

# CARBO 29/9 AC

<b>International Standards</b>	Material No.	1.4337
	EN 1600	E 29 9 R 12
	AWS A 5.4	E312-17
	DIN 8555	E 9-UM-200-CTZ

**Approvals** DB

**Typical applications and characteristics** CARBO 29/9 AC is an AC weldable electrode with a fully alloyed core, 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.

<b>Mechanical properties of all-weld metal</b> ( typical values)	<b>Tensile strength</b> R <sub>m</sub> N/mm <sup>2</sup>	<b>Yield strength</b> R <sub>p0,2</sub> N/mm <sup>2</sup>	<b>Elongation</b> A <sub>5</sub> %	<b>Impact strength</b> DVM J + 20°C	<b>Hardness</b> HB
	800	580	20	30	ca. 200

<b>Weld metal analysis</b> (typical, wt %)	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>	<b>Ni</b>
	0,10	1,2	0,7	29	9,5

**Current** = + / ~ , 42 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 pcs.	kg/packet	kg/carton
1,6 x 250	20 - 35	407	1628	8,6	3,5	14,0
2,0 x 300	30 - 60	339	1356	11,8	4,0	16,0
2,5 x 300	50 - 80	225	899	17,8	4,0	16,0
3,2 x 350	70 - 100	142	570	35,1	5,0	20,0
4,0 x 350	90 - 140	94	376	53,2	5,0	20,0
5,0 x 450	130 - 180	54	216	110,9	6,0	24,0

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