition to the machining of individual pieces or prototypes, the range of applications also includes the automated production of series parts.

A particular advantage of Tauro® / Taurox® machines is that they seamlessly monitor all processes during machining and therefore react before a tool breaks or the workpiece is damaged. The high quality of the material processing and the option of integration into existing automation solutions make Tauro® / Taurox® products suitable for use in a wide range of industries. These include production and manufacturing companies in the metal, plastic and sheet metal processing sectors. Users in the automotive supply and automotive industries, the aerospace industry, the optical industry and medical technology also benefit from Tauro® and Taurox® threading machines.

Talk to us about your requirements!

We are specialists in the field of thread machining and offer you not only expert advice in advance and technical support in implementing the machines, but also intelligent implementation. We also take time to adapt and integrate Tauro® and Taurox® products into your existing automation solutions.

All the advantages of Tauro® and Taurox® at a glance:

- Intelligent control and workpiece machining
- Smooth running behaviour
- Machining with carbide tools
- Infinitely variable speed from 50 to 3000 rpm
- high dynamics through synchronous servo technology
- Infinitely variable torque from 0.03 to 90 Nm
- Graphic display with menu-driven user interface
- Modular design and PLC interface
- Versatile applications
- Robust and maintenance-free

Tauro® / Taurox® thread machining impresses users:

- Tauro® / Taurox® contributes to quality assurance during processing through precise monitoring, scalability and optimisation of the processing parameters.
- Tauro® / Taurox® can be used to significantly reduce production costs because there Optimal machining parameters extend tool life.is no tool breakage and no workpiece scrap.
- Optimal machining parameters extend tool life.

Technical details

Thread machining with Tauro®/Taurox®

A counterbalance system is used to hold the drive spindle in a floating state during machining. This prevents axial loading on the threading tool, which draws itself into the workpiece to be machined by means of its geometry. It is no longer necessary to enter the thread pitch, because the depth is permanently monitored during machining from the workpiece zero point by means of a measuring system. The tool always finds the thread turn, thus also making it possible to rework workpieces.

Easy operation

A 4.3" TFT display with a rotary encoder and buttons allows for clear, menu-driven operation of Tauro® machines. It also makes it easy to enter machining and quality parameters. Various tools can be conveniently clamped using a quick-change system. Depending on the start mode, the machine detects the workpiece zero point when the spindle is rotating.

Intelligent control

The powerful processors of the individual modules of the Tauro® / Taurox® series are networked via a bus system. While one processor monitors the depth, another can control the drive and monitor the torque. Yet another handles the display and operation. Since the drive has its own processor, it is so fast that it can constantly measure the torque and intervene in the control loop if the torque is exceeded. This protects the tool and the workpiece from breakage and damage.

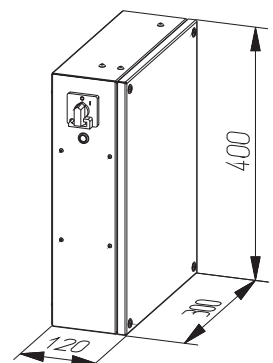
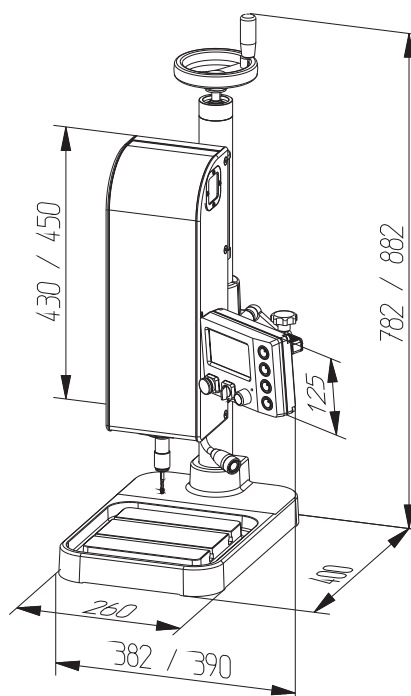
Quality evaluation

The intelligent control of Tauro® and Taurox® products enables reliable machining and quality evaluation. The parameters are monitored during the machining process. During quality evaluation, the monitor immediately displays the results obtained, such as error-free machining, contact with the bottom, exceeding the torque, tool wear, too small or too large a bore.

Dynamic drive

The synchronous servo motor of the Tauro® and Taurox® tapping machines, with its sophisticated control technology, achieves a very high dynamic response with extremely smooth running in both the low and high speed ranges. This even makes it possible to use carbide tools.

