



Premium 3-Axis Machining Center with powerful Siemens CNC

Highlights

- Powerful BBT 40 spindle with speeds up to 10.000 rpm
- High table load capacity of 1,500 kg allows machining of large, heavy workpieces
- Short tool changing times and 30 stations (optionally expandable to 40 stations) for increased productivity, high flexibility, and increased spindle up-time per shift



Machine Design

- Heavily ribbed machine frame with extra low center of gravity
- A major focus during development of this machine was a space-saving design
- The Lupus Series features linear guides on X, Y and Z to ensure high accuracy made possible by lower friction and higher dynamics
- 40 mm preloaded ball screws combined with a digital drive package provide a rigid table guide and high torque at maximum dynamics

Specifications

Lupus 650

Working area	
Table dimensions	mm 1.400x700
Table load capacity	kg 1.500
Spindle nose-to-table surface distance	mm 150 - 790
Throat	mm 707
Travels	
Travel X-axis	mm 1.280
Travel Y-axis	mm 670
Travel Z-axis	mm 640
Guideway	Roller
Headstock	
Spindle speed	1/min 10.000
Spindle mount	BBT 40
Spindle Torque cont./max.	Nm 70 / 95
Spindle bearing inner diameter	mm 70
Spindle drive method	Belt
Draw bolts	PS 806
Rapid feed	
Rapid feed X-/ Y-axis	mm/min 36.000
Rapid feed Z-axis	mm/min 30.000
Feed	
Work feed X-axis	mm/min 15.000
Work feed Y-axis	mm/min 15.000
Work feed Z-axis	mm/min 15.000
Tooling	
Tool changer type	Twin arm
Tool selection	Memory random
Number of tool stations	positions 30
Tool size Ø x L (max.)	mm 85x300
Tool weight max.	kg 7
Tool-change time tool/tool	sec 1,8
Tool-changing time chip/chip	sec 3,9
Accuracies	
Repeatabilities	mm ± 0,003
Positioning accuracies	mm ± 0,005
Drive capacity	
Motor rating main drive	kW 15
Main drive, continuous load	kW 11
Total power consumption	kVA 36
Voltage	V 220
Mains frequency	Hz 50
Measures and weights	
Overall dimensions (length x width x height)	m 3,3x2,35x2,94
Weight	kg 7.500
Part No.	422240

Spindle

- BBT 40 spindle with dual tool clamping ensures very secure seating of clamped tools in the spindle - low vibrations result in increased surface quality
- The spindle runs on 4 bearings for excellent absorption and dissipation of forces generated during machining - resulting in high surface quality
- The Lupus Series features 3 types of spindles (belt / built-in / gear) with various speeds to allow optimum customization for specific process requirements

Tool Changer

- Dual-arm tool changer with 30 stations ensures adequate flexibility and capacity for every day production needs (optionally with 40 stations)
- Short changing times (1.3 seconds tool-to-tool and 3.9 seconds chip-to-chip) increase spindle up-time and machine output

Siemens Sinumerik 828 D Milling

- The top specialist for demanding milling operations
- Preconfigured by STAHLWERK experts with Shopmill software, spindle speed upgrade to 10,000 rpm, oil cooler, chain-type chip conveyor with chip cart, coolant flow through the spindle up to 30 bar, with additional configurable M codes and preassembled hydraulic unit for a 4th axis

Standard Equipment

siemens 828 D control, Shopmill Softwareoption für Sinumerik 828D, Spindle upgrade to 10.000 RPM, Spindle head cooling system (Oil Cooler), chain type chip conveyor (lateral), chip cart 230 l (tiltable), Through Spindle Coolant 30 bar, Additional M code for configuration, Hydraulic unit for 4th axis, CE, USB interface, R232 interface, 30-station tool changer, electronic hand-wheel, coolant system, air and coolant spray wand, central lubrication, LED work lamp, 3-color signal lamp (LED), door lock, machine feet, operating tools