

EH 528

Covered Electrode for Hardfacing Applications -

Standards

EN 14700	E Fe16
TS EN 14700	E Fe16
DIN 8555	E 10-UM-65-GR

Approvals & Certificates

GOST

Properties and Applications

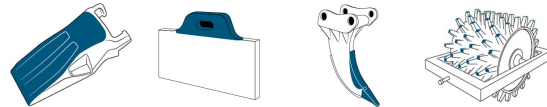
Basic type, high recovery (180%) electrode for depositing primary and eutectic Cr and Nb carbides in austenitic matrix. Suitable for hardfacing of parts subjected to heavy abrasion with moderate impact. Service temperature is max. 450°C. Suitable to use in hardfacing of cement crushers, cement presses and brick conveyor screws, mixer blades, press screws in oil industry, bucket lips and teeths in earth moving equipments. The typical transverse cracks occurring in such a hard metal is not suitable for applications where impact and shock conditions prevail. Wear coefficient of one layer deposit is 0.5 % with SiO₂. The weld metal is machinable only by grinding. Weld with long arc length shall not be welded more than 2 layers. Possible to use with both DC and AC.



Dayanım Gösterdiği Aşınma Tipleri ve Mikroyapısı

Property	Material	Value
Abrasion	Carbon steel	100
Adhesion	Carbon steel	100
Darbe	Carbon steel	100
Temperature	Carbon steel	100
Corrosion	Carbon steel	100
	Aluminum	100
	Stainless steel	100
	Brass	100
	Copper	100
	Gold	100
	Silver	100
	Platinum	100
	Palladium	100
	Rhodium	100
	Iridium	100
	Osmium	100
	Ruthenium	100
	Technetium	100
	Rhenium	100
	Barium	100
	Strontium	100
	Calcium	100
	Magnesium	100
	Aluminum	100
	Iron	100
	Steel	100
	Brass	100
	Copper	100
	Gold	100
	Silver	100
	Platinum	100
	Palladium	100
	Rhodium	100
	Iridium	100
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	Iron	100
	Steel	100
	Brass	100
	Copper	100
	Gold	100
	Silver	100
	Platinum	100
	Palladium	100
	Rhodium	100
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	Ruthenium	100
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	Rhenium	100
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	Calcium	100
	Magnesium	100
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	Iron	100
	Steel	100
	Brass	100
	Copper	100
	Gold	100
	Silver	100
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	Palladium	100
	Rhodium	100
	Iridium	100
	Osmium	100
	Ruthenium	100
	Technetium	100
	Rhenium	100
	Barium	100
	Strontium	100
	Calcium	100
	Magnesium	100
	Aluminum	100
	Iron	100
	Steel	1

Typical Applications



Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn	Cr	Nb	Fe
Weld Deposit	5.50	1.40	1.90	25	5.50	Rest

Typical Mechanical Values of Weld Metal

Test Condition	Hardness (HRc)	Wear Index
As welded	63	7.11 (1.sira)

Application Information

Welding Positions



Polarity:



Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)	Kg Kaynak Metali/1Kg Elektrod	Elektrod Adedi/1Kg Kaynak Metali	Weld Metal Deposition Rate (Kg/h)
2.50x350	70-100	0,73	40	0,68
3.25x350	115-150	0,69	28	0,89
4.00x350	150-200	0,73	17	1,22
5.00x350	190-240	0,70	11	1,91

Packaging Information

Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (Kg)	Boxes per Outer Box	Outer Box Gross Weight (Kg)	Packaging Type
18012HREM2	2.50x350	160 AD	5.07	3	15.40	Cardboard Box

18012NEEM2	3.25x350	80 AD	4.41	3	13.40	Plastic Box
18012NREM2	3.25x350	95 AD	5.07	3	15.40	Cardboard Box
18012QEEM2	4.00x350	55 AD	4.71	3	14.30	Plastic Box
18012QREM2	4.00x350	61 AD	5.07	3	15.40	Cardboard Box
18012TEEM2	5.00x350	40 AD	5.21	3	15.80	Plastic Box
18012TREM2	5.00x350	40 AD	5.07	3	15.40	Cardboard Box

Storage & Re-Drying Information

It can be dried maximum 5 times.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.
It has to be dried at 350°C for 2 hours.