

**Classifications**

EN ISO 21952-A	EN ISO 14341	AWS A5.28 / SFA-5.28	
G ZMn4MoSi	G4Mo	Mixed Gas	CO <sub>2</sub>
		ER90S-D2	ER80S-D2

**Characteristics and typical fields of application**

Low-alloyed solid wire electrode for welding of low-alloyed and higher strength steel grades using CO<sub>2</sub> or Ar based mixed gases. Applications include boiler, tank, pipeline and reactor construction.

**Base materials**

P235GH – P460M, 16 Mo 3; S460N; S460MC;  
 A36; A161-94 Gr. T1; A182M; A204M; A217; A250M; A285, A335 Gr. P1; A515 Gr. 70; A516 Gr. 70

**Typical analysis**

	C	Si	Mn	Mo
wt.-%	0.09	0.65	1.8	0.52

**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> )	Impact energy ISO-V KV J
	MPa	MPa	%	-30°C
u1	(≥ 540)	(≥ 620)	(≥ 17)	(≥ 47)
s1	(≥ 510)	(≥ 600)	(≥ 19)	(≥ 27)
u2	(≥ 470)	(≥ 550)	(≥ 17)	(≥ 27)

u1 untreated, as welded - shielding gas M21

s1 stress relieved 610°C / 5h - shielding gas M21

u2 untreated, as welded - shielding gas CO<sub>2</sub>

**Operating data**

	<b>Polarity</b>	DC+	<b>Dimension mm</b>
	<b>Shielding gas (EN ISO 14175)</b>	M1 – M3 C1	1.2

Recommended shielding gas: Ar/CO<sub>2</sub> mixtures; Ar/CO<sub>2</sub>/O<sub>2</sub> mixtures; 100% CO<sub>2</sub>

**Approvals**

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