

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	in	37.4	57.09	76.77	57.87	77.56
Turning diameter over bed	in	20	20	20	26	26
Turning-Ø over support	in	12	12	12	18	18
Bed width	in	16	16	16	16	16
Travels						
Travel X-axis	in	9.8	9.8	9.8	14.6	14.6
Travel Z-axis	in	35	54	74	56	75
Travel Z1-axis	in	4	4	4	4	4
Headstock						
Spindle speed	rpm	30 - 1600	30 - 1600	30 - 1600	30 - 1600	30 - 1600
Spindle bore	in	3	3	3	3	3
Spindle mount		A2-8	A2-8	A2-8	A2-8	A2-8
Lathe chuck diameter	in	10	10	10	12	12
Rapid Feed						
X-axis rapid feed	fpm	13.08	13.08	13.08	13.08	13.08
Z-axis rapid feed	fpm	13.08	13.08	13.08	13.08	13.08
Feed						
Feed X-axis	in/R	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874
Feed Z-axis	in/R	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874	0.00039 - 0.07874
Tapping						
Tapping, metric	mm	0,35 - 14	0,35 - 14	0,35 - 14	0,35 - 14	0,35 - 14
Tapping, withworth	TPI	48-4	48-4	48-4	48-4	48-4
Tailstock						
Tailstock quill diameter	in	3	3	3	3	3
Tailstock taper	MT	5	5	5	5	5
Tailstock quill stroke	in	6	6	6	6	6
Drive Capacity						
Motor rating main drive	Нр	8 - 12.1	8 - 12.1	8 - 12.1	10.1 - 14.8	10.1 - 14.8
Motor rating X-axis	Нр	2	2	2	2	2
Motor rating Z-axis	Нр	3.08	3.08	3.08	3.08	3.89
Measures and Weights						
Overall dimensions (length x width x height)	in	126x51x65	148x51x65	168x51x65	148x63x65	167x63x69
Weight	lbs	6,270	6,930	7,590	7,590	8,470
Part No.		300831	300832	300833	300834	300835