

# ALLOYS WITH SPECIFIC PHYSICAL PROPERTIES

## Application Segments

Automotive

## Available Product Variants

Long Products

## Product Description

BÖHLER P800 is a soft magnetic Fe-17% Co- alloy with high magnetic saturation. It has been developed for use in high performance actuator systems especially in the area of Diesel Injection Systems.

Thanks to the high magnetic saturation of min 2,14 T (at min. 400 A/cm), the cobalt-iron alloy generally is suitable for all applications where high flux density and minimum weight is required.

Due to the moderate Co content BÖHLER P800 is optimized for challenging technical applications under economically sensitive conditions.

Delivery condition as rolled. The alloy can be cold formed.

A final annealing treatment for magnetic properties is to be carried out after cold reforming, such as extrusion, upsetting or extensive machining operations.

## Process Melting

VIM + VAR

## Applications

- > Motorsport industry
- > Injection Components
- > Valves and Actuators
- > Civil and mechanical engineering

## Technical data

|                      |              |
|----------------------|--------------|
| Material designation |              |
| BÖHLER Trademark     | Market grade |

## Chemical composition (wt. %)

| C         | Si           | Mn           | Cr           | V            | Co             | Fe  |
|-----------|--------------|--------------|--------------|--------------|----------------|-----|
| max. 0.03 | 1.10 to 1.30 | 0.70 to 1.30 | 1.30 to 1.50 | 0.10 to 0.30 | 16.80 to 17.30 | REM |

**Delivery condition****Without Heat Treatment**

|                        |            |
|------------------------|------------|
| Hardness (HV)          | 170 to 210 |
| Tensile Strength (MPa) | min. 500   |

**Round Bars and Wire Rod (if any)**

| Diameter<br>mm |       |
|----------------|-------|
| <b>ROLLED</b>  |       |
| 12.50          | 25.00 |

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.

**voestalpine BÖHLER Edelstahl GmbH & Co KG**

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. [info@bohler-edelstahl.at](mailto:info@bohler-edelstahl.at)<https://www.voestalpine.com/bohler-edelstahl/de/>