

## CARBO 29/9 MPR

<b>International Standards</b>	Material No.	1.4337
	EN 1600	E 29 9 R 53
	AWS A 5.4	E312-17
	DIN 8555	E 9-UM-200-CKRTZ

**Approvals** ---

### Typical applications and characteristics

CARBO 29/9 MPR is an AC weldable electrode with 160% recovery, suitable for joining difficult-to-weld steels. Austenitic-ferritic stainless steel welding deposit (high ferrite content). The weld metal remains ferritic, even after dilution with an austenitic base metal forming elements such as Mn, Ni und C and is thus highly crack resistant. Plastic weld metal of high tensile strength, impact proof, tough, and acid and heat resistant up to 1,000° C. Hardness after strain-hardening: ca. 360 HB  
Soft, intense fusion, easy slag removal, finely rippled beads. Suitable for AC welding.  
Joint weld with a short arc using stringer bead techniques. Maximum wall thickness < 30 mm. The weld metal alloy strain-hardens during use.

**Operating temperature** 20°C up to 300° C

### Base materials

Difficult-to-weld base materials such as: high-carbon steel, tool steel, spring steel, manganese steel, case-hardening steel, high-speed steels, cast steels, screening steels, Suitable for joining these materials to each other or to dissimilar steels. Also suitable for surfacing and repair welding rails, shafts, couplings, impellers, hot work tools, pressing and trimming tools, as well as stamping dies.

### 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 DMV J + 20°C	Hardness HB
800	580	20	30	abt. 200

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

C	Si	Mn	Cr	Ni
0,10	1,2	0,7	29	9

**Curent** = + / ~ , 42 V

**Welding positions** PA, PB

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

Dia /Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000 pcs.	kg/packet	kg/carton
2,0 x 300	45 - 75	230	920	17,4	4,0	16,0
2,5 x 350	60 - 100	157	629	31,8	5,0	20,0
3,2 x 350	90 - 130	93	372	53,7	5,0	20,0
4,0 x 450	140 - 190	57	229	104,6	6,0	24,0
5,0 x 450	160 - 230	37	147	163,4	6,0	24,0