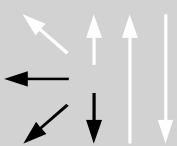


Classifications							
EN ISO 3581-A				AWS A5.4			
E 25 9 4 N L B				E2594-15			
Characteristics and typical fields of application							
<p>Avesta 2507/P100-HF is a rutile-basic super duplex covered electrode for welding super duplex steel castings such as 2507(5A). The electrode is chemically tailored to meet tough super duplex requirements while at the same time offering weld metal ferrite levels of 35-50% after post weld heat treatment.</p> <p>Avesta 2507/P100-HF can successfully be used for repair welding of castings, but can also be used as a substitute for standard electrodes whose chemistry cannot give acceptable ferrite levels after heat treatment.</p> <p><b>Corrosion resistance:</b></p> <p>Very good resistance to pitting and stress corrosion cracking in chloride containing environments. Pitting resistance according to ASTM G48-E is higher than 50°C after the recommended PWHT. PREN &gt; 42.5 (Annealing at 1100-1150°C followed by short air cooling and quenching.)</p>							
Base materials							
EN		UNS					
1.4410 X2CrNiMoN25-7-4		S32750					
Typical analysis of all-weld metal (wt.-%)							
	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.03	0.4	1.3	25.2	8.8	4.0	0.24
Mechanical properties of all-weld metal							
Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>		Elongation (L <sub>0</sub> =5d <sub>0</sub> )		Impact work ISO-V KV J	
	MPa	MPa		%		+20 °C	-50°C
u	730 (≥550)	880 (≥760)		25 (≥25)		64	42
a	560	830		30		140	90
u untreated, as-welded							
a annealed, at 1100-1150°C followed by short air cooling and quenching							
Operating data							
	Polarity: DC ( + )	Electrode identification: 2507/P100-HF		ø (mm)	L (mm)	Amps A	
				4.0	350	110 – 150	
				5.0	350	150 – 220	
Approvals							
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