

Conventional Horizontal Lathes **Servoturn® 410/1000**



SKU: 300825

The extensive SERVOTURN® series offers the same performance and features as servo-conventional precision machines All major controls are located for optimum accessibility or are intuitively linked to their respective functions. A powerful main spindle drive with infinitely variable speed allows machining with constant cutting speed Feed and thread leads are selected electronically via a rotary switch, and executed by servo-motors featuring maximum precision and dynamics Mineral-casting reduces vibration 6 times faster than cast-iron (GG25) and up to 10 times faster than steel - ensuring excellent surface quality that could not be achieved with conventional machines

- Mineral-casting frame
- Preloaded ball screws
- Electronic hand-wheels
- Servo-motor driven feeds
- Linear guides on all axes
- V constant

TECHNICAL SPECS

WORKING AREA

Workpiece length (max.)	41 in
Turning diameter over bed	16 in
Turning-Ø over support	10 in
Bed width	12 in

TRAVELS

Travel X-axis	8.9 in
Travel Z-axis	38 in
Travel Z1-axis	4 in

HEADSTOCK

Spindle speed	30 rpm - 3000 rpm
Spindle bore	2 in
Spindle mount	D1-6
Spindle taper	6 MT

FEED

Feed X-axis	in/R
	0.00039 in/R - 0.07874 in/R

THREADING

Threading, metric	(24) 02-14 mm
Threading, whitworth	(24) 4-48 TPI

TAILSTOCK

Tailstock quill diameter	2 in
Tailstock taper	4 MT
Tailstock quill stroke	6 in

DRIVE CAPACITY

Motor rating main drive	7.4 Hp
Motor rating X-axis	1.3 Hp
Motor rating Z-axis	2.15 Hp

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	97 in x 54 in x 54 in
Weight	5500 lbs



Intuitive operation



X-axis with preloaded ball screws



Servo drive technology – including "teachin" Buttons that allow setting a limit stop at the current position





PRODUCT DETAILS

Intuitive operation as we know it from conventional machines - only much better:

- Feed and thread leads can be selected via rotary switch what a brilliant concept.
- Stops can be set electronically with the press of a button
- Feeds are infinitely variable between 50 and 100% via override potentiometer finally available on a conventional lathe
- Micro-control via electronic hand-wheels but handling and postioning just as with a conventional machine
- Axes are powered by high-quality servo drives that translate your hand movements with the precision and dynamics of modern CNC machines
- Infinitely variable speed adjustment and constant cutting speed of headstock

The definition of a new standard for conventional lathes had to be perfect therefore, we complemented the Servoturn® with the following features:

Mineral-Casting Machine Frame

- Mineral-casting reduces vibration 6 times faster than cast-iron (GG25) and up to 10 times faster than steel - this ensures excellent surface quality that could not be achieved with conventional machines.
- Excellent thermal stability
- Modern manufacturing process with excellent energy footprint

Linear Profile Guide Rails

- Maximum reliability and performance
- Excellent rigidity, strength and accuracy is achieved by optimum load distribution, designed for accepting high loads and torques
- Long life and minimum maintenance
- Replaceable parts

Recirculating Ball Screw

- Considerably less errors due to loseness (backlash), resulting in significantly higher precision
- Significantly reduced friction
- Reduced heat development
- Less wear for even less maintenance requirements

3-axis position indicator

- More accuracy
- Lower error rate
- Increased productivity
- Resulting in valuable time savings
- For increased productivity
- Easy to read display
- Operator-specific féatures
- Convenient keyboard layout
- Resolution: 0.0004 / 0.0002"
- Default coordinates
- Axis position is maintained when display is turned off
- Storage for 10 tools
- Radius / diameter toggle
- Mm/inch conversion
- Display for top (Z0) and box way slide (Z1) both separate and in differential / cumulative mode for lathes

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2 3-jaw chuck, Ø 7.87" Quick change tool holder WBD 25120 (3 pieces) Quick change tool holder WBH 32130 Quick-change tool holder head WB Live rest (0.4 - 40 in) Coolant system Fixed splash guard (wall) Protective shield for the toolpost Work lamp Operator instructions