The machine is used for preparing weld edges of tube ends. Constructed with Aluminium housing to reduce weight the machines are designed in a very rugged way. In cooperation with German boiler manufacturers the machine has been developed with their own “On-Site Know How”. The units are easy to operate on-site but as well in workshop. High working speed and fast clamping allow economic working procedures.

- High Cutting Capacity
- Quick and Secure Clamping
- Rugged and compact type of Construction
- Easy handling
- Low price at high quality

Field of applications:
- The unit serves to machine and prepare welding edges on tubes, branches and headers.
- Operated by one man only, it is well suited for use in the workshop and on site.
- Its high working speed and quick readiness allow economical manufacturing.
- Due to its extremely compact type of construction it can be readily used in confined space.

<table>
<thead>
<tr>
<th>Unit type</th>
<th>MF3iw</th>
<th>MF3i</th>
<th>MF5i</th>
<th>MF6i-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube outside diameter (mm)</td>
<td>max. 101,6</td>
<td>max. 160</td>
<td>max. 460</td>
<td>max. 771</td>
</tr>
<tr>
<td>Tube outside dia. mm (inch)</td>
<td>Max 4</td>
<td>Max 6.3</td>
<td>Max 18.1</td>
<td>Max 28</td>
</tr>
<tr>
<td>Tube inside dia. mm (inch)</td>
<td>16.2 - 96</td>
<td>25 - 152</td>
<td>100 - 448</td>
<td>280 - 700</td>
</tr>
<tr>
<td>Tube outside diameter (inch)</td>
<td>0.6 - 3.8</td>
<td>1 - 6</td>
<td>3.9 - 17.6</td>
<td>11 - 27.5</td>
</tr>
<tr>
<td>Tube wall thickness (mm)</td>
<td>max. 15</td>
<td>Max. 25</td>
<td>Max. 30</td>
<td>Max. 36</td>
</tr>
<tr>
<td>Spindle stroke (mm)</td>
<td>20</td>
<td>15</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>weight (kg)</td>
<td>5,8</td>
<td>10,3</td>
<td>23,8</td>
<td>79</td>
</tr>
<tr>
<td>Pneumatic motor (kW)</td>
<td>0,74</td>
<td>0,74</td>
<td>2 x 0,74</td>
<td>3 x 0,74</td>
</tr>
<tr>
<td>Electric motor (kW)</td>
<td>1,2</td>
<td>1,2</td>
<td>2,2</td>
<td>/</td>
</tr>
<tr>
<td>Geared air motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geared electric motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angle air motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angle electric motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Standard version
- Available special version

MF3iw

Blade & Tool Tip Holder
Made in Germany

TUBE END MILLING UNIT
• INTERNAL CLAMPING

Cutting tool tip holder
0°

clamping sleeve 1
091501113 cutting tool tip holder 0°
(Ø-internal 16 mm - Ø-outside 56 mm)

clamping sleeve 2
091501114 cutting tool tip holder 0°
(Ø-internal 25 mm - Ø-outside 64 mm)

clamping sleeve 3
091501104 cutting tool tip holder 0°
(Ø-internal 40 mm - Ø-outside 104 mm)

Cutting tool tip holder
30°

091501010 cutting tool tip holder 30°
(Ø-internal 16 mm - Ø-outside 50 mm)

091501012 cutting tool tip holder 30°
(Ø-internal 25 mm - Ø-outside 58 mm)

091501013 cutting tool tip holder 30°
(Ø-internal 40 mm - Ø-outside 78 mm)

Cutting tool tip holder
45° - internal

010007080 cutting tool tip holder 45°
(Ø-internal 16 mm - Ø-outside 56 mm)

010007080 cutting tool tip holder 45°
(Ø-internal 25 mm - Ø-outside 66 mm)

010007080 cutting tool tip holder 45°
(Ø-internal 40 mm - Ø-outside 82 mm)

MF3i

Blade & Tool Tip Holder

091502139 Blade holder size 2
for clamping sleeve size 2
(Outside-Ø 101.6 mm)
(Standard blade holder)

091502144 Blade holder size 1
for clamping sleeve size 1
(Outside-Ø 84 mm)

0915000665 cutting tool tip holder 10°
(internal)

091501215 cutting tool tip holder 30°
(larg)

091501215 cutting tool tip holder 30°
(larg)

091501213 cutting tool tip holder 0°
(short)

