

307 Si

CATEGORY GMAW-GTAW Solid wires

TYPE Solid welding wire for dissimilar welding and buffer layers

APPLICATIONS Buffer layers before hardfacing, dissimilar welding between steel and stainless steel, armor plate, exhaust systems (type 409, 304), high Manganese austenitic steel, heterogeneous welding, difficult to weld steels etc.

PROPERTIES Corrosion resistance is equivalent to type 304, high mechanical properties and good weldability, work hardening and cold-tough to -110°C.

CLASSIFICATION

AWS	A 5.9: ER 307
EN ISO	14343-A: G 18 8 MnSi 14343-B: SSZ307
DIN: W.Nr.	1.4370
DIN	8556: SG X15CrNiMn 18 8

SUITABLE FOR Dissimilar welding between steel and stainless steel, armor plate, exhaust systems (type 409, 304), high Manganese austenitic steel, difficult to weld steels such as: 42CrMo4, C45, 42MnV7, tool steels, 1.3401, X120Mn12 etc.

APPROVALS TUV (12385.00) , DB (43.206.01) CE approved

WELDING POSITIONS:

TYPICAL ALL WELD METAL ANALYSIS (M12)

C	Mn	Si	Cr	Ni	P	S
<0.12	6.5	0.6-1.0	18.5	8.5	<0.025	<0.025

MECHANICAL PROPERTIES

Heat treatment	R _{P0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact energy (J) ISO-V			Hardness HRc / HV
				+20C	-40°C	-60C	
AW	>360	>600	40	>100			

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / pack	kg / pallet
0.8	15-24	55-160	D-200 / K-300 / POP	5 / 15 / 250	1000 / 1080 / 1000
1.0	15-28	80-240	D-200 / K-300 / POP	5 / 15 / 250	1000 / 1080 / 1000
1.2	15-29	100-300	D-200 / K-300 / POP	5 / 15 / 250	1000 / 1080 / 1000
1.6	23-31	230-375	D-200 / K-300 / POP	5 / 15 / 250	1000 / 1080 / 1000

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: M11, M12, M13