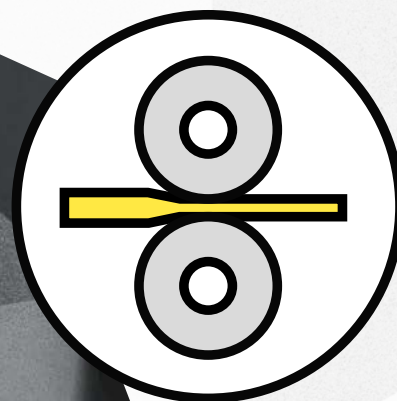


**HMP** **ROLLING**  
*FELSS Group*

**ROLLING**

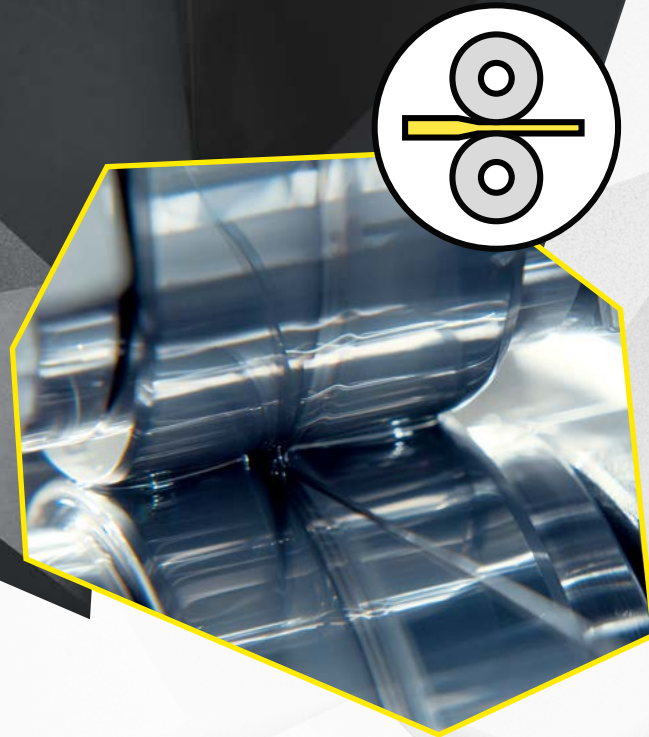
THE TECHNOLOGY



# ROLLING

## THE TECHNOLOGY

With this technology, the material is formed between rotating tools. Depending on the shape and number of work rolls within the machine, the initial diameter can be reduced and profiled. Depending on the forming operation to be performed and the material to be formed, additional back-up rolls are used in addition to work rolls.



HMP's rolling mills are constructed flexibly and are developed in close dialogue with our customers. The machines are used in a wide variety of industrial sectors. For example in the following areas:

- + Watchmaking
- + Jewellery manufacturing
- + Coin manufacturing
- + Optics technology
- + Electrical technology
- + Clothing technology
- + Sensor and measurement technology



## HMP ROLLING | THE ROLLING PROCESSES

### STRIP ROLLING

- Strip width from 30 to 400 mm
- Strip thickness from 0.015 to 20 mm (coil) + 45 mm (bars)
- Rolling forces up to 5000 kN
- Strip speeds up to 400 m/min
- Accuracies up to:  $\pm 5 \mu\text{m}$  | in 2 Hi
- Accuracies up to:  $\pm 2 \mu\text{m}$  | in 4 Hi



### FLAT WIRE/PROFILE ROLLING

- Wire  $\varnothing$  from 0.5 to 20 mm
- Rolling forces up to approx. 1000 kN
- Speeds up to 1000 m/min
- Accuracies up to:  $\pm 2 \mu\text{m}$  | in 2 Hi



### ULTRA PRECISION ROLLING

- Strip width from 0.05 to 1.5 mm
- Strip thickness from 10 to 150  $\mu\text{m}$
- Rolling forces up to 4 kN
- Strip speeds up to 150 m/min
- Accuracies up to:  $\pm 0.05 \mu\text{m}$  | in 2 Hi



### WIRE REDUCTION ROLLING

- Wire  $\varnothing$  from 2 to 45 mm
- Rolling forces up to approx. 300 kN
- Speeds up to 300 m/min
- Accuracies up to:  $\pm 10 - 15 \mu\text{m}$  | in 2 Hi



## YOUR ADDED VALUE



### STRONGER

Highly resilient rolling machines due to best quality in the production of the machines offer stable processes and constant product quality.



### RESOURCE EFFICIENCY

Resource-efficient use of long-life rolling machines due to the adjustability of the machines through quick and flexible changeovers.



### FASTER

Automated adjustments in the rolling mills and avoidance of manual, time-consuming corrections through the latest measurement and control technology.



### MORE PRECISE

Lowest tolerances, even in the field of ultrafine wires, due to the highest precision of the tools.

Since May 2019, HMP (Heinrich Müller Pforzheim) has been part of the Felss Group, with headquarters in Königsbach-Stein. HMP is regarded as a specialist in rolling technology and thereby expands the product portfolio of the Felss Group by a further technology. The HMP rolling technology is integrated in the Felss Group and will in future operate under the brand name HMP ROLLING.

**HMP ROLLING**  
FELSS Group

**FELSS**  
The smarter way of forming.

Felss Group GmbH  
Dieselstraße 2  
75203 Königsbach-Stein, Germany

+49 7232 402-0  
info@felss.com  
www.felss.com