

| Pos. | Qty. | Article Description | Price / € |
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## Complete machine description

- 10 1 Vertical CNC-machining centre model FZ 18 WM  
Completely refurbished pre-owned machine  
Year of construction: 1998, weight: ca. 8.000 kg**

**Machine-No. 434-55**

Scope of delivery:

- 20 1 Column moving machining centre with work piece changing equipment**

- 30 1 Main spindle drive with AC-motor**

11 kW at 100 %

18 kW at 25 %

Spindle speed range: 20 - 10.500 rpm - 140 Nm

01100800

Drilling capacity in steel 60

∅ 42 mm (with insert drill)

Tapping capacity

M 30

Milling capacity in steel 60

300 cm<sup>3</sup>/min.

**Travel:**

X-axis

630 mm

Y-axis

400 mm

Z-axis

630 with adjustable tool change level

01102000

- 40 1 Automatic tool changer**

No. of tools

20

Tool shaft

HSK A 63 DIN 69893

01103500

- 50 1 Workpiece swivel table 0/180 degrees**

Clamping surface 2 x 850 x 470 mm<sup>2</sup>

with thread and locating hole grids

M 16 x ∅ 15 H7 x 50 mm

Table change time approx. 4,0 s

Table loading capacity per side max. 250 kg (400 kg)

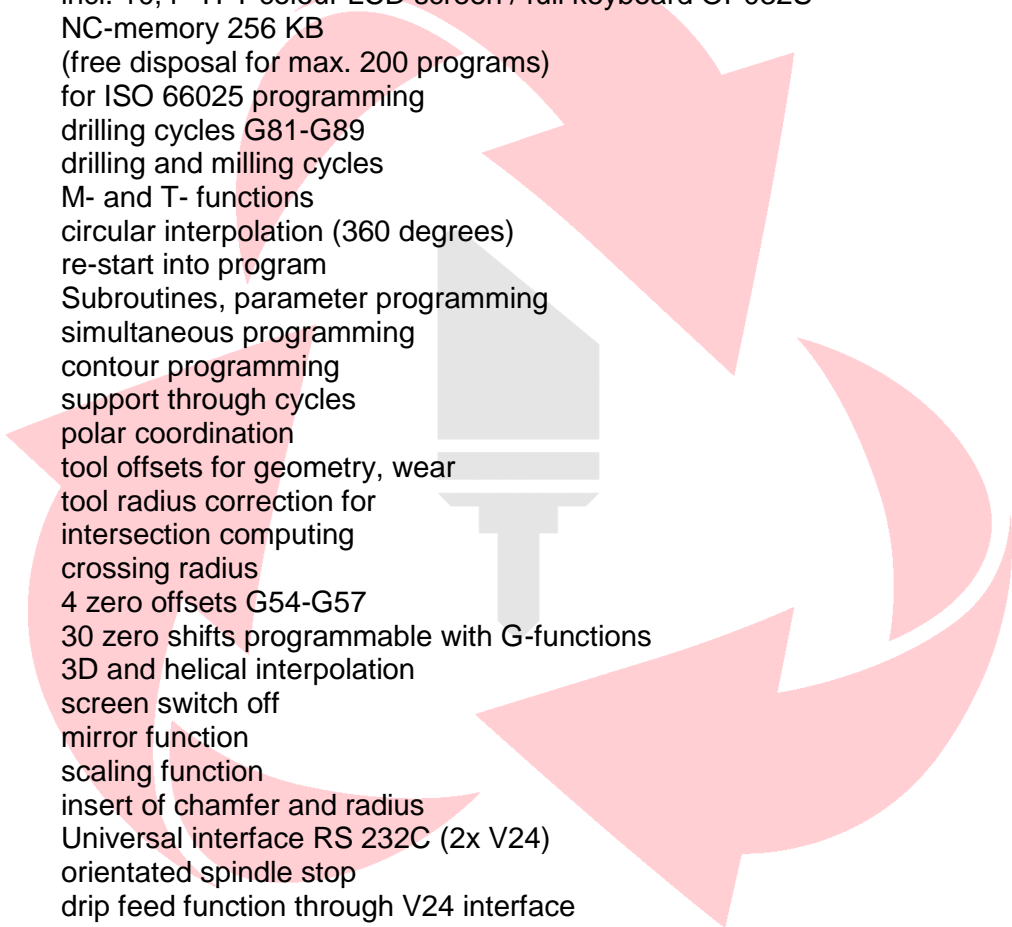
(At loading capacity up to max. 2 x 400 kg

the change times will be extended up to 7s)

