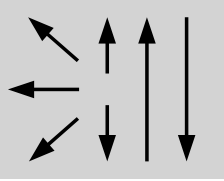


Classifications						
EN ISO 14341-A	EN ISO 14341-B	AWS A5.18	AWS A5.18M			
G 46 5 M21 3Si1	G 55A 5U M21 G6	ER70S-G	ER485S-G			
G 42 4 C1 3Si1	G 49A 4U C G6					
Characteristics and typical fields of application						
<p>BÖHLER SG 3-P is a micro alloyed GMAW solid wire designed for high quality automatic welding of pipelines. An optimum balanced alloying concept ensures good weld metal properties to fulfil the high requirements in the On-Offshore-Pipeline Industry. Deposit is extremely crack resistant and the weld metal toughness is available down to -50°C.</p> <p>The very important quality aspects, prerequisite for uninterrupted feedability of the solid wire e.g. helix of the wire, copper coating, close wire diameter tolerance and precision layer wound spooling are taken into account during the production. BÖHLER SG 3-P can be used in sour gas applications (HIC-Test acc. to NACE TM-02-84). Test values for SSC-test are available too.</p>						
Base materials						
EN:	L290MB – L450MB					
API Spec. 5L:	X42, X46, X52, X56, X60, X65					
Typical analysis of solid wire (wt.-%)						
	C	Si	Mn	Ti		
wt-%	0.05	0.75	1.55	+		
Mechanical properties of all-weld metal						
Condition	Yield strength R_e	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V KV J		
	MPa	MPa	%	+20 °C	-40 °C	-50 °C
u1	510 (≥ 460)	640 (530 – 680)	25 (≥ 20)	120	75	55 (≥ 47)
u2	470 (≥ 420)	610 ($\geq 500 - 640$)	26 (≥ 20)	100	60 (≥ 47)	
u1	untreated, as welded – shielding gas Ar + 15 – 25 % CO_2					
u2	untreated, as welded – shielding gas 100 % CO_2					
Operating data						
		Polarity: DC (+)	Shielding gases: Argon + 15 – 25 % CO_2 100% CO_2			ø (mm) 0.9 1.0 1.2
Preheating and interpass temperature as required by the base metal.						
Approvals						
TÜV (07682.), CE, NAKS (ø 0.9; 1.2 mm), GAZPROM (ø 0.9 mm)						