

# CORROSIONS-RESISTANT STEELS - AUSTENITIC STEELS AND NON MAGNETIC STEELS

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| Plates |  |
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# **Product Description**

A506 is an austenitic stainless Cr-Ni-Mo-steel with sulfur addition for improved machinability, ideal for the production of drilled and milled screenplates and –drums for the pulp and paper industry and for food processing industry.

## **Applications**

> Components for food processing and animal feed

> Paper and Pulp Industry / Printing

#### Technical data

| Material designation |      |
|----------------------|------|
| 1.4305               | SEL  |
| X8CrNiS18-9          | EN   |
| S30300               | UNS  |
| AISI: 303            | AISI |
| ~SUS303              | JIS  |

| Standards |         |    |
|-----------|---------|----|
|           | 303S21  |    |
|           | 303S31  | BS |
|           | ~303S41 | В5 |
|           | ~303S42 |    |
|           |         |    |

## Chemical composition (wt. %)

| С      | Si  | Mn  | S    | Cr   | Ni  |
|--------|-----|-----|------|------|-----|
| ≤ 0,08 | 0.5 | 1.8 | 0.25 | 17.3 | 8.3 |

#### **Physical Properties**

| Density                     | 7.9  | [kg/dm³]                             |
|-----------------------------|------|--------------------------------------|
| Thermal conductivity        | 15   | [W/(m.K)]                            |
| Specific heat               | 500  | [kJ/kg K]                            |
| Spec. electrical resistance | 0.73 | [Ohm.mm²/m]                          |
| Modulus of elasticity       | 200  | [10 <sup>3</sup> N/mm <sup>2</sup> ] |





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#### Thermal Expansions between 20°C | 68°F and ...

| Temperature (°C)                             | 100 | 200  | 300 | 400  | 500 |
|--|-----|------|-----|------|-----|
| Thermal expansion (10 <sup>-6</sup> m/(m.K)) | 16  | 16.5 | 17  | 17.5 | 18  |

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.

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