01107300



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| 60   | 1    | <p><b>AC-servo motors for x-, y- and z-axes</b><br/>           digital direct drives with indirect absolute path measuring system<br/>           acceleration drive engineering: 4,5 m/sec<sup>2</sup><br/>           rapid traverse 40 m/min.<br/>           01107800</p>   |           |
| 70   | 1    | <p><b>Siemens CNC-control 840 D</b><br/>           (MMC 100.2 / NCU 572.2, 6 measuring circuits, 1 channel)<br/>           incl. 10,4" TFT colour LCD screen / full keyboard OP032S<br/>           NC-memory 256 KB<br/>           (free disposal for max. 200 programs)<br/>           for ISO 66025 programming<br/>           drilling cycles G81-G89<br/>           drilling and milling cycles<br/>           M- and T- functions<br/>           circular interpolation (360 degrees)<br/>           re-start into program<br/>           Subroutines, parameter programming<br/>           simultaneous programming<br/>           contour programming<br/>           support through cycles<br/>           polar coordination<br/>           tool offsets for geometry, wear<br/>           tool radius correction for<br/>           intersection computing<br/>           crossing radius<br/>           4 zero offsets G54-G57<br/>           30 zero shifts programmable with G-functions<br/>           3D and helical interpolation<br/>           screen switch off<br/>           mirror function<br/>           scaling function<br/>           insert of chamfer and radius<br/>           Universal interface RS 232C (2x V24)<br/>           orientated spindle stop<br/>           drip feed function through V24 interface<br/>           dimension metric or inch<br/>           software limit switch<br/>           NC-diagnosis<br/>           machine-diagnosis<br/>           absolute, indirect path-measuring system<br/>           S16100450</p> |           |



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| <b>80</b>  | 1    | <b>CMS Powersafe</b><br>Software package for selective shutdown of installed consumers such as axis motors, drives, spindles, coolant-pumps and auxiliary equipment during production breaks.<br>Definable point in time at which the machine goes demand-oriented automatically into it's Power Safe mode.  |           |
| <b>90</b>  | 1    | <b>Working hours and piece counter</b><br>in the screen  |           |
| <b>100</b> | 1    | <b>Rigid tapping</b>   |           |
| <b>110</b> | 1    | <b>Machine enclosure</b><br>with sliding doors, electrically interlocked,<br>2800 mm high above floor, incl. machine lamp  |           |
| <b>120</b> | 1    | <b>Mini-operating panel</b><br>with start and receipt push buttons, for pallet recognition M61/M62   |           |
| <b>130</b> | 1    | <b>Installation elements</b>   |           |
| <b>140</b> | 1    | <b>Chip conveyor (scratch band)</b><br>(for cast iron slurry)<br>discharge height 1050 mm with coolant equipment,<br>tank capacity 500 l,<br>pump capacity 200 l/min at 1,3 bar<br>pump capacity 20 l/min at 30 bar<br>high pressure circuit with coolant filtration<br>via paperbondfilter PF 50 and twinfilter<br>incl. bed flushing system<br>(This filtration method will not eliminate increasing cast iron slurry from the coolant equipment.)<br>02103900 |           |
| <b>150</b> | 1    | <b>Machine preparation</b><br>for through tool coolant system<br>02104450  |           |
| <b>160</b> | 1    | <b>Wash gun</b><br>02104600  |           |
| <b>170</b> | 1    | <b>4. Axis ready for plug-in</b><br>S05100300  |           |



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| 180  | 1    | <b>5. Axis ready for plug-in</b><br>S05100350  |           |
| 190  | 1    | <b>Full enclosure</b><br>with connection to extraction fan,<br>with supplementary machine lamp, servicedoors,<br>drop channel at loading area<br><b>REMARK:</b><br>An exhaust fan is required by using a full enclosure !<br>02107550-01   |           |
| 200  | 1    | <b>Automatic loading door of total enclosure</b><br>opening and closing<br>incl. two-hand push buttons<br>02105300-01  |           |
| 210  | 1    | <b>Socket 230 V</b><br>at control panel<br>S06101300   |           |
| 220  | 1    | <b>Central pneumatic supply</b><br>without control and 2 outlet couplings,<br>03100100   |           |
| 230  | 1    | <b>Documentation</b><br>Operating manuals, programming and operating manuals 1-fold<br>on a USB-Stick.<br>Please refer to the manufacturer's instructions for each component.<br><br><b>Maschinenfarbe</b><br>Two-components-structure varnish - 3 colours<br>light grey      acc. to NCS S1502-B<br>blue              acc. to NCS S2050-R80B<br>basalt grey      acc. to RAL 7012<br><br><b>Main circuit</b><br>total power supply 400 / 230V ± 10 %, 50 cycles N/PE,<br>neutral conductor, load possible, pressure supply<br>6 bar, ± 1 bar at all procedures,<br>room temperature max 40° |           |



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### Information Export

We point out that the CNC-machining centres are subject to controls. For the export from the European Union an export license is necessary.

### Information Machine safety

The machine is designed and built in accordance with the European machine guideline, according placing the product on the first time onto the market.

Other safety features due to special company rules and specifications can be considered. The actual cost will be invoiced.

### Information Coolant lubrication

The machine is designed for standard water soluble coolant and fully enclosed at the standard version. The machine must be equipped with fume extraction.

The machine contents different plastics, varnish, resin and glue, which are selected carefully for using coolant and cutting oil.

The use of aggressive coolant and additive could cause major damages and machine stops.

Contact in any case your coolant supplier before machine set-up and installation.

