

Classifications

EN ISO 17633-A	EN ISO 17633-B	AWS A5.22
T 19 12 3 L P M21 1 / T 19 12 3 L P C1 1	TS316L-F M21 (C1) 1	E316LT1-4 / E316LT1-1

Characteristics and typical fields of application

BÖHLER EAS 4 PW-FD is a rutile flux cored welding wire with fast freezing slag providing excellent positional operating characteristics and fast travel speeds. It is easy to use and operates with a powerful penetrating spray arc transfer, minimum spatter formation and self releasing slag. This flux cored welding wire offers many economical and quality advantages over solid wire pulse arc welding. High deposition rates and productivity gains are easily achievable. Additional cost effective benefits are offered through use of less expensive shielding gases (Argon + 15 – 25 % CO₂ or 100 % CO₂), good wetting characteristics (less grinding), little temper discoloration & bead oxidation (less pickling expenses), easy operation and safe penetration (reduces the risk of weld defects and associated repair work costs), and smooth and clean weld finish (less post weld work). Due to its characteristics mainly for positional welding and service temperatures between –120 °C to +400 °C. Resists intergranular corrosion up to +400°C. For down hand & horizontal welding positions (1G, 1F, 2F) our flux cored wire BÖHLER EAS 4 M-FD should be preferred.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3,
1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2,
1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo19-11-2
UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

Typical analysis of the wire and of all-weld metal (wt.-%)

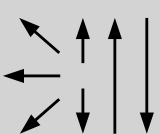
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.03	0.7	1.5	19.0	12.0	2.7

Mechanical properties of all-weld metal

Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation (L ₀ =5d ₀)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	–120 °C
u	400 (≥ 320)	560 (≥ 510)	38 (≥ 30)	65	45 (≥ 32)

u untreated, as welded – shielding gas Ar + 18 % CO₂

Operating data

	Polarity:	Shielding gases:	Redrying:	∅ (mm)	Amps A	Voltage V
	DC (+)	Argon + 15 – 25 % CO ₂	possible 150°C / 24 h	1.2 1.6	100 – 220 175 – 260	20 – 31 21 – 29
		100 % CO ₂				

Welding with standard GMAW-facilities possible, slightly trailing torch position (angel appr. 80°), slight weaving is recommended for positional welding; when using 100 % CO₂ as shielding gas it is necessary to increase the voltage by 2 V; the gas flow should be 15 – 18 l/min

Approvals

TÜV (09118.), DB (43.014.24), CWB (E316LT1-1(4)), LR (DXVu.O, BF 316LS), GL (4571S (C1,M21)), SEPPOZ, CE, DNV, ABS