

– Specifications

Specifications	Standard	Option	Windows XP Option	
Components	•		○	MC 422 C and MC 420 main computers MC 422 C main computer with 2 processors CC 422 and CC 424 B controller units TE 530 B, TE 520 B and TE 535 operating panels BF 150 15.1-inch color TFT flat-panel display with soft keys
Operating system	•		○	HEROS real-time operating system for machine control Windows XP PC operating system as user interface
Memory	•		○	RAM memory: 512 MB for control applications 512 MB for Windows applications Hard disk with at least 13 GB program memory
Input resolution and display step	•			Linear axes: up to 0.1 μm Up to 0.0001°
Input range	•			Maximum 99 999.999 mm (3937 inches) or 99 999.999°
Interpolation	•	9		Linear in 4 axes Linear in 5 axes (subject to export permit) Circular in 2 axes Circular in 3 axes with tilted working plane Helical: superimposition of circular and straight paths Spline: execution of splines (3rd degree polynomials)
Block processing time	•	9		3.6 ms (3-D straight line without radius compensation) Option: 0.5 ms
Axis feedback control	•			Position loop resolution: Signal period of the position encoder/1 024 Cycle time of position controller: 1.8 ms Cycle time of speed controller: 600 μs Cycle time of current controller: minimum 100 μs
Range of traverse	•			Maximum 100 m (3937 inch)
Spindle speed	•			Maximum 60 000 rpm (with 2 pole pairs)
Error compensation	•			Linear and nonlinear axis error, backlash, reversal spikes during circular movements, thermal expansion Stick-slip friction
Data interfaces	•	18		One RS-232-C/V.24 and one RS-422/V.11, each with max. 115 Kbps Extended data interface with LSV2 protocol for remote operation of the iTNC 530 over the data interface with the HEIDENHAIN software TNCremoNT 100BaseT fast Ethernet interface 2 x USB HEIDENHAIN-DNC for communication between a Windows application and iTNC (DCOM interface)
Diagnostics	•			Fast and simple troubleshooting through integrated diagnostic aids
Ambient temperature	•			Operation: 0 °C to +45 °C Storage: -30 °C to +70 °C