Tauro® 8 / 25 / 83
thread tapping machine



Control unit



Technical data

Type of machine	Tauro[®] 8	Tauro[®] 25	Tauro[®] 83	Tauro[®] 120	Taurox[®] 300	Taurox[®] 400	Taurox[®] 900
Thread capacity AlMg4.5Mn / 3.3547 (thread cutting blind hole 2.0 x D)	M0,5 – M3	M1 – M6	M2 – M10	M2 – M12	M4 – M18	M5 – M18	M6 – M22
Thread capacity X6CrNiMoTi17–12–2 / 1.4571 (V4A) (thread cutting blind hole 1.5 x D)	M0,5 – M2	M1 – M5	M2 – M8	M2 – M10	M4 – M16	M5 – M16	M6 – M18
Torque range (smoothly adjustable)	0,03 – 0,8 Nm	0,1 – 2,5 Nm	0,3 – 8,3 Nm	0,3 – 12 Nm	1,4 – 30 Nm	2 – 40 Nm	8 – 90 Nm
Speed range (smoothly adjustable)	50 – 3000 rpm	50 – 3000 rpm	50 – 2400 rpm max. 2000 rpm ab 6,80 Nm	50 – 2400 rpm	25 – 800 rpm max. 650 rpm ab 18 Nm	25 – 600 rpm max. 500 rpm ab 25 Nm	25 – 250 rpm max. 200 rpm ab 60 Nm
Spindle / tool holder	ER11 Spannzangen	Gr. 0 Schnellwechsel	Gr. 1 Schnellwechsel	Gr. 1 Schnellwechsel	Gr. 1 Schnellwechsel	Gr. 2 Schnellwechsel	Gr. 2 Schnellwechsel
Outreach	165 mm	165 mm	185 mm	200 mm			
Travel height adjustment Column Ø / length	0 – 330 mm 50 / 650 mm	0 – 330 mm 50 / 650 mm	70 – 415 mm 50 / 750 mm	0 – 488 mm 75 / 730 mm	0 – 444 mm 75 / 730 mm	0 – 425 mm 75 / 730 mm	
Travel height adjustment / swivel range	mit Handrad / 60°			mit Kurbel / 60°			
Machine pedestal (WxDxH) 2xT-slots	260 x 400 x 45 mm T–Nut DIN 650–10			469 x 296 x 75 mm T–Nuten DIN 650–12			
Dimensions machine (WxDxH mm)	382 / 450 / 782		390 / 450 / 882		484 / 469 / 806		
Dimensions control unit (WxDxH mm)	120 / 300 / 400		210 / 400 / 400				
Electric supply / Power input / stand by	230V~ / 615W / < 40 W			230V~ / 1,1 kW / < 40 W			
Cable length between the modules	2 m (others on request)			3 m (others on request)			
Spindle travel / thread depth	60 / 50 mm	90 / 80 mm					

General information	Taurox® 8 - Taurox® 900
Modular construction (3-parts)	– spindle unit – operator and display unit – control unit
Entrance protection class	IP54
Engineer standard	Conforms to CE / EMV
LCD Display	4.3" TFT–display, 65536 colors
Operation	Menu driven
Digital inputs/outputs (24V DC) (PLC / automation-capable / valves)	3 Digital inputs (24 V)* 10 Digital outputs (24 V / 3.6 W) short-circuit proof*
Depth accuracy	0,1 mm
Finish	RAL 7035 / light grey
RAL / colour name	RAL 5005 / signal blue
Quality evaluations / Error messages	Anzeige mit Fehlermeldung Auswertung und Signalton

Accessories	• Schnellwechseleinsätze* • Vorschub Spindelzustellung* • Minimalmengenschmiereinheit Tropfendosierung, Sprühdosierung und Ausblasimpuls zur Reinigung* • Signalsäule rot, orange, grün und Hupe zur Qualitätsauswertung* • Schlüsselschalter für Bediensperre* • Zusatztasten Parameterdatenbank direkte Anwahl* • Wandbefestigung Montagesatz für Steuereinheit* • Automationsanbindung*
Software	• Languages: German / English / Spanish / French (more on request) • Depth unit: mm / inch • Torque monitoring with actual value display • Independent of thread type and pitch • Process programs: thread cutting, thread forming, Thread tapping to basic contact with depth tolerance, rethreading with lead monitoring, thread inserts, screw in, thread plug gauge • Chip clearance programs • Grade of quality: blowhole, array of torque, tolerance of depth, tool wear • Start program: Start with start button, Start at workpiece zero point, Start at torque detection (automatic zero point identification with rotating spindle) • All start programs are compatible with feed for spindle feed*. • Rotation: right and left rotation switchable • Reversal program: variable speed 20% - 1000% (max. speed) • Parameter database: 99 parameter data records • Counter: Daily counter, Part counter, Quantity counter, OK / not OK adjustable with subsequent lock • Lubrication program: Cooling lubricant and blow-out programs optimized for minimal quantity lubrication technology • Switching function for power outputs* for valves such as pneumatic part holder 24 V DC / 3.6 W • Digital inputs / outputs* for automation with pre-assigned functions

*Options / Accessories
Technical changes reserved

Try the products from **Taurox e. K.** and let us convince you of our quality!

Art.-Nr. K211L-E, 11/2024

