**CORODUR® SP 105 HY**

*Flux cored wires for Thermal Spray Application*
EN ISO 14919 – 5 – 1,6 - 4

**MATERIAL REVIEW:**
Special alloy with a high content of Chromium and Cobalt. The coating shows austenitic structure with increasing hardness in service. Coatings are very resistant against corrosion, erosion and in particular against cavitation. Made exclusively for arc spraying, but may also be sprayed by wire- and high-velocity-wire-flame-spraying.

**APPLICATION:**
Typical applications can be found as protection coatings against cavitation and erosion in the field of water turbines, hydraulics and gas system components.

**COMPOSITION (Weight-%):**

<table>
<thead>
<tr>
<th></th>
<th>Fe</th>
<th>Cr</th>
<th>Co</th>
<th>Si</th>
<th>Mn</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bal.</td>
<td>20</td>
<td>11</td>
<td>2,8</td>
<td>11</td>
<td>0,25</td>
<td></td>
</tr>
</tbody>
</table>

**PHYSICAL PROPERTIES OF THE COATING:**

- Hardness: 350 HB
- Increasing hardness in service: 450 HB
- Melting point: ~ 1440 °C
- Spray rate: 4,2 kg/h / 100 A
- Wire consumption: 1,0 kg/m² / 0,1 mm

**SPRAY PROCEDURE (Arc):**

<table>
<thead>
<tr>
<th></th>
<th>Atomizing Air Pressure</th>
<th>Nozzle Cap</th>
<th>Arc Load Volt</th>
<th>Ampere</th>
<th>Stand off mm</th>
<th>Coating thickness / pass mm/pass</th>
<th>Deposit Efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 1,6 mm</td>
<td>3,5 bar</td>
<td>30-32</td>
<td>100 -200</td>
<td>75-125</td>
<td>0,125</td>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>

**SALES UNIT:**

- Coil: "BS 300" = 15 kg "B 450" = 25 kg
- Wire Diameter: 1,6 mm (1/16") 2,4 mm

Other dimensions on request

Corodur Fülldraht GmbH may change the characteristics of the wire without notice. Statements on composition and application are just for the applier’s information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. We recommend the applier to check our products for their special application autonomously.