



SKU : 801255

DEMO MACHINE

The equipment of the servo-conventional universal milling machine UFM 8 V includes a horizontal spindle and a swiveling vertical milling head as well as a wide speed range. The large clamping table has plenty of space for workpieces and clamping devices. With infinitely variable servomotor feed, electronic handwheels and additional milling functions, the machine offers many advantages of the CNC series, all without programming. Extensively equipped, this model is ideal for repair workshops and training and production departments.

- Swiveling cutter head with quill feed
- Horizontal spindle with its own drive
- Pneumatic tool tightening system
- Infinitely variable spindle speed
- Servo-conventional feed technology
- Preloaded ball screws for all axes
- Electronic hand-wheels

TECHNICAL SPECS

WORKING AREA

Table dimensions	1600 mm x 320 mm
Table load capacity	450 kg
Number of T-slots	3 positions
T-slots, width	18 mm
T-slots, spacing	80 mm

TRAVELS

Travel X-axis	1300 mm
Travel Y-axis	290 mm
Travel Z-axis	450 mm
Top slide travel	550 mm

VERTICAL MILLING HEAD

Speed range (2)	80-650 / 650-5000 1/min
Spindle mount	SK 40 / DIN 2080
Quill feeds	0,04 / 0,08 / 0,15 mm/R
Quill stroke	127 mm
Swivel range	± 45°

RAPID FEED

Rapid feed X-axis	5000 mm/min
Rapid feed Y-axis	3000 mm/min
Rapid feed Z-axis	1500 mm/min

HORIZONTAL MILLING SPINDLE

Speed range (2)	60-360 / 360-1800 1/min
Spindle mount	SK 50 / DIN 2080
Horizontal spindle-to-table surface distance	10 mm - 460 mm
Spindle axis-to-top beam distance	245 mm

FEED

Feed speed X-axis	0 mm/min - 1000 mm/min
Feed speed Y-axis	0 mm/min - 1000 mm/min
Feed speed Z-axis	0 mm/min - 1000 mm/min

DRIVE CAPACITY

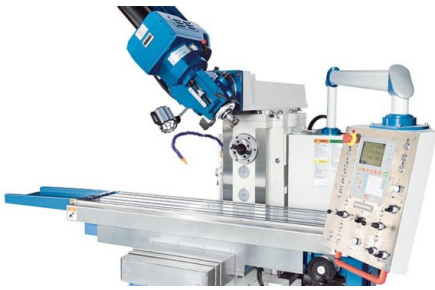
Motor rating horizontal spindle	7.5 kW
Motor rating vertical spindle	5.5 kW

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	1.9 m x 2.05 m x 2.5 m
Weight	2400 kg

PRODUCT DETAILS

Demonstration machine with small traces of use



Cutter head swivels 45°



Powerful drive for horizontal spindle

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 frame design with wide guideways and travels
- Servo-conventional drives on all axes, infinitely variable with fast rapid feeds, synchronized with spindle speed
- Preloaded ball screws on X, Y and Z ensure high precision, low maintenance and low wear
- All gears and guideways are hardened and ground
- Swivelling vertical cutter head, pneumatic tool clamping and powerful 5.5 kW motor
- 2 gear steps for a wide speed range, infinitely variable up to 5000 rpm, and high torque at the spindle
- Horizontal spindle motor with 7.5 kW

Servomill - Highlights

- Control developed and built in Germany
- Positioning control for traveling pre-selected paths on all axes
- Constant cutting speed with feed speed based on spindle rpm
- 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
- With speeds up to 5000 mm/min
- 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
- Constant cutting speed:

- The feed rate is infinitely variable and can be coupled with the spindle speed in a selectable feed-per-spindle revolution ratio in the range of 0.01 to 1 mm/R
- This ensures a constant feed-per-tooth value and simplifies the operator's task of optimizing the machining operation
- 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
 Electronic hand-wheels
 Pneumatic tool clamping
 Coolant system
 Work lamp
 Chip tray
 Draw bar
 Long arbour 27mm
 Long cutter arbor Ø 32 mm
 Operating tools
 Operator instructions