CARBO WELD
SCHWEISSMATERIALIEN GMBH

CARBO S- 4370 Si
CARBO T- 4370

International standards

	S = solid wire	T = bare rod
Mat. No.	1.4370	
DIN 8559	G 18 8 Mn	W 18 8 Mn
AWS A 5.7	≈ ER307mod.	≈ ER307 mod.

Approvals TÜV, DB, CE TÜV, DB, CE

Application notes

Solid wire electrode of type 18 8 Mn for numerous applications. Suitable for welding difficult-to-weld, crack-sensitive steels with > 0.7 % carbon content and for joint welding of and surfacing on heat resistant stainless steels and castings.
Suitable for joint welding of austenitic to ferritic steels which are exposed to service temperatures of -110° above 500° C.
Furthermore it can be used for welding equalizing buffer layers prior to hardfacing and for repair welding of manganese steels. Stainless, heat resistant weld metal, non-scaling up to 850° C and resistant to sulphurous waste gases at temperatures up to 500° C.
The weld metal alloy is case hardening and non-magnetic
Hardness after strain-hardening: approx. 340 HB

Operating temperature -110° C up to + 300° C

Base materials

Combined compound of 1.4583 with H I / H II, 17 Mn 4, StE 355
1.4583 with P235GH / P256GH, P295GH,P355N
Surfacing on rails with an Rm of 685 N/mm²

Mechanical properties of all-weld-metal, untreated as welded (gas: Argon)

(typical values)

Tensile strength R_m N/mm²	Yielding strength $R_{p0,2}$ N/mm²	Elongation A_5 %	Impact strength ISO – V J at 20°C	at 110°C
660	450	38	120	>32

Weld metal analysis (typical, wt %)

C	Si	Mn	Cr	Ni
0,08	0,8	7,0	19,2	9,0

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Gas types EN 439	M12, M13, M21	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.

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