

CARBOTRODE 92

International Standards	Material No.	1.4337
	EN 1600	E 29 9 1 R 12
	AWS A 5.4	E312-16
	DIN 8555	E 9-UM-200-CKRTZ

Typical applications and characteristics

CARBOTRODE 92 is an AC weldable electrode with an 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, acid resistant 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 ²	Yield strength R _{p0,2} N/mm ²	Elongation A ₅ %	Impact strength DVM J + 20°C	Hardness HB
800	580	20	30	ca. 200

Weld metal analysis (typical, wt %)

C	Si	Mn	Cr	Ni
0,10	1,1	0,65	29	9

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	40 - 50	339	1356	11,8	4,0	16,0
2,5 x 300	60 - 70	216	865	18,5	4,0	16,0
3,2 x 350	65 - 100	137	549	36,4	5,0	20,0
4,0 x 350	95 - 140	91	362	55,2	5,0	20,0
5,0 x 450	120 - 180	54	216	110,9	6,0	24,0
6,0 x 450	150 - 220	38	150	159,7	6,0	24,0

Rev. 000