

## Details

# DECKEL **FP3L**

repowered by FPS

**FP3L 2302 conventional**  
Inclined bed machine X = 800mm



### 3 axis digital display Heidenhain ND 7013

Easy to use actual value display with radius correction for 100 tools, furthermore hole circle, hole segment, hole row and hole frame calculation graphically supported. The display has 100 programmable reference points and a cutting data calculator. Machine functions such as motor brake on/off, spindle start/stop, emergency stop, are clearly organized on the control panel.

Highest precision due to direct path measuring systems in all axes.

Positioning accuracy **0,005 mm**



### With additional emergency stop

Due to safety reasons an additional emergency stop button is equipped on the machine.

## Details



### Vertical milling head

The milling head can be swiveled  $\pm 90^\circ$  and can be positioned in any number of degrees via a scale.



### Horizontal working

For horizontal working the milling head must be swiveled by  $90^\circ$  and pushed backwards.

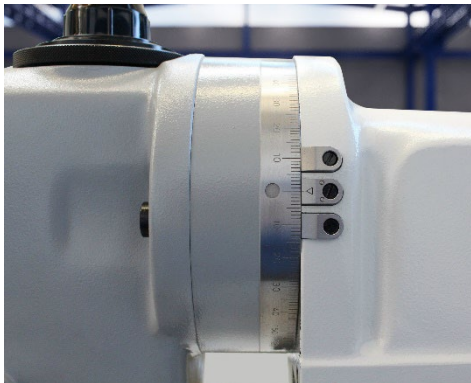


### Slidable milling head

The vertical milling head can be additionally moved **200 mm** in the longitudinal axis for maximum working range, thus increasing the **X - Y working area to 800 x 500 mm**.

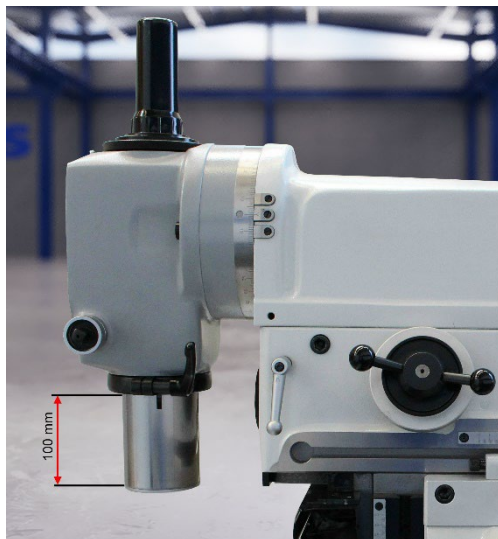
The slidable milling head can be used as a counter support for the overarm.

## Details



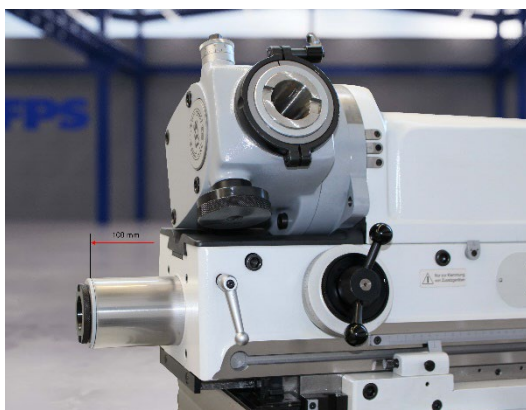
### Scale on milling head

After the horizontal working or swiveling of the milling head it can be quickly brought back again in the **vertical position** via a scale and can therefore be immediately repositioned.



### Vertical spindle

The vertical spindle is manually telescopic by **100 mm** and can be used as a drilling quill. The telescopic quill has a clamping feature



### Horizontal spindle

The horizontal spindle is manually telescopic by **100 mm** and can be used as a drilling quill. The telescopic quill has a clamping feature.

## Details



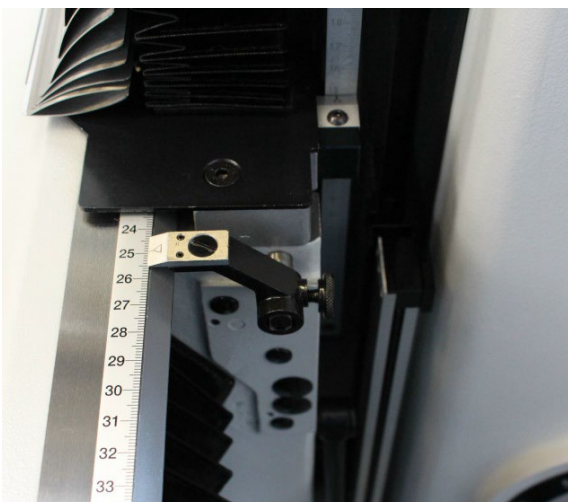
### Handwheels

Mechanical manual safety handwheels with additional scale ring in all axes with precision mechanical drive and sensitive response. The handwheels are arranged ergonomically and user-friendly for maximum ease of operation.



