

Universal Lathe

Servoturn® 500 • 660

Conventional turning with the precision and dynamics of modern CNC machines



- Electronic hand-wheels
- V-constant cutting speed
- The combination of a tried and tested machine base with the most advanced feed technology makes the change to a servo-conventional lathe even more attractive and cost-effective

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 push of a button
- Feeds are infinitely variable between 50 and 100% via override potentiometerfinally available on a conventional lathe
- 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
- Constant cutting speed: During face turning, the spindle speed automatically adapts to the changing workpiece diameter – the constant cutting speed at the cutting edge of the turning tool ensures superior turning results with quality comparable to CNC lathes

Machine Frame

- Heavy ribbed machine bed with wide, hardened bed guides and V-blocks allow for heavy-duty machining
- Headstock and main spindle are designed for optimum rigidity, vibration damping and temperature balance
- This entire series also features large spindle bores
- A quick-action tool changer is included in the standard package and ensures maximum flexibility and productivity

Feed

 Ball screws on the X- and Z-axes ensure considerably fewer errors due to looseness (backlash), resulting in significantly higher precision

Equipment

- The low-maintenance machine is equipped with a central lubrication system
- The heavy-duty tailstock is easy to handle and features high clamping force
- incl. 3-axis position indicator with integrated spindle speed display, fully assembled



Operation via electronic handwheels in the $\boldsymbol{\mu}$ range - in feel and position as with a conventional machine

Standard Equipment

3-axis position indicator, 3-jaw chuck, work lamp, operating tools, operator instructions, steady rest, coolant system, protective shield for support, quick change tool holder, follow rest, electronic hand-wheels, fixed splash guard (wall)

Options	Part No.		
Power Worker Metal Cutter	123040		
Oscillation Element LK 3	103330		

For additional options for this machine, visit our website.

Specifications Servoturn®		500/1000	500/1500	500/2000	660/1500	660/2000
Working area						
Center width	mm	950	1.450	1.950	1.470	1.970
Turning diameter over bed	mm	500	500	500	660	660
Turning-Ø over support	mm	300	300	300	450	450
Bed width	mm	400	400	400	400	400
Travels						
Travel X-axis	mm	250	250	250	370	370
Travel Z-axis	mm	880	1.380	1.880	1.420	1.900
Travel Z1-axis	mm	100	100	100	100	100
Headstock						
Spindle speed	1/min	30 - 1600	30 - 1600	30 - 1600	30 - 1600	30 - 1600
Spindle bore	mm	86	86	86	86	86
Spindle mount		A2-8	A2-8	A2-8	A2-8	A2-8
Lathe chuck diameter	mm	250	250	250	315	315
Rapid feed						
X-axis rapid feed	m/min	4	4	4	4	4
Z-axis rapid feed	m/min	4	4	4	4	4
Feed						
Feed X-axis	mm/R	0,01 - 2	0,01 - 2	0,01 - 2	0,01 - 2	0,01 - 2
Feed Z-axis	mm/R	0,01 - 2	0,01 - 2	0,01 - 2	0,01 - 2	0,01 - 2
Tapping						
Tapping, metric	mm	0,35 - 14	0,35 - 14	0,35 - 14	0,35 - 14	0,35 - 14
Tapping, whithworth	TPI	48-4	48-4	48-4	48-4	48-4
Tailstock						
Tailstock quill diameter	mm	75	75	75	75	75
Tailstock taper	MT	5	5	5	5	5
Tailstock quill stroke	mm	150	150	150	150	150
Drive capacity						
Motor rating main drive	kW	6 - 9	6 - 9	6 - 9	7,5 - 11	7,5 - 11
Motor rating X-axis	kW	1,5	1,5	1,5	1,5	1,5
Motor rating Z-axis	kW	2,3	2,3	2,3	2,3	2,9
Measures and weights						
Overall dimensions (length x width x height)	m	3,2x1,28x1,65	3,75x1,28x1,65	4,25x1,28x1,65	3,74x1,6x1,65	4,23x1,6x1,75
Weight	kg	2.850	3.150	3.450	3.450	3.850
Part No.		300831	300832	300833	300834	300835