HYDRAULIC OPEN DIE FORGING PRESSES
A STRONG PARTNERSHIP.
SCHULER AND WEPUKO.

Schuler forging. System solutions from Schuler offer customers all over the world a decisive quality advantage in all temperature ranges:

- Systems for hot forging
- Systems for warm forging
- Systems for cold forging

Hydraulic open die forging presses are used in hot forging.

For more than 170 years the Schuler name has stood for innovation, quality and service for forging technology. For open die forging, Schuler has built on its capabilities by forming a strategic partnership with Pahnke, a long-time and experienced name in the forging business.

Together, we provide our customers a broad range of products and services, even for large scale and complex projects. Our goal is to ensure a competitive advantage for our customers to achieve profitable production systems producing high quality open-die forgings.

Press Systems. According to the requirements Pull Down (MHFU-series) as well as Push Down concepts (MHFT-series) in two or four column design can be provided. Beside the need of a deeper foundation pull down presses are offering plenty advantages. Less tendency of swing, clear forging area with excellent accessibility and drive system below floor level is protected against contamination.

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THE ADVANTAGES

- High productivity
- Energy efficient drive technology
- Excellent uptime and availability

THE APPLICATIONS

- Slabs
- Different kinds of shafts
- Sleeves
- Rings
- Special forgings
Open die forging presses offer very good accessibility. High flexibility due to large width between uprights.

### MODEL OVERVIEW OF HYDRAULIC OPEN DIE FORGING PRESSES

<table>
<thead>
<tr>
<th>Model</th>
<th>MHFT8 MHFUB</th>
<th>MHFT10 MHFU10</th>
<th>MHFT12,5 MHFU12,5</th>
<th>MHFT16 MHFU16</th>
<th>MHFT20 MHFU20</th>
<th>MHFT30 MHFU30</th>
<th>MHFT45 MHFU45</th>
<th>MHFT60 MHFU60</th>
<th>MHFT80 MHFU80</th>
<th>MHFT100 MHFU100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press force in MN</td>
<td>8.0</td>
<td>10.0</td>
<td>12.5</td>
<td>16.0</td>
<td>20.0</td>
<td>30.0</td>
<td>45.0</td>
<td>60.0</td>
<td>80.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Die space (A) in mm</td>
<td>2,200</td>
<td>2,200</td>
<td>2,500</td>
<td>2,850</td>
<td>3,400</td>
<td>4,000</td>
<td>5,000</td>
<td>6,000</td>
<td>7,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Ram stroke (B) in mm</td>
<td>1,000</td>
<td>1,000</td>
<td>1,200</td>
<td>1,350</td>
<td>1,600</td>
<td>1,800</td>
<td>2,400</td>
<td>3,000</td>
<td>3,500</td>
<td>4,000</td>
</tr>
<tr>
<td>Passage width in mm (C × D)</td>
<td>1,400 × 750</td>
<td>1,600 × 850</td>
<td>1,800 × 1,000</td>
<td>2,000 × 1,100</td>
<td>2,300 × 1,200</td>
<td>2,500 × 1,400</td>
<td>3,500 × 1,550</td>
<td>4,000 × 1,800</td>
<td>4,500 × 2,000</td>
<td>5,000 × 2,200</td>
</tr>
</tbody>
</table>

Subject to technical modifications. Open die forging presses up to 150 MN are available upon request.
IN-DEPTH TECHNOLOGY.
THE DRIVE.

Proven drive System. The Modified Sinusoidal Direct drive System (PMSD) gives presses an extremely high cycling frequency in a shock free manner, because there are no operating valves in the main lines of the system. This drive and control system is designed for low maintenance requirements and high availability. The energy efficient drive technology allows up to 30% energy savings compared to valve operated drive systems.

Press Main Cylinder
- Generous dimensioned bushings for proper guiding of the piston
- Adjustable V-shaped packing ensure best solidity
- Specific double spherical connection to the ram ensure best life time of the seals and low wear

Guiding
- The guiding system is based on flat guides running with adjustable wedges on large hardened steel liners along the columns.
- The large size of the rectangular flat surface minimizes wear and gives a long life precision guiding during operation.
IN-DEPTH TECHNOLOGY.
ADDITIONAL FUNCTIONS.

Additional Forging Features
1 Top Die Clamping Device to provide rotation or fast exchange of the top dies.
2 Shifting Table for presses with upsetting, disc and ring forging operation.
3 Die Train as preferred arrangement for high production draw down and bar forging presses.
4 Die Magazine to provide fast exchange of the dies arranged on the die train.

Open-die forging press from the MHFU series.
In-depth technology.

Master control.

Forgemaster. Assures the optimum forging production schedule. These programs are customized and take into account the special needs of the product range. At all times the operator is able to take over operate in manual or semi-automatic mode.
As a supplier of custom system solutions, Schuler supplies turnkey systems, including integration of all necessary peripheral devices.

**Turnkey Solutions for open die Forging.** Forging Manipulators integrated with the forging press complete the equipment of modern forge shops with optimized productivity. They provide fast and precise positioning of the forging and allow automatic operation and repetition of proven forging methods. Manipulators are also suitable as Master Carrier when forging heavy forgings with crane assistance. Pop Up Turntables arranged between the manipulator and press assist charging by mobile chargers and are used to rotate forgings.

Open-die forging press with two manipulators.

Schuler Service offers a tailored portfolio of services covering the entire life cycle of your equipment. Over 900 service employees worldwide provide expert support 24/7 in close cooperation with you – our partners. Our main priority is always to ensure the maximum productivity and safety of your production equipment in order to secure your company’s continued success.

Find out more, [www.schulergroup.com/service_en](http://www.schulergroup.com/service_en)