



SKU : 301258

The versatile Servomill UWF 12 to 15 with servo-conventional feed technology and the universal milling head that can be swiveled on two planes is the top model of the UWF milling machines. The series has a particularly large work area and the most powerful main spindle drive. With electronic stops, electronic handwheels and additional milling functions, the Servomill makes the advantages of large-scale CNC technology accessible without programming. The machines are mainly used in toolmaking and in training and manufacturing departments.

- Large work area and high drive capacity
- Servo-conventional feed technology
- Preloaded ball screws on all axes
- Electronic hand-wheels
- Universal cutter head with 2 swivel axes

TECHNICAL SPECS

WORKING AREA

Table dimensions	2000 mm x 500 mm
Table load capacity	1000 kg
Number of T-slots	5 positions
T-slots, width	18 mm
T-slots, spacing	80 mm

TRAVELS

Travel X-axis	1400 mm
Travel Y-axis	700 mm
Travel Z-axis	500 mm

MILLING HEAD

Speed range (2)	30-390 / 390-2050 1/min
Spindle mount	SK 50 DIN 2080
Swivel angle	360°
Spindle center-to-table distance	50 mm - 550 mm

RAPID FEED

Rapid feed X-axis	2200 mm/min
Rapid feed Y-axis	2200 mm/min
Rapid feed Z-axis	1100 mm/min

FEED

Feed speed X-axis	10 mm/min - 1000 mm/min
Feed speed Y-axis	10 mm/min - 1000 mm/min
Feed speed Z-axis	5 mm/min - 500 mm/min

DRIVE CAPACITY

Motor rating main drive	11 kW
-------------------------	-------

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	2.6 m x 2.5 m x 2.1 m
Weight	5000 kg



Powerful headstock drive with auxiliary gearbox (Servomill® UWF 12)



PRODUCT DETAILS

Conventional milling, now easier, more precise and more efficient due to integrated electronics

- The Servomill represents a new generation of advanced milling machines that are operated like a conventional machine
- This machine features a user-friendly design, significantly higher precision and increased machining capacity
- Very high reliability and long service life of all components ensure drastically reduced maintenance and increased availability
- Rigid, torsion-proof construction with dovetail guide on X-axis, and wide square guides on Y and Z
- Large work table and long travels on all axes
- All guides are hardened, ground, and supplied with oil by a central lubrication unit
- Universal swivel head swings easily to a horizontal position
- Infinitely variable feed speeds and rapid feeds can be synchronized to spindle speed by the push of a button
- Preloaded ball screw for easy and precise Feeds, and zero backlash
- Robust transmission with hardened and ground gears

Servomill - Highlights

- Control developed and built in Germany
- Positioning control for traveling pre-selected paths on all axes
- Zero backlash preloaded ball screws
- Servo-motors on all axes, infinitely variable feed, rapid feed, and speed control
- Electronic spindle load indicator
- Electronic hand-wheels on all axes
- X, Y and Z axis movement via joystick technology
- Integrated position indicator with precision glass scale

Your Advantages:

- Easy to use: intuitive operation - practical layout of control elements and streamlined function
- Automatic feed on all axes and infinitely variable rapid feed
- Set limit stops on any axis with the push of a button - 3 stop positions per axis can be stored
- More precise: operated via electronic hand-wheels - axes are powered by high-quality servo drives that translate your hand movements with the precision and dynamics of modern CNC machines
- More reliable: drives, spindles, and measuring systems are totally enclosed or mounted in protective enclosures and virtually maintenance-free
- Electronics - made in Germany
- More capacity: this machine only uses premium drive components that are designed for continuous operation
- Maintenance-free: no regular maintenance needed for the entire feed drive
- Advanced Feed Technology:
- Axes are powered by high-quality servo drives that translate your hand movements with the precision and dynamics of modern CNC machines
- Reliable, maintenance-free mass production technology
- High rapid feed rate for reduced machine down-times
- Ball screw drive on all axes:
- Considerably less errors due to looseness (backlash), resulting in significantly higher precision
- Significantly reduced friction, no stick-slip effect, reduced heat buildup, minimal wear
- Electronic hand-wheels:
- Micro-control via electronic hand-wheels offering the same handling and positioning as with a conventional machine, just smoother and more precise
- Joystick control:
- Maximum operator comfort for axis movements
- Easy handling during sequential processing
- Electronically controlled fixed stops:
- Set 2 limit stops at 3 positions on each axis by the push of a button - these buttons are grouped around the feed switch for intuitive control
- This ensures high repeatability during coordinate drilling or pocket cutting, and significantly more positions can be set up than on conventional machines
- Electronic spindle load indicator:
- Assists the operator in the most efficient utilization of machine and tool capacities
- Reliable indicator helps avoid damages caused by overloads

X.pos Plus - You will gain productivity, quality and comfort

- Default coordinates

- Hole circle pattern calculation
- Vibration filter feature
- Mm/inch conversion
- 8 display languages
- Calculator function
- High-resolution display with excellent legibility
- State-of-the art electronics and a very robust, completely sealed enclosure ensure maximum safety and optimum production conditions
- A major focus during the development and selection of electronic components was the achievement of maximum resistance against external interferences and maintaining low temperature levels
- Background colors of the display can be changed as required or desired
- The keyboard membrane is highly resistant and yet very comfortable to touch
- The display also provides a key to toggle between radius and diameter
- The axis position is maintained when the display is turned off
- Graphical support with residual path display and sketch drawing
- Linear and non-linear length correction is possible
- Easy mounting, easy electric connection, and maintenance-free operation

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2
 Collet chuck with collets (4,5,6,8,10,12,14,16 mm diam.)
 Electronic hand-wheels
 LED work lamp
 Central lubrication
 Coolant system
 Operating tools
 Operator manual



KNUTH on YouTube Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?
Please feel free to contact us!**