HAEUSLER HYBRID Technology (HHT)
Roll bending takes press forming
“Machine construction is our profession – using inventive talent and passion.”

We at HAEUSLER

HAEUSLER is one of the world's leading companies in the field of metal forming. With 75 years of experience we have always been and still are pioneers in developing innovative bending machines. What once started as a small locksmith’s shop in 1936 is now a successful, future-oriented family business in the field of metal bending, forming and general assembly technologies. Our goal is to provide our customers with first class machines, innovative custom solutions and entire highly efficient production lines. All designed and manufactured at HAEUSLER.

Left
HAEUSLER Main Office in Duggingen, Switzerland

Top
German plant in Rheinfelden-Herten, Germany
HAEUSLER HYBRID Technology (HHT)

As a leading manufacturer of bending machines, in 1990 HAEUSLER produced the first roll bending mill for the production of 12m LSAW pipes. This was the beginning of the success story that has continued through to today and that has resulted in a market share of 70 percent in the LSAW pipe production sector.

In addition to the typical HAEUSLER features such as quality and durability, this success is also due to the unique characteristics of the roll bending process such as high output, flexibility and premium pipe quality.

Other processes were only employed due to the limitations of the roll bending process with regard to the pipe diameter and wall thickness ratio.

These limits were already partially shifted clearly in favour of roll bending by the supported top roll developed by HAEUSLER in 2001.

The new, further-developed and revolutionary HAEUSLER HYBRID Technology (HHT) now ensures absolute flexibility in the use of the roll bending process over the entire LSAW pipe production range.

![HAEUSLER HYBRID Technology (HHT)](image)

**Capacity for LSAW pipe production**

- **HAEUSLER HYBRID Forming (2014)**
- **Supported top roll (2001)**
- **Forming with pre-stressed top roll (1990)**
HAEUSLER HYBRID Technology (HHT)

Roll bending takes press forming

The HAEUSLER HYBRID Technology (HHT) makes the roll bending practically limitless without having to give up the tremendous advantages of roll bending.

It is therefore now possible to cover the entire LSAW spectrum with HAEUSLER roll forming technology.

<table>
<thead>
<tr>
<th>Capacity</th>
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<tbody>
<tr>
<td>Pipe diameter</td>
<td>from 16° up to 60°</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>from 6.8 up to 50 mm</td>
</tr>
<tr>
<td>Pipe length</td>
<td>from 9 up to 24 m</td>
</tr>
<tr>
<td>Productivity</td>
<td>up to 20 pipes/hour</td>
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<tr>
<td>Output</td>
<td>200 000 up to 1 000 000 metric tons/year</td>
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The unique way of combining the forming advantages of roll bending, with the unlimited forces of press forming creates this revolutionary forming system.

**HAEUSLER HYBRID Technology**

- No limits in pipe lengths as top roll is supported over whole length
- High output of up to 20 pipes/hour due to fast rolling process
- Low tooling cost as all production range can be executed with 1 to 2 tools only
- Perfect pipe shape after forming due to homogenous rolling process
- Homogenous stress distribution inside the pipe due to continuous roll forming process
- Flexible with fast product change cycles, mostly without tool change
- No limits in wall thickness of pipe as press forming can cover all diameter thickness ratio
- Reasonable civil and installation cost due to modular main frame system
- Modular system extendable for future demand
HAEUSLER LSAW Pipe Mill

In addition to the delivery of complete pipe mills, HAEUSLER offers a wide range of supplementary services for successful completion of your project and the long-term operation of your production plant.

Engineering

- Plant engineering
- Civil engineering documents
- Basic engineering for grounding
- Basic engineering for media networks like water, air, power, cooling systems and technical gases
- Basic engineering for drain systems and waste water treatment

Accessories

- Quality Assurance Laboratory
- Maintenance workshop
- Spare parts logistics
- Consumables
- Transport and lifting equipment

Services

- Site management and installation
- Training
- Production support
- Repair services
- Certification support
- Plant modernization
In use around the world

HAEUSLER is an export-oriented company. Our machines and equipment are already in operation on all continents and in more than 70 countries in total. Shown below is a summary of HAEUSLER’s reference list.

America
- Berg Steel Pipe Corp., US
- Siat S.A., AR
- Tenaris Siat, AR
- Confab, BR

Europe
- Bergrohr, DE
- EEW Erndtebrücker Eisenwerk, DE
- Eisenbau Krämer, DE
- Corus, GB
- TMK, RU
- PPSO SHELFPROEKTSTROJ (ETPM), AZ
- Khartsyzsk, UA
- UMRAN STEEL PIPE, TR

Africa / Middle East
- WestcomWireless, NG
- IPIC, EG
- Ahwaz Pipe Mills Co., IR
- SAFA, IR
- JPIOS, AE
- KPIOS, KW
- Arabian Pipes, SA

Asia
- Sumitomo Metal Industries Ltd., JP
- Dong Yang Steel Pipe, KR
- Histeel, KR
- Hyundai Pipe, KR
- Pusan Steel Corp., KR
- Pikaron, TR
- MAN Aluminium, IN
- MAN Industries (India) Ltd., IN
- Bakrie + Brothers, Jarka, ID
- Canadoil Asia Ltd., TH
- PV Pipe, Vietnam, VN
HEAD OFFICE
HAEUSLER AG Duggingen
Baselstrasse 21
4202 Duggingen
Switzerland

CONTACT
Telephone +41 61 755 22 22
Fax +41 61 755 22 00
sales@haeusler.com
www.haeusler.com