

Ferrod 160T

High recovery rutile electrode

Classification

AWS A5.1-91 : E7024
EN 499-94 : E 42 0 RR 74

General description

Rutile electrode for fillet welds and horizontal V- and X-welds
Very high welding speed
Smooth weld appearance
Self releasing slag
High recovery (160%)

Welding positions



ISO/ASME PA/1G PB/2F

Current type

AC / DC electr. -

Approvals

ABS	BV	CTL	DNV	FORCE	GL	LR	TÜV
2	2,2Y	+	2	+	2Y	2,2Y	+

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

C	Mn	Si
0.07	0.9	0.6

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	450	570	26	70

Packaging, available sizes and identification

	Diameter (mm)	3.2	4.0	5.0
	Length (mm)	450	450	450
Unit: box	Pieces / unit (nominal)	95	65	40
	Net weight/unit (kg)	6.4	6.3	6.1

Identification Imprint: 7024/Ferrod 160T

Tip colour: green

Ferrod 160T: 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 450	130 - 160							
4.0 x 450	180 - 220	AC	90	554	2.6	92.7	15	1.43
5.0 x 450	260 - 300	AC	90	864	4.2	154.9	10	1.43

*stub end 35 mm

Welding parameters, optimum fill passes

Welding position Diameter (mm)	PA/1G Current (A)	PB/2F
4.0	210	200
5.0	300	270

Application advice

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