091501105 HSS cutting tool tip 0°

091501106 HSS cutting tool tip 0°

091501107 HSS-WP 30°

091501108 HSS-WP 30°

091501112 HSS-WP 45° - internal
TUBE END MILLING UNIT
• INTERNAL CLAMPING

MF6i-50

Blade & Tool Tip Holder

MF6i-50 Blade & Tool Tip Holder

MF5i

Blade & Tool Tip Holder

MF5i Blade & Tool Tip Holder

091501105
HSS cutting tool tip holder 10° (short)
091501106
HSS cutting tool tip holder 0° (short)
091501415
HSS cutting tool tip holder 30°
091501416
HSS cutting tool tip holder 30° (TIN)
091500665
Cutting tool tip holder 10° (short)
091501108
HSS cutting tool tip 30° (TIN)
091501105
HSS cutting tool tip 0°
091501106
HSS cutting tool tip 0° (TIN)
091501415
HSS cutting tool tip 30°
091501416
HSS cutting tool tip 30° (TIN)
091500665
Cutting tool tip holder 10° (short)
091501108
HSS cutting tool tip 30° (TIN)
091501105
HSS cutting tool tip 0°
091501106
HSS cutting tool tip 0° (TIN)
091501415
HSS cutting tool tip 30°
091501416
HSS cutting tool tip 30° (TIN)

091501451
Blade holder size 1
Working range:
Ø-internal 90 mm - Ø-outside 332 mm
(Standard blade holder)
091501408
Blade holder size 2
Working range:
Ø-internal 176 mm - Ø-outside 460 mm
can only be used with MF5i-II
and thin-walled tubes
091501408
Blade holder size 2
for clamping sleeve size 2
(Outside-Ø 101.6 mm)
091501413
Blade holder size 1
for clamping sleeve size 2
(Outside-Ø 101.6 mm)
can only be used with MF5i-II
and thin-walled tubes
091501413
Blade holder size 1
(Standard blade holder)
The unit serves to machine and prepare welding edges on tubes, branches and headers. On steam bloc boilers it is used for machining tube walls and cutting out welds. Having a low weight the unit is of very rugged design. Operated by one man only, it is well suited for use in the workshop and on site. Due to its extremely compact type of construction it can be readily used in confined space. Its high working speed and quick readiness allow economical manufacturing.

- High Cutting Capacity
- Quick and Secure Clamping
- Rugged and compact type of Construction
- Easy handling
- Low price at high quality

Field of applications:
- The unit serves to machine and prepare welding edges on tubes, branches and headers.
- Having a low weight the unit is of very rugged design.
- Operated by one man only, it is well suited for use in the workshop and on site.
- Due to its extremely compact type of construction it can be readily used in confined space.
- It's high working speed and quick readiness allow economical manufacturing.

<table>
<thead>
<tr>
<th>Unit type</th>
<th>MF3-R</th>
<th>MF4-R</th>
<th>MF2-25</th>
<th>MF3-K</th>
<th>MF3-25</th>
<th>MF4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube outside diameter (mm)</td>
<td>12 - 44,5</td>
<td>44,5 - 88,9</td>
<td>20 - 38</td>
<td>20 - 63,5</td>
<td>20 – 63,5</td>
<td>38 – 133</td>
</tr>
<tr>
<td>Tube outside dia. mm (inch)</td>
<td>0.5 - 1.75</td>
<td>1.75 - 3.5</td>
<td>0.8 - 1.5</td>
<td>0.8 - 2.5</td>
<td>0.8 - 2.5</td>
<td>1.5 - 5.3</td>
</tr>
<tr>
<td>Tube inside dia. mm (inch)</td>
<td>Min. 9</td>
<td>Min. 30</td>
<td>Min. 12.5</td>
<td>Min. 12.5</td>
<td>Min. 12.5</td>
<td>Min. 25</td>
</tr>
<tr>
<td>Tube outside diameter (inch)</td>
<td>Min. 0.4</td>
<td>Min. 1.2</td>
<td>Min. 0.5</td>
<td>Min. 0.5</td>
<td>Min. 0.5</td>
<td>Min. 1</td>
</tr>
<tr>
<td>Tube wall thickness (mm)</td>
<td>Max. 10</td>
<td>Max. 10</td>
<td>Max. 15</td>
<td>Max. 15</td>
<td>Max. 15</td>
<td>Max. 25</td>
</tr>
<tr>
<td>Spindle stroke (mm)</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>weight (kg)</td>
<td>4.8</td>
<td>6.2</td>
<td>5.6</td>
<td>7.1</td>
<td>8.6</td>
<td>12</td>
</tr>
<tr>
<td>Pneumatic motor (kW)</td>
<td>0.74</td>
<td>0.74</td>
<td>0.74</td>
<td>0.74</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td>Electric motor (kW)</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Geared air motor</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Geared electric motor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Angle air motor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Angle electric motor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

