

Classifications

EN ISO 14341-A	AWS A5.18 / SFA-5.18
G 42 5 M21 2Si	ER70S-3
G 42 3 C 2Si	

Characteristics and typical fields of application

Pipeshield X series of solid wires for GMAW are specifically designed for fully automatic circumferential all position pipe welding. Pipeshield X combine the benefits of engineered wire surfaces and thoroughly controlled chemical compositions leading to good impact values even at low temperatures. Consistent wire geometry supports wire feeding and stable arc performance.

Pipeshield X 56 covers pipe steel grades up to API X56 offering good impact toughness at low temperatures down to -50 °C . Especially used for root pass welding with higher tensile pipe grades.

Base materials

EN: L290MB – L420MB
API Spez. 5L: X42, X46, X52, X56

Typical analysis

	C	Si	Mn
wt.-%	0.08	0.60	1.15

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Yield strength R_e	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa		%	20° C	-50° C
u	(≥ 420)	(≥ 530)	(≥ 22)	(≥ 200)	180 (≥ 120)
s	(≥ 360)	(≥ 510)	(≥ 22)	(≥ 200)	200 (≥ 150)

u untreated, as welded - shielding gas M21
s stress relieved (620° C) - shielding gas M21

Operating data

	Polarity	DC +	Dimension mm	
	Shielding gas (EN ISO 14175)	C		1.0
		M21		1.2

Approvals

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