



# CEWELD NiCrBSi 6 Tig (Colmonoy 6)

TYPE	Nickel based Tig filler metal for hardfacing and overlay applications.												
APPLICATIONS	NiCrBSi 6 TIG offers outstanding metallurgical and physical properties making them ideally suited to solving wear mechanisms such as abrasion, erosion, corrosion and high-temperatures encountered in service.												
PROPERTIES	This nickel based alloy offers superior wear protection, retaining its hardness up to 600°C (1000°F) with significant resistance to oxidation.												
CLASSIFICATION	AWS                      A 5.21: ERNiCr-C												
SUITABLE FOR	Aircraft gas turbines, steam turbine powerplants, turbochargers and valves in reciprocating engines, prosthetic devices, heat treating equipment, pollution control equipment, coal gasification and liquefaction systems, and components in pulp and paper mills.												
APPROVALS	No Approvals Found												
WELDING POSITIONS													
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 16.6%;">C</td> <td style="width: 16.6%;">Ni</td> <td style="width: 16.6%;">Cr</td> <td style="width: 16.6%;">B</td> <td style="width: 16.6%;">Si</td> <td style="width: 16.6%;">Fe</td> </tr> <tr> <td>0.7</td> <td>Rem.</td> <td>14</td> <td>3</td> <td>4.25</td> <td>4</td> </tr> </table>	C	Ni	Cr	B	Si	Fe	0.7	Rem.	14	3	4.25	4
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ALL WELD MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">Heat Treatment</td> <td style="width: 12.5%;">R<sub>p0,2</sub> MPa</td> <td style="width: 12.5%;">R<sub>m</sub> MPa</td> <td style="width: 12.5%;">A<sub>5</sub> (%)</td> <td style="width: 12.5%;"></td> <td style="width: 25%;">Hardness Rockwell C</td> </tr> <tr> <td>As Welded /</td> <td></td> <td></td> <td></td> <td></td> <td>Avg. 55.5</td> </tr> </table>	Heat Treatment	R <sub>p0,2</sub> MPa	R <sub>m</sub> MPa	A <sub>5</sub> (%)		Hardness Rockwell C	As Welded /					Avg. 55.5
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REDRYING TEMPERATURE	Not required												
GAS ACCORDING EN 14175	11												