MMA COATED ELECTRODES

UNIVERSAL RUTILE (6013)

NON-ALLOY STEELS

INVEST IN THE FUTURE

Universal rutile electrode, designed for welding in any position, including vertical down welding. It is easy to ignite and offers an excellent weldbead aesthetics. It is recommended for general construction of non-alloy and low alloy steel.

Classification

EN ISO 2560-A : E 42 0 RC 1 1
AWS A 5.1 : E6013

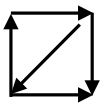
Applications

- Metal constructions,
- Tanks,
- Pipework,
- Metalwork,
- Crafts

Benefits

- Easy ignition and re-ignition.
- Good weldability in all positions.
- Flat weld bead (slightly rounded) and easy cleanup.
- Excellent weldbead aesthetics.

Positions and polarity



- Ignition from 40V - Direct current.
- **Electrode polarity (-).**

Chemical properties

C %	Mn %	Si %	P %	S %
0.06	0.50	0.40	0.025	0.025

Mechanical properties

Re	Rm	A 5 d	KV 0 °C
440 MPa	540 MPa	24%	50 J

Recommendations

Ø électrode (mm)	1.6	2.0	2.5	3.2	4.0
thickness (mm)	1,5	1,5 ▶ 3	2,5 ▶ 6	5 ▶ 8	8 ▶ +
welding current (A)	30	40 ▶ 70	60 ▶ 100	80 ▶ 130	130 ▶ 170

Approval

TÜV - DB

Packaging

Ref	Ø (mm)	↔ (mm)	x...	weight (kg)
084315	Ø 1.6	300	17	0.16
084414			50	0.41
084322	Ø 2.0	350	13	0.22
084421			50	0.71
084339	Ø 2.5		11	0.24
084438			50	1.00
084346	Ø 3.2		9	0.30
084445			50	1.50
084353	Ø 4.0		8	0.38
084452			50	2.24

Ref	Ø (mm)	↔ (mm)	x...	x...	weight (kg)
085114	Ø 1.6	300	210	6	1.65
085121	Ø 2.0	350	155		2.08
085138	Ø 2.5		110		2.11
085145	Ø 3.2		70		2.09
085152	Ø 4.0		47		2.21

Ref	Ø (mm)	↔ (mm)	x...	x...	weight (kg)
085022	Ø 2.0	350	355	3	4.82
085039	Ø 2.5		230	3	4.46
085046	Ø 3.2		165	3	4.85
085053	Ø 4.0		110	3	5.39

Ref	Ø (mm)	↔ (mm)	x...	weight (kg)
081598	Ø 2.5	350	75	-
081604	Ø 3.2		57	-

Ref	Ø (mm)	↔ (mm)	x...	weight (kg)
086005	Ø 2.5	350	252	4.6
086012	Ø 3.2		172	5
086029	Ø 4.0		117	5