

Ferrod 170

High recovery rutile electrode

Classification

AWS A5.1-91 : E7024
EN 499-94 : E 42 0 RR 73

General description

Rutile electrode for fillet welds and horizontal V- and X-welds

170% recovery

Very high welding speed

Smooth weld appearance

Self releasing slag

Welding positions



ISO/ASME PA/1G PB/2F PC/2G

Current type

AC / DC electr. + / -

Approvals

ABS	GL
2	2Y

Chemical composition (w%), typical, all weld metal

C	Mn	Si
0.07	1.1	0.5

Mechanical properties, all weld metal

Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J) 0°C
Required: AWS A5.1-91	min. 399	min. 482	min. 17	not required
EN 499-94	min. 420	500-640	min. 20	min. 47
Typical values AW	480	560	26	66

Packaging, available sizes and identification

	Diameter (mm)	3.2	4.0	5.0
	Length (mm)	350	450	450
Unit: Box	Pieces / unit (nominal)	93	66	40
	Net weight/unit (kg)	4.7	6.5	6.1

Identification Imprint: 7024/Ferrod 170

Tip colour: none

Ferrod 170: rev. EN 15

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Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S185, S235, S275, S355
Ship plates	ASTM A131	Grade A, B, D, AH32 to DH36
Boiler & pressure vessel steel	EN 10028-2	P235, P265, P295, P355
Fine grained steel	EN 10113-2 EN 10113-3	S275, S355, S275, S355

Calculation data

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time - per electrode at max. current - (s)*	Energy E(kJ)	Dep.rate H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ kg weldmetal 1/N
3.2 x 350	125 - 160	AC	65	270	1.9	49.2	30	1.46
4.0 x 450	175 - 210	AC	84	494	2.9	100.1	15	1.03
5.0 x 450	260 - 320	AC	84	963	4.5	107.3	10	1.49

*stub end 35 mm

Application advice

High yield strength steels such as S355, L360, P355 and X60 preheat according EN 1011-1