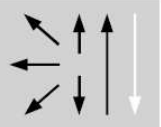


Classification						
<b>EN ISO 3581-A</b>	<b>EN ISO 3581-B</b>	<b>AWS A5.4</b>				
E 13 B 2 2	ES410-15	E410-15 (mod.)				
Characteristics and typical fields of application						
<p>Core wire alloyed, basic covered stick electrode, low-hydrogen with good welding characteristics in all positions except vertical-down. Mainly used for surfacing on sealing faces of gas, water and steam valves to meet stainless and wear resistant overlays. In the machined condition, at least a two layer build up should remain.</p> <p>Joint welding of similar, stainless and heat resistant chromium steels provides matching colour of weld metal with very good ability to polishing.</p> <p>Retention of hardness up to +450 °C, scaling resistant up to +900 °C.</p>						
Base materials						
<p>Surfacing: all weld-able backing materials, unalloyed and low-alloyed.</p> <p>Joint welds: corrosion resistant Cr-steels as well as other similar-alloyed steels with C-contents ≤ 0.20% (repair welding); heat resistant Cr-steels of similar chemical composition. Be careful with dilution and welding technology.</p> <p>1.4006 X12Cr13, 1.4021 X20Cr13 AISI 410, 420</p>						
Typical analysis of all-weld metal						
	C	Si	Mn	Cr		
wt.-%	0.08	0.7	0.8	13.5		
Mechanical properties of all-weld metal – typical values (min. values)						
Condition	Yield strength R <sub>p0,2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Brinell-hardness		
	MPa	MPa	%	HB		
u				<b>350</b>		
a	<b>530</b> (≥ 450)	<b>700</b> (≥ 640)	<b>17</b> (≥ 15)	<b>210</b>		
u	untreated, as welded		a annealed, 750 °C/2 h/furnace			
<p>The hardness of the deposit is greatly influenced by the degree of dilution with the base metal (depending on the relevant welding conditions) and by its chemical composition. As a general rule it can be observed that the higher the degree of dilution and the C-content of the base metal, the higher the deposit hardness.</p>						
Operating data						
	<b>Polarity:</b> DC (+)	<b>Redrying if necessary:</b> 120-200°C, min. 2 h	<b>Electrode identification:</b> FOX KW 10 E 13 B	<b>ø mm</b>	<b>L mm</b>	<b>Amps A</b>
				2.5	300	60 – 80
				3.2	350	80 – 100
				4.0	350	110 – 130
<p>Preheating and interpass temperature 200 – 300 °C, post weld heat treatment at 700 – 750 °C depending on the weld job.</p>						
Approvals						
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