Alloy 400 has outstanding resistance to neutral and alkaline salt solutions. This alloy is one of the few metallic materials which can be used in contact with fluorine, hydrofluoric acid, hydrogen fluoride or their derivatives. It has been a standard material for salt plants for many years. 2.4360 has good mechanical properties from sub-zero temperatures up to about 550 °C and is free from chloride induced stress-corrosion cracking.

### Material Data Sheet

<table>
<thead>
<tr>
<th>Material Designation</th>
<th>2.4360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alloy</td>
<td>Alloy 400 / Monel®</td>
</tr>
<tr>
<td>DIN</td>
<td>17743</td>
</tr>
<tr>
<td>UNS</td>
<td>N 04400</td>
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<tr>
<td>Trademark</td>
<td>Nicorros®</td>
</tr>
<tr>
<td>VdTÜV</td>
<td>263</td>
</tr>
</tbody>
</table>

### Main fields of application of alloy 400

2.4360 is a single-phase solid-solution nickel-copper alloy with excellent corrosion resistance to a wide range of media. Typical applications include:

- propeller and pump shafts for seawater service
- industrial heat exchangers
- brine heaters and evaporator bodies in seawater desalination plants
- feed-water and steam generator tubing in power plants
- plants for uranium refining and isotope separation in the production of nuclear fuel
- sulphuric and hydrofluoric acid alkylation plants
- splash-zone sheathing in offshore structures
- cladding for crude oil distillation columns

### Chemical composition of alloy 400

<table>
<thead>
<tr>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ %</td>
<td>≤ %</td>
<td>≤ %</td>
<td>≤ %</td>
</tr>
<tr>
<td>0-0.015</td>
<td>0-0.5</td>
<td>0-1.25</td>
<td>0-0.02</td>
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<tr>
<td>Al</td>
<td>Ni</td>
<td>Cu</td>
<td>Fe</td>
</tr>
<tr>
<td>%</td>
<td>≤ %</td>
<td>≤ %</td>
<td>≤ %</td>
</tr>
<tr>
<td>0-0.05</td>
<td>63</td>
<td>28.0-34.0</td>
<td>1.0-2.5</td>
</tr>
</tbody>
</table>

### Characteristics of alloy 400

- **Melting Range**: 1300 - 1350°C
- **Density**: 8.8 g/cm³
- **ISO-V notch impact toughness**
  - annealed ≥ 150 J/cm²
  - stress-relieved ≥ 100 J/cm²

### Filler metal (for welding with alloy 400)

- Recommended filler metal for 2.4360:
  - Material No. 2.4377
- Covered electrode: 2.4366

https://www.hempel-metals.de/en/material/nickel-alloys/alloy-400-24360/
Delivery program

Sheets / Plates mm
1.5 - 20

Precision strip mm
0.2 - 0.5

With short delivery time:

plates or sheets, tubes, flanges, forged or die-cut rings and round blanks, elbows, T-fittings, reductions, screws, nuts or washers according to your request. According to your individual wishes, we are able to cut our material with our plasma- or water jet cutter. Our material is stocked in superformats of 2000x6000mm. Cut to size on request.

Material Outlet by Hempel

ECONOX.com offers buyers a new and uncomplicated procurement channel, which also includes small quantities and materials in special alloys at favourable conditions.

Contact us

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Waterjet cutting
Shear cutting

Weight Calculator