

309 H

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stainless steel filler metal with high carbon content for high temperature applications.

APPLICATIONS Cladding on low alloyed steels in case a 18/8 CrNi layer is required in the first layer. Scale resistant up to 1050° C., Buffer layers before hard facing, cladding and joining of similar austenitic steels, specially recommended for use in oxidizing gasses with nitrogen and gasses containing small amounts of oxygen.

PROPERTIES High mechanical properties and very good weldability, suitable for high operating temperatures up to 1100°C.

CLASSIFICATION

AWS	A 5.9: ER 309
EN ISO	14343-A: G 22 12 H
DIN: W.Nr.	1.4829
DIN	8556: SG X12CrNi 24 12

SUITABLE FOR 1.2780, 1.4541, 1.4550, 1.4712, 1.4724, 1.4742, 1.4825, X15CrNiSi20 12 (1.4828), G-X 40 CrNiSi20 9 (1.4826)

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	Cr	Ni	Mo
<0.12	1.0-2.5	0.50	23-25	12-14	-

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
				+20°C	-40°C	-60°C	
AW	>400	550-700	>25	>70			

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / spool	kg / pallet
0,8	15-24	55-160	K-300	15	1080
1,0	15-28	80-240	K-300	15	1080
1,2	15-29	100-300	K-300	15	1080

REDRYING TEMPERATURE not required