

CARBO 307 AC

International standards	Material No.	1.4370 modified
	DIN 8555	E 8-UM-200-CKNPZ
	AWS A 5.4	E307-17 / modified

Characteristics and typical applications

CARBO 307 AC is an AC-weldable electrode with an alloyed core, suitable for welding difficultly weldable steels of carbon content >0.7 % which are at risk of cracking and for joint welding and surfacing on heat resistant stainless steels and castings.

Suitable for joint welding of austenitic to ferritic steels which are exposed to service temperatures up to 300° C.

Furthermore, CARBO 307 AC 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: abt. 340 HB

Operating temperature - 60° 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
Manganese steels, screening steels and other harden able steels.

Mechanical properties of all-weld metal

(typical values)

Tensile strength R_m N/mm ²	Yield strength $R_{p0.2}$ N/mm ²	Elongation A_5 %	Impact strength ISO-V J at 20° C	Hardness HB
600	>400	> 32	> 32	180

Weld metal analysis % (typical)

C	Si	Mn	Cr	Ni	Mo
0,10	0,5	4	20	10	1,5

Current = + / ~ , 50 V

Welding positions PA, PB, PC, PD, PE, PF

Rebaking 1 h, 350° C +/- 10° C (if necessary)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 300	50 - 70	234	936	17,1	4,0	16,0
3,2 x 350	70 - 120	148	593	33,7	5,0	20,0
4,0 x 350	100 - 140	98	392	51,0	5,0	20,0
5,0 x 450	135 - 180	59	234	102,5	6,0	24,0