

# Conventional Vertical Milling Machines

## FPK 4.3



### SKU : 302340

This versatile tool-milling machine has become an indispensable part of mechanical production in tool and mold making. The compact design, which offers a lot of flexibility and at the same time is very easy to use, has proven itself many times and has been interpreted in a modern way. Servo drives and ball screws make the machine even more powerful and precise. The entire series is ideally suited for the construction of tools and molds in repair shops as well as training and manufacturing departments.

- Vertical and horizontal spindle
- Precise preloaded ball screws on all axes
- Large vertical console and work table
- Automatic feed on all axes with rapid feed
- Infinitely variable main spindle drive
- Extensive accessory package included

## TECHNICAL SPECS

### WORKING AREA

Table dimensions	400 mm x 800 mm
Vertical table	225 mm x 1020 mm
Table load capacity (max.)	200 kg
Number of T-slots	6 positions
T-slot (width x spacing)	14 mm x 63 mm
T-slots, vertical table (number)	3 positions
T-slots, vertical table (width x spacing)	14 mm x 63 mm

### TRAVELS

Travel X-axis	500 mm
Travel Y-axis	400 mm
Travel Z-axis	400 mm

### VERTICAL MILLING SPINDLE

Travel pinole	60 mm
Spindle center - column (min.)	165 mm
Spindle center - column (max.)	570 mm

### VERTICAL MILLING HEAD

Angular adjustment of vertical head	± 90°
-------------------------------------	-------

### RAPID FEED

Rapid feed X-axis	1200 mm/min
Rapid feed Y-axis	1200 mm/min
Rapid feed Z-axis	1200 mm/min

### FEED

Work feed X-axis	10 mm/min - 1000 mm/min
Work feed Y-axis	10 mm/min - 1000 mm/min
Work feed Z-axis	10 mm/min - 1000 mm/min

### HORIZONTAL MILLING SPINDLE / VERTICAL MILLING SPINDLE

Speed range	40 1/min - 2000 1/min
Spindle mount	SK 40 DIN 2080

### DRIVE CAPACITY

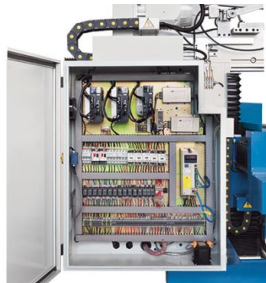
Motor rating main drive	3.2 kW
Motor rating coolant pump	0.09 kW

### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	1.5 m x 1.7 m x 1.8 m
Weight	1550 kg



All operator controls are arranged on one side



Premium electric components ensure safety and high availability



Universal swivel table for FPK 4.3/ FPK 6.3 (253721)

## PRODUCT DETAILS

- The Machine column made of premium cast-iron, ensures maximum dynamic rigidity and constant precision
- Precision preloaded ball screws on all axes
- Ergonomically arranged controls and a swivelling control panel plus standard digital position indicator for maximum operator comfort
- Both machines have rigid outer arbors for horizontal milling
- Despite the compact design, this machine features a large work table and large travels for versatile use
- Automatic feed on all axes, infinitely variable and with fast rapid feed
- The vertical cutter head swivels and the quill can be moved manually
- The infinitely variable main spindle drive with counter gear offers a wide speed range with high torque
- Extensive accessory package included
- Central lubrication system is standard equipment
- Price incl. fully assembled 3-axis position indicator

## STANDARD EQUIPMENT

Electronic hand-wheels  
 3-axis position indicator X.Pos 3.2  
 Central lubrication  
 Reducing sleeves MT1, MT2, MT3  
 Collet chuck with collets  
 Horizontal milling arbor 16mm  
 Horizontal milling arbor 22mm  
 Horizontal milling arbor, 27 mm  
 Horizontal milling arbor 32mm  
 Counterholder for horizontal milling  
 Chip tray  
 Coolant system  
 Work lamp  
 pull rod (M16) for horizontal / vertical spindle  
 levelling pads and bolts  
 Operating tools  
 Operator manual

## OPTIONAL EQUIPMENT

- Universal swivel table for FPK 4.3/ FPK 6.3, SKU : 253721



## 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!**