We put metal into shape – since 1946

Precision parts are under continuous price pressure these days, especially in high-tech industries such as automotive, aviation and engineering. Flaig + Hommel’s aim is to achieve significant cost savings in comparison to classic turning, and that is why we have perfected cold forming and opened up completely new options for cost-sensitive buyers.

**PRODUCT OVERVIEW**

- Nuts
- Seal plugs
- Threaded plates
- Tubes
- Sleeves
- Bushings
- Tapered parts
- Welded parts
- Quadrangular parts
- Gears
- Eccentric parts

**ECONOMIC ALTERNATIVE TO TURNED PARTS!**

Depending on the batch size and part, noticeable savings can be realized with quantities of 100,000 pieces or more.

**MATERIAL EFFICIENCY**

Cold forming technology enables significantly reduced material waste, making it particularly efficient.

- Formed part: 95.2 g
- Raw material: 100.2 g
- Waste: 5 g

**CERTIFICATION**

- EN 1216
- EN 1216
- EN 1216
- ISO 9001
- DIN 13
- VDI 2066
- VDI 3340
- Aerospace

**INTEGRATED FUNCTIONS**

Thanks to cold forming technology, we are able to make function-specific embossing marks on parts directly during the extrusion process.

**EMBOSSING**

Cold forming technology offers the opportunity to combine multiple parts of an assembly in a single workpiece.

**REFERENCES**

- Daimler
- Bosch
- MAN
- Volkswagen
- BMW
- Audi
- Bentley
- MB
- Delphi
- Siemens
- Daimler-Benz
- Continental

**COLD FORMED PARTS**

Parts manufactured using cold forming have a diameter between 5 mm and 90 mm and a length of up to 240 mm. Complex geometries can be manufactured through multi-stage forming.

- Frequently cost savings of more than 25% compared to classic turned part manufacturing
- Optimal benefits once batch sizes reach approx. 100,000 pieces
- Utmost flexibility when it comes to material selection and shaping
- Highly effective utilisation of materials
- Production close to final geometry with reduced reworking
- Continuous thread on part
- High speed when manufacturing large quantities
- High size accuracy and surface quality

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If necessary, we can guarantee a 100% inspection using camera and opto-electronic inspection systems. When doing this, we can, among other things, measure the parts and inspect them for any potential cracks.

IMPRESSIVE QUALITY
Flaig + Hommel is an innovative partner for the development of light constructional components from aluminium materials. We set new standards when it comes to weight savings and, together with our customers, shape the future of the automotive sector.

PREPARED FOR THE FUTURE
E-MOBILITY AND LIGHTWEIGHT CONSTRUCTION
The cold forming process perfected by Flaig + Hommel can be used for a multitude of materials, finishes and products. Our experienced team is available to contact at any time for any requirements that exceed the specifications set out below.

A selection of the materials we offer:

<table>
<thead>
<tr>
<th>Material</th>
<th>Grades/Types</th>
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<td>Steels</td>
<td>Grades 8, 10, 12</td>
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<td>Special steels</td>
<td>37Cr4, 41Cr4, 16MnCr5, ball bearing steel 100Cr6, etc.</td>
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<td>Aluminium</td>
<td>AlSi1MgMn, AlMg3, AlMg2,5, AlZn5,5MgCu, AlMgSi1</td>
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Our ultra-modern design division works with CAD systems commonly used for automotive and FEM. Often there is no need for time-intensive project meetings either. Just a sketch with your relevant product data is frequently enough for us. Based on this, our team can analyse and develop the product’s design drawing, including the optimal production method for it.

We present our proposals by transferring data electronically. This means that solutions can be realised significantly faster.

MANUFACTURING
It usually takes very little time from the moment you send in your order to the moment your part leaves our production area. Our technicians and machinery operators are the product of years of experience - our specialists are actively ensuring you get the quality you can expect from us.

OPEN TO THE HIGHEST PRECISION
21 ultra-modern cold formers can put your part into shape, with the process requiring no more than eight steps. Our technicians and machinery operators are the product of years of experience - our specialists are actively ensuring you get the quality you can expect from us.

IMPRESSIVE QUALITY
Flaig + Hommel in combination with its in-house finishing operations ensures the highest precision. The cold forming process stands out for its excellent surface quality and high degree of accuracy. The tolerances set by the DIN EN ISO 4042 galvanic coating standard are down to 0.025 mm or 0.2 mm for diameters and lengths respectively. Should there be a need for even more precise tolerances, we can machine products down to the desired dimensions through our in-house finishing operations.

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