

# CARBO 4430 AC

International standards	Material No.	1.4430
	EN 1600	E 19 12 3 L R 12
	AWS A 5.4	E 316L-17

**Approvals** TÜV, DB, GL, Ü. UDT

**Characteristics and typical applications**

CARBO 4430 AC is an AC-weldable, rutile coated electrode with an alloyed core, suitable 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 weld metal is capable of taking high polish.  
Also approved for joining austenitic to ferritic steels (weld thin stringer beads)

**Operating temperature** - 120° C up to + 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

Combined compounds of 1.4583 with H I / H II, 17Mn 4, 15 Mo 3, StE 255 up to StE 355  
1.4583 with P235GH / P256GH, P295GH, 16Mo3, P255N up to P355N max. 300° C

**Mechanical properties of all-weld metal**

(typical values)

Tensile strength $R_m$ N/mm <sup>2</sup>	Yield strength $R_{p0,2}$ N/mm <sup>2</sup>	Elongation $A_5$ %	Impact strength ISO-V J at - 120° C
580	400	>32	65

**Weld metal analysis**  
(typical, wt %)

C	Si	Mn	Cr	Ni	Mo
< 0,03	0,8	0,6	19	12	2,8

**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
1,6 x 250	30 - 40	693	2772	5,7	4,0	16,0
2,0 x 300	40 - 60	345	1379	11,6	4,0	16,0
2,5 x 300	50 - 75	221	884	18,1	4,0	16,0
3,2 x 350	85 - 120	140	559	35,8	5,0	20,0
4,0 x 350	120 - 160	92	369	54,2	5,0	20,0
4,0 x 450	120 - 160	86	345	69,6	6,0	24,0
5,0 x 450	160 - 190	55	221	108,8	6,0	24,0