

<b>Standards</b>	DIN 8555	E 20-MF-40-CKTZ																														
<b>Characteristics</b>	<p>The deposit of CARBO F-S 6 H is a cobalt base alloy of austenitic- ledeburitic structure with embedded CrW carbides. The weld metal is highly resistant to corrosion, impact, abrasive wear as well as thermal shocks and heavy mechanical impact. Good aptitude for polishing and machining. Higher C-content and higher hardness than CARBO F-S 6.</p>																															
<b>Welding instructions</b>	<p>Working temperature should be kept between 400° and 600°C, depending on base material and type of construction. Slow cooling, if necessary oven cooling, is recommended for low alloyed and austenitic steels. Subsequent heat treatment ( stress relief at 700°C approx.) is not necessary, except on large structures.</p>																															
<b>Working temperature</b>	From room temperature up to + 600° C																															
<b>Typical applications</b>	Due to its above-mentioned characteristics CARBO F-S 6 H is particularly recommended for use on steam valves, hot shear blades, hot pressing dies, pumps for high-temperature liquids, etc.																															
<b>Mechanical properties of all-weld metal</b> ( typical values )	<table border="1"> <thead> <tr> <th>At Rt. HRc</th> <th>+ 300°C HRc</th> <th>+ 600°C HRc</th> <th>Melting- range °C</th> <th>Density g/cm<sup>3</sup></th> </tr> </thead> <tbody> <tr> <td>ca. 45</td> <td>ca. 37</td> <td>ca. 30</td> <td>1280-1390</td> <td>8,3</td> </tr> </tbody> </table>	At Rt. HRc	+ 300°C HRc	+ 600°C HRc	Melting- range °C	Density g/cm <sup>3</sup>	ca. 45	ca. 37	ca. 30	1280-1390	8,3																					
At Rt. HRc	+ 300°C HRc	+ 600°C HRc	Melting- range °C	Density g/cm <sup>3</sup>																												
ca. 45	ca. 37	ca. 30	1280-1390	8,3																												
<b>Weld metal analysis</b> (typical, wt. %)	<table border="1"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>Cr</th> <th>W</th> <th>Fe</th> <th>Co</th> <th>Others</th> </tr> </thead> <tbody> <tr> <td>1,3</td> <td>0,9</td> <td>1</td> <td>28</td> <td>4,5</td> <td>3</td> <td>Base</td> <td>&lt; 3</td> </tr> </tbody> </table>	C	Si	Mn	Cr	W	Fe	Co	Others	1,3	0,9	1	28	4,5	3	Base	< 3															
C	Si	Mn	Cr	W	Fe	Co	Others																									
1,3	0,9	1	28	4,5	3	Base	< 3																									
<b>Gas types EN 439</b>	<b>M13: 99% Argon with 1% Oxygen</b>																															
<b>Current</b>	= +																															
<b>Current intensity</b>	<table border="1"> <thead> <tr> <th>DIA (mm)</th> <th>DIA (inch)</th> <th>Volt</th> <th>Amps</th> <th>Delivering form</th> </tr> </thead> <tbody> <tr> <td>1,2</td> <td>3/64</td> <td>19 - 22</td> <td>120 - 220</td> <td>G</td> </tr> <tr> <td>1,6</td> <td>1/16</td> <td>20 - 26</td> <td>160 - 260</td> <td>G</td> </tr> <tr> <td>2,0</td> <td>5/64</td> <td>22 - 27</td> <td>220 - 280</td> <td>G</td> </tr> <tr> <td>2,4</td> <td>3/32</td> <td>24 - 28</td> <td>260 - 340</td> <td>G</td> </tr> <tr> <td>2,8</td> <td>7/64</td> <td>25 - 29</td> <td>300 - 400</td> <td>S</td> </tr> </tbody> </table>	DIA (mm)	DIA (inch)	Volt	Amps	Delivering form	1,2	3/64	19 - 22	120 - 220	G	1,6	1/16	20 - 26	160 - 260	G	2,0	5/64	22 - 27	220 - 280	G	2,4	3/32	24 - 28	260 - 340	G	2,8	7/64	25 - 29	300 - 400	S	
DIA (mm)	DIA (inch)	Volt	Amps	Delivering form																												
1,2	3/64	19 - 22	120 - 220	G																												
1,6	1/16	20 - 26	160 - 260	G																												
2,0	5/64	22 - 27	220 - 280	G																												
2,4	3/32	24 - 28	260 - 340	G																												
2,8	7/64	25 - 29	300 - 400	S																												
<b>Delivering form</b>	<b>O = Flux cored wire self shielding</b> <b>G = Flux cored wire for shielded arc welding</b> <b>S = Flux cored wire for submerged arc welding</b>																															
<b>Coils, weight</b>	B/BS 300 = 15 kg	B 450 = 30 kg      pay off pack = 150 / 300 kg																														

Rev. 000