- Standard version
- Available special version

**MF3R**

**Blade & Tool Tip Holder**

091501105 HSS cutting tool tip 0°

091501106 HSS cutting tool tip 0° (TIN)

091501028 HSS cutting tool tip 30°

091501029 HSS cutting tool tip 30° (TIN)

091502825 Tool tip holder 0°

091502824 Tool tip holder 30°

091502999 Tool tip holder 45°

091502870 Blade holder for special blades
FORM OF WELD

FORM I

FORM V

SONDERFORM

MF4R

Blade & Tool Tip Holder

091502113
Adjustable blade holder size 1,
Working range: di 25 - do 88,9 mm

091502138
Cutting tool tip holder 0°

091502136
Cutting tool tip holder 30°

091501105
HSS cutting tool tip 0°

091501028
HSS cutting tool tip 30° (TIN)

091501106
HSS cutting tool tip 0° (TIN)

091501108
HSS cutting tool tip 30° (TIN)
Membrane Wall Machining with Crown Milling Cutters

<table>
<thead>
<tr>
<th>Tube Ø (mm)</th>
<th>All necessary parts for one complete unit</th>
<th>Spare parts</th>
<th>Holding-down bolts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MF2-25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.0</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>21.3</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>25.0</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>26.9</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>28.6</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>30.0</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>31.8</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>33.7</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>35.0</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
<tr>
<td>38.0</td>
<td>091503973</td>
<td>091503972</td>
<td>091503971</td>
</tr>
</tbody>
</table>
Membrane Wall Machining with Crown Milling Cutters

<table>
<thead>
<tr>
<th>Tube Ø (mm)</th>
<th>All necessary parts for one complete unit</th>
<th>Spare parts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>MF2-25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20,0</td>
<td>091503973</td>
</tr>
<tr>
<td></td>
<td>21,3</td>
<td>091503972</td>
</tr>
<tr>
<td></td>
<td>25,0</td>
<td>091503971</td>
</tr>
<tr>
<td></td>
<td>26,9</td>
<td>091503969</td>
</tr>
<tr>
<td></td>
<td>28,6</td>
<td>091504440</td>
</tr>
<tr>
<td></td>
<td>30,0</td>
<td>091502588</td>
</tr>
<tr>
<td></td>
<td>31,8</td>
<td>091502484</td>
</tr>
<tr>
<td></td>
<td>33,7</td>
<td>091502467</td>
</tr>
<tr>
<td></td>
<td>35,0</td>
<td>091502485</td>
</tr>
<tr>
<td></td>
<td>38,0</td>
<td>091502457</td>
</tr>
</tbody>
</table>
## TUBE END MILLING UNIT
• EXTERNAL CLAMPING

### Blade & Tool Tip Holder

**MF4**

![Crown milling for membran wall machining](membrane-wall-machining.png)

**Membrane Wall Machining with Crown Milling Cutters**

<table>
<thead>
<tr>
<th>Tube Ø (mm)</th>
<th>All necessary parts for one complete unit</th>
<th>Spare parts</th>
<th>Holding-down bolts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MF4</strong></td>
<td><strong>TT crown milling cutter with knox screws M4 and 4 screws M5x25 (Art.-No.)</strong></td>
<td><strong>Spare parts</strong></td>
<td><strong>Holding-down bolts</strong></td>
</tr>
<tr>
<td></td>
<td><strong>TT 0°</strong> Basic holder (compl. thread-pin M8x10) Number (Pieces)**</td>
<td><strong>Knox screws M4 (TT)</strong> 1 piece per TT-holder (Art.-No.)</td>
<td><strong>Screw M5x20</strong> 4 pieces (Art.-No.)</td>
</tr>
<tr>
<td>44,5</td>
<td>091502487 6</td>
<td>091502493 10</td>
<td>091500642</td>
</tr>
<tr>
<td>48,3</td>
<td>091502488 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51,0</td>
<td>091502489 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57,0</td>
<td>091502459 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60,3</td>
<td>091502490 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63,5</td>
<td>091502491 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70,0</td>
<td>091502492 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76,1</td>
<td>091502493 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**091502111**
Adjustable blade holder size 2
Working range: di 25 - do 133 mm
Standard blade holder

**091502118**
Adjustable blade holder size 1
Working range: di 25 - do 88,9 mm

---

Made in Germany
Pipe Cold Cutting System

Type DLW

Portable pipe cutters, for machining of pipes on-site, are versatile in application and can perform many operations. The machines are reduced in weight and dimensioning. The accessories needed for the different machining allow multiple operations, like beveling and cutting in one operation, inside beveling, flange repair of flange facing.

