

CARBO 4430 MPR

International standards	Material No.	1.4430
	EN ISO 3581-A	E 19 12 3 L R 53
	AWS A 5.4	E 316L-17

Approvals ---

Characteristics and typical applications

CARBO 4430 MPR is an AC-weldable, rutile coated electrode with 160 % recovery, 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 - 60° 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

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 - 60° C
550	380	35	> 32

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,

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

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,0 x 300	55 - 70	238	952	16,8	4,0	16,0
2,5 x 350	70 - 90	163	651	30,7	5,0	20,0
3,2 x 350	80 - 120	96	385	51,9	5,0	20,0
4,0 x 450	110 - 180	59	238	101,0	6,0	24,0
5,0 x 450	160 - 240	38	152	157,8	6,0	24,0

Rev. 001/12