

Project Info 21

Type of machine: Travelling column machining centre

Task: Milling of rolled steel profiles up to 8.8 m in length (lift masts for forklifts and high rack warehouses)

Solution:

- Standard travelling column machining centre with horizontal SK 60 spindle
- Four tools in a pick-up magazine, consisting of an SK 60 milling cutter with counter bearing, each fitted with 4 disc cutters of D = 500 mm
- Hydraulic workpiece clamping device

Special characteristics:

- Prepared for unmanned operation with automated loading and unloading
- Identification of the raw workpieces lying on the conveyor belt by means of a camera system
- Prefabricated parts are inserted into the clamping device and removed by means of a gantry loader
- Automated clamping device for optimal workpiece clamping
- High-performance chip extractor running in parallel on the X axis

Technical data:

X-traverse range:	12000 mm
Y- traverse range:	600 mm
Z- traverse range:	525 mm
Main drive (with 100 % DC):	66 kW
Spindle torque (with 40 % DC):	3200 Nm
Speed range:	10 - 500 1/min
Tool changing system:	4 tool places



For heavy-duty machining of rail and strip profiles a high-torque 3200 Nm horizontal spindle and SK 60 tool holder are used



The clamping elements each open and pivot sideways to uncover the area to be machined for the milling tool as it moves past.