- Split-Frame technology for endless tubes
- Extremely low weight
- Quick and safe clamping and adjusting
- Reduced space requirement
- Multiple operations possible

Option DLW-CB:
Inside beveling device for calibration of inside diameter and inside boring of max. 200 mm depth, adjustable 5° - 25°.

Option DLW-FF:
Flange facing device for DLW machines to regroove the flange surface, automatic feed mechanism, to be used together with DLW-CB.

Cutter Overview

<table>
<thead>
<tr>
<th>Type</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>Weigh (kg)</th>
<th>(inch)</th>
<th>(mm)</th>
<th>rpm</th>
<th>max. WT (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLW 3-6</td>
<td>308</td>
<td>180</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>23</td>
<td>3</td>
<td>6</td>
<td>76.2</td>
<td>152.4</td>
</tr>
<tr>
<td>DLW 4-8</td>
<td>360</td>
<td>232</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>27</td>
<td>4</td>
<td>8</td>
<td>101.6</td>
<td>203.2</td>
</tr>
<tr>
<td>DLW 5-10</td>
<td>414</td>
<td>286</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>30</td>
<td>5</td>
<td>10</td>
<td>127</td>
<td>254</td>
</tr>
<tr>
<td>DLW 6-12</td>
<td>465</td>
<td>337</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>34</td>
<td>6</td>
<td>12</td>
<td>152.4</td>
<td>304.8</td>
</tr>
<tr>
<td>DLW 8-14</td>
<td>496</td>
<td>368</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>38</td>
<td>8</td>
<td>14</td>
<td>203.2</td>
<td>355.6</td>
</tr>
<tr>
<td>DLW 10-16</td>
<td>547</td>
<td>419</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>42</td>
<td>10</td>
<td>16</td>
<td>254</td>
<td>406.4</td>
</tr>
<tr>
<td>DLW 12-18</td>
<td>602</td>
<td>470</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>45</td>
<td>12</td>
<td>18</td>
<td>304.8</td>
<td>457.2</td>
</tr>
<tr>
<td>DLW 14-20</td>
<td>649</td>
<td>521</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>50</td>
<td>14</td>
<td>20</td>
<td>355.6</td>
<td>508</td>
</tr>
<tr>
<td>DLW 20-24</td>
<td>750</td>
<td>622</td>
<td>88.5</td>
<td>65</td>
<td>127</td>
<td>60</td>
<td>20</td>
<td>24</td>
<td>508</td>
<td>609.6</td>
</tr>
<tr>
<td>DLW 26-30</td>
<td>920</td>
<td>775</td>
<td>88.5</td>
<td>74</td>
<td>127</td>
<td>83</td>
<td>26</td>
<td>30</td>
<td>660.4</td>
<td>762</td>
</tr>
<tr>
<td>DLW 32-36</td>
<td>1068</td>
<td>928</td>
<td>88.5</td>
<td>74</td>
<td>127</td>
<td>93</td>
<td>32</td>
<td>36</td>
<td>812.8</td>
<td>914.4</td>
</tr>
<tr>
<td>DLW 36-43</td>
<td>1250</td>
<td>1105</td>
<td>88.5</td>
<td>74</td>
<td>136</td>
<td>102</td>
<td>36</td>
<td>43</td>
<td>914.4</td>
<td>1092.2</td>
</tr>
<tr>
<td>DLW 40-48</td>
<td>1420</td>
<td>1245</td>
<td>95</td>
<td>89</td>
<td>151</td>
<td>na</td>
<td>40</td>
<td>48</td>
<td>1016</td>
<td>1219.2</td>
</tr>
</tbody>
</table>

Portable pipe cutters, for machining of pipes on-site, are versatile in application and can perform many operations. The machines are reduced in weight and dimensioning. The accessories needed for the different machining allow multiple operations, like beveling and cutting in one operation, inside beveling, flange repair of flange facing.

- Split-Frame technology for endless tubes
- Extremely low weight
- Quick and safe clamping and adjusting
- Reduced space requirement
- Multiple operations possible

Option DLW-CB:
Inside beveling device for calibration of inside diameter and inside boring of max. 200 mm depth, adjustable 5° - 25°.

