Main features of the FZ-14M

<table>
<thead>
<tr>
<th>Upper Spindle</th>
<th>Lower Spindle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulling length:</td>
<td>350 mm</td>
</tr>
<tr>
<td>Pulling speed:</td>
<td>0 - 30 mm/min</td>
</tr>
<tr>
<td>Fast travel speed:</td>
<td>100 - 300 mm/min</td>
</tr>
<tr>
<td>Spindle rotation:</td>
<td>0 - 50 rpm</td>
</tr>
<tr>
<td></td>
<td>350 mm</td>
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<tr>
<td></td>
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</tbody>
</table>

RF-Generator

- RF output power: 10 kW
- RF frequency: 2.8 MHz nominal
- Power control: SCR-power thyristor triggered by pulse transformers
- Oscillator valve: water-cooled ceramic type ITK 15 - 2

Vacuum system

- End vacuum: 2.5 · 10E - 5 mbar
- Leak rate: < 1 · 10E - 3 mbar 1/sec
- Chamber walls: polished stainless steel, Ra < 0.1 μm
- Pump: Turbo pump with diaphragm pre-/backing pump

The floor area required for the complete set-up including generator, closed loop cooling system, vacuum/gas system, control panel, operator’s platform and computer station is approx. 3 x 4 meters.

Weight

approx. 2,500 kg (net) The weight includes the high frequency generator and control panel.

Pressure

- Operating pressure: -1 to +2 bar overpressure (0 to 3 bar absolute)
- Test pressure: 2.6 bar over pressure

Cooling water

- Mechanically clean (mesh width 0.38 mm)
- Carbonate hardness max. 8° DH
- Chemically neutral
- Electrical conductivity max 300 μS

FZ-system

- Quantity: approx. 20 l/min
- Pressure: 4 - 6 bar
- Temp. Inlet: 12 - 25°C
- Temp. Outlet: max. 35°C

Generator

- Quantity: approx. 25 l/min
- Pressure: 4 - 6 bar
- Temp. Inlet: 12 - 20°C
- Temp. Outlet: max. 35°C

Argon

- Quantity operation: 18 l/min
- Quantity quick fill: 100 l
- Pressure: 5 - 10 bar
- Quality: Semi standard C57-0305, grade 4.8

Dimensions (approx.) excl. generator

- Height (top level) 3,220 mm
- Width 2,650 mm
- Depth 1,500 mm