

High recovery rutile electrode

Classification

AWS A5.1 : E7024
ISO 2560-A : E 38 0 RR 53

General description

Rutile electrode for fillet welds and horizontal V- and X-welds
High welding speed
Smooth weld appearance
Self releasing slag
High recovery (140%)

Welding positions



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

Current type

AC / DC -

Approvals

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

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

C	Mn	Si
0.08	0.5	0.35

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		min. 400	min. 483	min. 17	not required
ISO 2560-A		min. 380	470-600	min. 20	47
Typical values	AW	460	530	25	54

Packaging and available sizes

	Diameter (mm)	3.2	4.0	5.0
	Length (mm)	450	450	450
Unit: box	Pieces / unit	90	65	45
	Net weight/unit (kg)	5.5	5.7	5.9

Identification

Imprint: 7024 / FERROD 135T

Tip Color: none

Ferrod 135T: rev. EN 21

Ferrod 135T

Materials to be welded

Steel grades/Code	Type
General structural steel	
EN 10025	S185, S235, S275, S355
Ship plates	
ASTM A131	Grade A, B, D, AH32 to DH36
Cast steel	
EN 10213-2	G P 240R
Boiler & pressure vessel steel	
EN 10028-2	P235, P265, P295, P355
Fine grained steel	
EN 10113-2	S275, S355
EN 10113-3	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 - 150	AC	85	344	1.6	61.3	27	1.67
4.0 x 450	180 - 200	AC	92	515	2.2	87.7	18	1.67
5.0 x 450	275 - 300	AC	86	735	3.7	129.9	11	1.43

* stub end 35 mm

Welding parameters, optimum fill passes

Welding positions Diameter (mm)	PA/1G	PB/2F	PC/2G
3.2	150A	140A	140A
4.0	200A	190A	190A
5.0	290A	280A	

Remarks/ Application advice

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