Option DLW-FF:
Flange facing device for DLW machines to regroove the flange surface, automatic feed mechanism, to be used together with DLW-CB.
The RS 5090 is a compressed air powered grinding and polishing machine for cleaning pipe and plate ends easy and fast. Both grinding parts of the RS 5090 can simple be adjusted for every wall thickness. Use able in Heat exchanger, Offshore-Technic, Steel industry, Equipment manufacturing, Shipyards, Machine engineering, Pipeline construction and many more.

- Fast cleaning
- Easy handling
- Compact design
- Simple adjustment

<table>
<thead>
<tr>
<th>Model</th>
<th>RS 5090 S</th>
<th>RS 5090 D</th>
<th>RS 5090 AUTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>with straight handle</td>
<td>with D handle</td>
<td>with AUTO unit</td>
</tr>
<tr>
<td>Air Consumption (m³/min)</td>
<td>0,46 m³/min</td>
<td>0,46 m³/min</td>
<td>0,58 m³/min</td>
</tr>
<tr>
<td>Drive</td>
<td>manual feed</td>
<td>manual feed</td>
<td>rotation through airfeed</td>
</tr>
<tr>
<td>Grinding Range (mm)</td>
<td>25 and 30 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliverable Graining</td>
<td>40, 80 and (black) Strip-It-Wheels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>12,000 rpm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating pressure</td>
<td>6 bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>weight (kg)</td>
<td>3,5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Boiler Wall Cutting System

The machine serves to cut boiler walls. Having a low weight the unit is of very rugged design. Operated by one man only, it is well suited for use in the workshop and on site. Due to its extremely compact type of construction it can be readily used in confined space. It's high working speed and quick readiness allows economical manufacturing.

- Increased safety of workers
- No heat affected zone
- Less wearing of cutting disk
- High productivity
- High cutting quality

Technical data complete system:
- Max. membrane length : 4,5 m
- Max. tube diameter : 63,5 mm
- Rail material : aluminium
- Weight : on request

Technical data pneumatic feed:
- Power : 3500 watt
- Compressed air : 6,2 bar (g)
- Air consumption : 60 l/s
- Connection : R 1/2 inch
- Noise level : 85 d(B)A
The basis of the MFS series is formed by the new MFS-4 with clamping range from 1/2” to 4” (20mm - 116mm outside diameter). The number in the title of the machine refers to the maximum clamping range in inches for that particular machine. For example, the MFS-16 has a clamping range up to 16” (410mm).

- Heat exchanger manufacturing
- Offshore construction
- Apparatus manufacture
- Equipment constructions
- Shipbuilding
- Machine construction
- Pipeline construction

**MAKING WELD PREPARATIONS IS A MATTER OF SECONDS**
The performance determines the choice of a machine. It is the fastest working machine for machining (thick-walled) pipes made from duplex steel, stainless or hasteloy, for example. The minimal handling of materials required and very short machining time make the MFS end preparation machines to some of the fastest on the market.

**SELF-CENTERING PRISM CLAMP**
A self-centering-clamp holds the pipe firmly in place. The clamp can be manually opened and closed rapidly using a large ratchet. The MFS-24 and MFS-30 have an electric drive as standard for the prism-clamp.

**LARGE CHIP TRAY**
The large chip tray has a separator to filter the chips out of the coolant. All MFS machines have a built-in pump for cooling fluid.

**POWERFUL ELECTRIC MOTORS**
The more than adequate electric motors of the MFS-4 and MFS-6 have two speeds and can be operated very simply. As well as the two speed motor, MFS-16 also has a gearbox allowing simple switching to a total of four speeds.
### TECHNICAL DATA

