BÖHLER X96 L-MC

Seamless metal cored wire, high strength

Classifications	
EN ISO 18276-A	**AWS A5.36**
T89 4 ZMn2NiCrMo M M21 1 H5	E131T15-M21A4-K4-H4
EN ISO 18276-B	**AWS A5.36M**
TZ834T15-1M21A-N4C1M2-UH5	E901T15-M21A4-K4-H4

Characteristics and typical fields of application

The BÖHLER X96 L-MC metal cored wire manufactured with seamless laser technology is developed for shielded arc welding of thermo mechanically and quenched and tempered produced fine grained structural steels. A balanced metallurgy combined with a very precise production technology results in high strength combined with very good toughness behaviour and excellent welding behaviour. This seamless tubular wire possesses higher rigidity – as a result it offers exact ignition and excellent feeding characteristic. Due to the manufacturing technology metal cored wire ensures lowest diffusible hydrogen content of < 2 ml / 100g. This metal cored wire is designed for welding under mixture gas (Ar + CO_2) in PA and PB-position. Good results were also achieved after using alternative gases, 8 – 10 % CO_2 + Ar and different welding positions (PG). This filler material is used for high strength steel constructions and also for crane and vehicle manufacturing.

Base materials

S960 and higher strength grades,

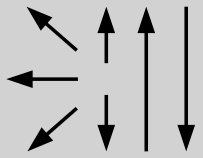
	Typical analysis of all-weld metal						
	Gas	C	Si	Mn	Cr	Ni	Mo
wt.-%	M21	0.06	0.7	1.9	0.6	2.2	0.5

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20°C	–40 °C
u	**980** (≥ 890)	**1020** (940 – 1180)	**16** (≥ 15)	**80**	**60** (≥ 47)

u untreated, as welded – shielding gas M21

Operating data



Polarity	Shielding gases:	ø (mm)
DC (+)	(EN ISO 14175) M21	1.0 1.2

Preheating and interpass temperature as required by the base metal.

Approvals

TÜV, DB, CE