

Production year: 2016

Standard Machine

00000	<p>Vertical Machining Center F9</p> <ul style="list-style-type: none"> ▪ Tool shank HSK-A63 ▪ Tool magazine ATC48 ▪ Scale feedback ▪ Coolant tank with drum type lift up chip conveyor (right) ▪ Nozzle coolant ▪ Through spindle air ▪ Centralised auto grease ▪ Auto power out ▪ Signal light-3 layer ▪ MAKINO Professional 5 Control ▪ Helical interpolation ▪ 128KB part program storage and 250 registerable programs ▪ Coordinate system rotation ▪ Rigid tapping ▪ Data Center 800 MB ▪ Super G1.4 control ▪ Tool offset pairs 64 ▪ Maintenance tool set
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Machine Options – already on the machine

1017	<p>Spindle 20.000 rpm Spindle Speed 50-20.000U/min, tool shank HSK-A63, power (cont.) 22kW, maximum torque (25%ED) 104Nm, tool clamping force 18kN, including ATC48.</p>
26003	Scale feedback – X,Y,Z
29025	Mist collector including interface
29061	Through spindle coolant – 3,0 MPa with cyclone filtration and coolant temperature control (2nd tank)
29064	Lift up chip conveyor – right (scraper drum)
37015	ATLM laser Blum
	AWM Blum
47000	<p>Air dryer The air connection of the machine has to be according to ISO 8573-1 in quality 2 for maximal particle diameter (1µm), quality 5 for maximal dew-point temperature (7°C) and quality 3 for maximal oil concentration (1mg/m³). Using of air dryer is not necessary with lower values within the factory net.</p>



67017	High speed skip function
68006	Addition of custom macro common variables 600 numbers
72008	Super GI 4 control

Machine Options – have to be added

29025	Mist collector including interface
29014	Coolant temperature controller Automatically controls the coolant temperature against the machine temperature in order to reduce thermal distortion of the mechanical system.
59008	Conical/Spiral Interpolation Allows simplified programming of spirals and conical objects (G02, G03).
59009	NURBS Interpolation (G06.2) NURBS are Non-Uniform Rational B-Splines. The use of this option allows better shape control. Requires a CAM system able to output Nurbs tool paths.
61027	Program Storage to 2MB & 1000 Registerable Programs
66008	Additional 48 Work Offsets (G54.1 P1-P48) Allows for 48 work coordinate systems simplifying multiple part fixtures.
67000	Additional Optional Block Skip (total): nine (9) Blocks Allows the operator in conjunction with the programmer to select certain program blocks to be skipped or not, depending on switch selection.
67010	Program restart This function shows the sequence number in the program to be restarted when a tool is broken down or when it is desired to restart machining operations after a day off, and restarts the machining operation from that block. It can also be used as a high-speed program check function.
68023	Automatic corner override Automatically decelerating cutting speed at inner corners depending on the corner angle to maintain cutting quantity per unit time (G62).
72009	Nano smoothing This function infers a curve from a programmed figure approximated with segments within tolerance. It reduces the segment approximation error and makes the cutting surface smoother.
