Basic Information

VDM® Alloy N08120

Description
VDM® Alloy 08120 is a nickel-chromium-alloy used in industrial heating application. It is a solid solution strengthened alloy with additions of carbon and nitrogen. VDM® Alloy 08120 has good resistance to carburization and sulfidation and is providing high mechanical strength at temperatures up to 1,100 °C (2,012 °F).

Designations and standards

<table>
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<tr>
<th>VDM Designation</th>
<th>Nicrofer 3725 Nb</th>
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<td>UNS</td>
<td>N08120</td>
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Characteristics
VDM® Alloy 08120 (N08120) is characterized by:

- good resistance in carburizing and sulfiding atmospheres
- high creep resistance
- operating temperatures up to 1,100°C (2,012 °F)
- VDM® Alloy 08120 has a higher strength compared to Alloy 330 or Alloy 800 H (1,100°C/ 2,012 °F)

Applications
VDM® Alloy 08120 has a wide range of applications in areas of elevated temperatures in furnace construction like industrial annealing furnaces and waste incineration plants. Further it is used in the chemical industry, in environmental protection plants, in the automotive industry and in power plants. Typical applications are furnace muffles, heat treatment baskets, wire cloth as well as furnace conveyor belts, superheaters for tubes and recuperators.

Available product forms
VDM® Alloy 08120 is offered in the product form sheet metal in the following dimensions:

- Cold rolled: 1-7 mm (0.04-0.28 in) Thickness, ≤ 2.500 (39.37-98.43 in) Width and ≤ 12.500 (492.13 in) Length
- Hot rolled*: 3-80 mm (0.12-3.15) Thickness, ≤ 2.500 (39.37-98.43 in) Width and ≤ 12.500 (492.13 in) Length

* 2 mm (0.08 in) thickness on request

Please contact us for other dimensions.
Legal notice

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