<table>
<thead>
<tr>
<th></th>
<th>MFS-4</th>
<th>MFS-6</th>
<th>MFS-16</th>
<th>MFS-24</th>
<th>MFS-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamp range1 (pipe in inches)</td>
<td>½” – 4”</td>
<td>1 ½” - 6”</td>
<td>3” - 16 ”</td>
<td>8” - 24”</td>
<td>8” - 30”</td>
</tr>
<tr>
<td>Turning range (mm)</td>
<td>10 – 116</td>
<td>30 – 180</td>
<td>60 – 410</td>
<td>170 – 620</td>
<td>170 – 780</td>
</tr>
<tr>
<td>Voltage2 (Volt)</td>
<td>400V – 3Ph – 50Hz</td>
<td>400V – 3Ph – 50Hz</td>
<td>400V – 3Ph – 50Hz</td>
<td>400V – 3Ph – 50Hz</td>
<td>400V – 3Ph – 50Hz</td>
</tr>
<tr>
<td>Motor Power (kW)</td>
<td>2,6 / 3,2</td>
<td>4,5 / 5,5</td>
<td>4,5 / 5,5</td>
<td>15</td>
<td>18,5</td>
</tr>
<tr>
<td>Clamping</td>
<td>Manuel Clamp</td>
<td>Manuel Clamp</td>
<td>Manuel Clamp</td>
<td>Electric</td>
<td>Electric</td>
</tr>
<tr>
<td>Clamp operation</td>
<td>Manuel</td>
<td>Manuel</td>
<td>Manuel</td>
<td>Electric</td>
<td>Electric</td>
</tr>
<tr>
<td>Machining</td>
<td>Carbide inserts</td>
<td>Carbide inserts</td>
<td>Carbide inserts</td>
<td>Carbide inserts</td>
<td>Carbide inserts</td>
</tr>
<tr>
<td>Max. wall thickness3 (mm)</td>
<td>13 (in 1 machining)</td>
<td>25 (in 1 machining)</td>
<td>20 (in 1 machining)</td>
<td>35 (in 1 machining)</td>
<td>35 (in 1 machining)</td>
</tr>
<tr>
<td>Feed operation</td>
<td>Manuel</td>
<td>Manuel</td>
<td>Manuel</td>
<td>Electric</td>
<td>Electric</td>
</tr>
<tr>
<td>Feed stroke (mm)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Speed (r.p.m) at 50 HZ</td>
<td>96 and 195</td>
<td>48 and 96</td>
<td>36, 48, 72 and 96</td>
<td>25, 38, and 50</td>
<td>20, 40, and 70</td>
</tr>
<tr>
<td>Size LxWxH (mm)</td>
<td>900 x 740 x 1300</td>
<td>1300 x 900 x 1450</td>
<td>1400 x 1100 x 1300</td>
<td>3000 x 2300 x 1800</td>
<td>3500 x 2400 x 1800</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>700</td>
<td>1250</td>
<td>2250</td>
<td>11000</td>
<td>12000</td>
</tr>
</tbody>
</table>

### OPTION

<table>
<thead>
<tr>
<th></th>
<th>MFS-4</th>
<th>MFS-6</th>
<th>MFS-16</th>
<th>MFS-24</th>
<th>MFS-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrically operated clamp</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Electrically operated feed</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Electrically operated pipe-stop</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Semi-automatic</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Built-in cooling pump</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Mist cooling system</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Copying system</td>
<td>-</td>
<td>-</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>RBT roller bench</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Maintenance contract</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

1) Clamping range and turning range can be reduced using optional insert jaws
2) Other voltages/frequencies can be supplied on request
3) The maximum wall thickness is unrestricted by machining the pipe several times in succession

• = optionally available
BLADE & TOOL TIP HOLDER

**Internal Clamping**

- 091500665 cutting tool tip holder 0°
- 091501413 cutting tool tip holder 0°
- 091502125 cutting tool tip holder 0°
- 091501414 cutting tool tip holder 0°
- 091502184 cutting tool tip holder 30°
- 091502183 cutting tool tip holder 0°
- 091502128 cutting tool tip holder 0°
- 091502185 30°-HSS-blade small
- 091502188 10° - internal
- 091502186 8° - internal
- 091502189 0°-HSS-blade small
- 091502127 DBS 34-R3
- 091502177 DBS 34-R5
- 091502192 DIN 2559-4 small
- 091502175 DIN 2559-3 small
- 091502194 DBS 34-R3 small
- 091502193 DBS 34-R5 small

**External Clamping**

- 091502141 HSS-blade 0°
- 091502140 HSS-blade 30°
- 091502199 DBS 34-R5
- 091502160 DIN 2559-4
- 091502148 DIN 2559-3
- 091502154 DBS 34-R3
- 091502162 10° - internal
- 091502163 8° - internal
- 091502135 10° - internal

**Various Special Blades On Request**
Application range

DWT develops and supply tools for aligning and adjusting pipes and fittings of metal when welding. Other products are Purge Gas Equipment, Pipe Welding Equipment and Measuring Instruments for welding with purge gas.

USEFULL ACCESSORIES

- FMT Marking Tool
- WT Clamp
- Pipe Stand Foldable
- EZ Purge Gas System
- Centering Head
- Flange Leveler