CARBO 4370 MPR

International standards

Material No.	1.4370
EN 1600	E 18 8 Mn R 53
AWS A 5.4	E307-16 / mod.
DIN 8555	E 8-UM-200-CKNPZ

Typical applications and characteristics

Rutile-basic coated electrode with high recovery (160%) for AC-welding. Fully austenitic stainless steel deposit with high Mn-content. Suitable for welding and cladding on crack-sensitive, difficult-to-weld steels (> 0.7 % C) and for tough joints and claddings on heat resistant stainless steels and cast steels.
CARBO 4370 MPR is suitable for joining austenitic to ferritic base materials at service temperatures up to 300° C. It can also be used for buffer layers prior to hardfacing and for repairing Mn-steel.
Stainless steel deposit, heat resistant and non-scaling up to 850° C, resistant to sulphurous furnace gases at max. 500° C. The deposited alloy is strain-hardenable and non-magnetic.
Hardness after strain-hardening: abt. 340 HB

Operating temperature

From room temperature up to +300° C

Base materials

Dissimilar joints: 1.4583 with H I / H II, 17 Mn 4, StE 355
1.4583 with P235GH / P256GH, P295GH, P355N
Mn-steel, armour steel, and other hardenable steels

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 energy ISO – V J at room temp.	Hardness HB
570	> 360	> 32	> 70	180

Weld metal analysis (typical, wt. %)

C	Si	Mn	Cr	Ni
0,10	0,7	6	18,5	8,5

Current

= - / + / ~ / 50 V

Welding positions

PA, PB

Rebaking

1 h, 350° C + / - 10° C (if required)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000 pcs.	kg/packet	kg/carton
2,0 x 300	55 - 85	230	920	17,4	4,0	16,0
2,5 x 350	85 - 140	157	629	31,8	5,0	20,0
3,2 x 350	115 - 160	93	372	53,7	5,0	20,0
3,2 x 450	115 - 160	87	348	68,9	6,0	24,0
4,0 x 450	120 - 200	57	229	104,6	6,0	24,0
5,0 x 450	180 - 250	59	147	163,4	6,0	24,0
6,0 x 450	225 - 360	25	102	235,3	6,0	24,0