### Handwheel scale

In addition to the digital display, a scale on the handwheel allows positioning in all axes.



### Linear scale

The linear scale serves as a rough scale for an overview of the working position of the respective axis.

## Details

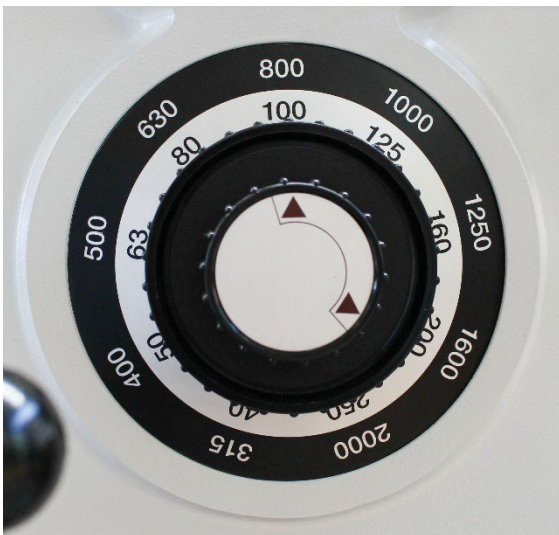


### Fixed table

The fixed table is included in the basic equipment of the machine.

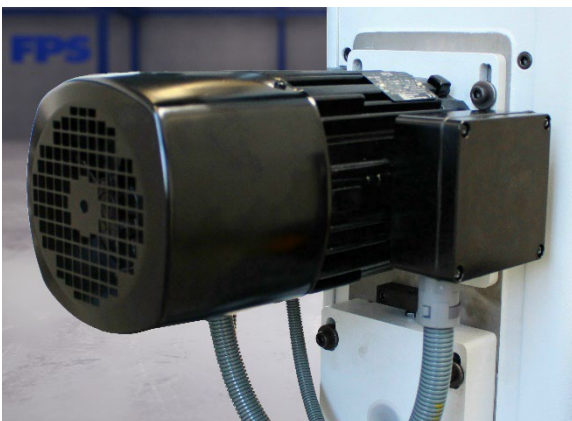
It has a clamping surface of **1000 x 440 mm** and the max. load is **2000 kg**.

The fixed table has **five 16H7** slots with a distance of **90 mm**.



### Spindle speed 40 – 2000 rpm

High-torque direct drive with **18** gear stages for high efficiency and maximum milling performance on the milling spindles.



### Main spindle drive

Main spindle drive via high-torque pole-changing three-phase brake motor.

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### Feed drive

**10 – 500 mm/min**

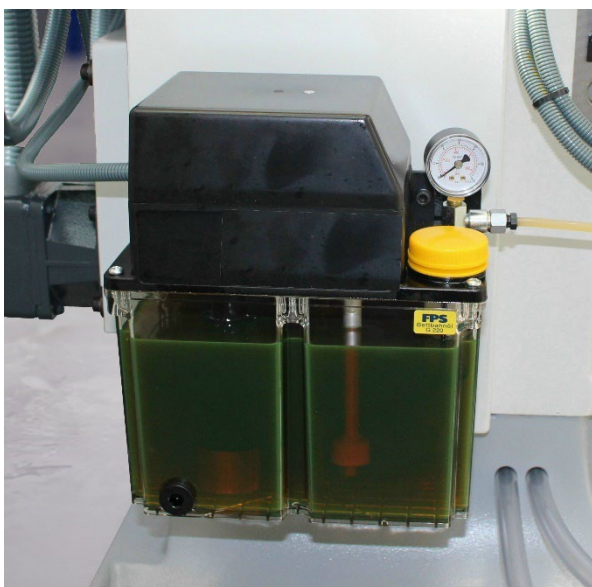
Stepless adjustable digital drive.



### Measuring system

The machine is equipped with a direct measuring system through glass scales in **all axes X Y Z.**

Maximum precision due to direct position measuring system as standard.



### Option:

#### Automatic central lubrication:

Automatic central lubrication can be retrofitted to all conventional DECKEL machines as a useful option.