CARBO WELD
SCHWEISSMATERIALIEN GMBH

CARBO S- 4430 Si
CARBO T- 4430

International standards

	S = solid wire	T = bare rod
Mat. No.	1.4430	
EN 12072	G 19 12 3 L Si	W 19 12 3 L Si
AWS A 5.9	ER316LSi	ER316LSi

Approvals

TÜV, DB, CE — TÜV, DB, CE

Application notes

Solid wire electrode for joining corrosion-proof CrNiMo steels of low carbon content as well as stabilised and non-stabilised steels of identical or similar characteristics which are resistant to chemical agents. Used on a base metal of identical characteristics the weld metal is resistant to wet corrosion up to 400° C.
Scale resistant up to 875° C in an air and oxidising gases atmosphere.
No intercrystalline corrosion due to low carbon content.
The deposit is capable of taking high polish.
Also approved for joining austenitic to ferritic steels (weld thin stringer beads)

Operating temperature

-120° C bis +400° C

Base materials

1.4404 X2CrNiMo17-13-2	1.4437 GX6CrNiMo18-12
1.4435 X2CrNiMo18-14-3	1.4408 GX5CrNiMo19-11-2
1.4409 GX2CrNiMo19-11-2	1.4571 X6CrNiMoTi17-12-2
1.4429 X2CrNiMoN17-13-3	1.4580 X6CrNiMoNb17-12-2
1.4401 X5CrNiMo17-12-2	1.4581 GX5CrNiMoNb19-11-2
1.4436 X3CrNIMo17-13-3	1.4583 (G)X10CrNiMoNb18-12

Mechanical properties of all-weld metal

(typical values**)**

Tensile strength R_m N/mm²	Yield strength $R_{p0,2}$ N/mm²	Elongation A_5 %	Impact strength ISO – V J at 20° C
550	320	35	70

Weld metal analysis
(typical, wt. %)

C	Si	Mn	Cr	Ni	Mo
0,02	0,8	1,7	18,8	12,5	2,8

Gas types EN 439

S = solidwire: M12, M13 — T = bare rod: I1

Current

		= +				= –				
Diameter	mm	**0,8**	**1,0**	**1,2**	**1,6**	**1,6**	**2,0**	**2,4**	**3,2**	**4,0**
Welding amps	(A) min.	80	120	180	250					
	(A) max.	130	190	250	320					

coils, weight

B300 15 kg. — 10 kg.

Rev. 001/13