



elektrode jesenice d.o.o.

ELECTRODES, PRODUCING ABRASION RESISTANT DEPOSIT

ABRADUR 54	L1
ABRADUR 58	L2
ABRADUR 60	L3
ABRADUR 64	L4
ABRADUR 65	L5
ABRADUR 66	L6
CrWC 600	L7



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Classification:

EN 14 700: E Fe 14
DIN 8555: ≈E 10-UM-60-GR

ABRADUR 58

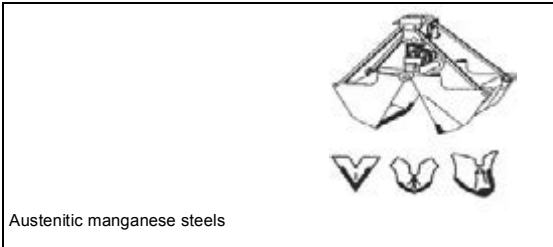
Description and application:

Electrode produces hard deposits extremely resistant to abrasive and moderate impact. It is suitable for hardfacing crushing and earthmoving equipment, soft ore crushers, conveyor screws, bucket teeth and lips.

Welding of buffer layers with Inox B 18/8/6 or Mn17Cr13 electrodes is recommended.

The weld metal can be treated with grinding.

Base materials:



Austenitic manganese steels

Heat treatment:

Preheating is not required.

Coating type:

Rutile

Welding current:

AC
DC +

Welding positions:



Redrying temperature:

300°C / 2h

Metal recovery:

180%

Typical weld metal properties:

Chemical composition, wt %:

C	Cr
3.2	32

Mechanical properties:

Hardness: 57-62 HRC typical: 59 HRC (20°C)

Wear coeff.: 2%

The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Welding parameters			Packing		
φ mm	Length mm	Current A	Weight/ packet kg	Weight/ Carton kg	Weight/ 1000 pcs kg *
2.5	350	65-95	4	20	33
3.25	350	110-140	4	20	55.6
4	450	160-200	5	25	111
5	450	210-270	5	25	172.5

* approximate data

Approvals:





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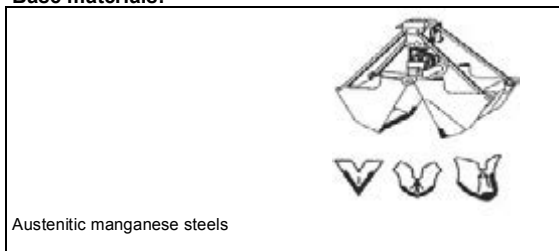
Classification:
 EN 14 700: E Fe 14
 DIN 8555: ≈E 10-UM-60-GR

ABRADUR 60

Description and application:

Rutile-coated chromium carbide electrode produces hard deposits extremely resistant to abrasive and moderate impact. It is suitable for hardfacing crushing and earthmoving equipment, soft ore crushers, conveyor screws, bucket teeth and lips.
 Welding of buffer layers with Inox 18/8/6 or Mn17Cr13 electrodes is recommended.
 The weld metal can be treated with grinding.

Base materials:



Heat treatment:

Preheating is not required.

Coating type:

Rutile

Welding current:

AC
 DC +

Welding positions:



Redrying temperature:

300°C / 2h

Metal recovery:

Typical weld metal properties:

Chemical composition, wt %:

C	Cr	V
3.6	32	0,7

Mechanical properties:

Hardness: 59-64 HRC typical: 60 HRC (20°C)

Wear coeff.: $\epsilon = 40\%$
 $\Delta G = 0,9$

The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Approvals:

Welding parameters			Packing		
ϕ mm	Length mm	Current A	Weight/ packet kg	Weight/ Carton kg	Weight/ 1000 pcs kg *
2.5	350	65-95	4.5	22.5	33
3.25	350	110-140	4.5	22.5	55.6
4	450	160-200	5	25	111
5	450	210-270	5	25	172.5

* approximate data



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Classification:

EN 14 700 : E Fe 15
DIN 8555: ≈E 10-UM-65-GR

ABRADUR 64

Description and application:

Electrode produces hard deposits extremely resistant to abrasive with moderate impact up to 450°C. It is suitable to hardfacing in the brick and cement making industry, screws of refractory material presses conveyor belt guides, screws, mill blades and scratches, centre risers, excavator cogs... Welding of buffer layers with Inox B 18/8/6 or EMn17Cr13 electrodes is recommended. The weld metal can be treated with grinding.

Base materials:



Heat treatment:

Preheating is not required.

Coating type:

Basic

Welding current:

AC
DC +

Welding positions:



Redrying temperature:

300°C / 2h

Metal recovery:

190%

Typical weld metal properties:

Chemical composition, wt %:

C	Cr	Nb
6	26	7.5

Mechanical properties:

Hardness: 62-65 HRC typical: 64 HRC (20°C)

Wear coeff.: 0.5%

The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Welding parameters			Packing		
φ mm	Length mm	Current A	Weight/ packet kg	Weight/ Carton kg	Weight/ 1000 pcs kg *
2.5			4	20	31
3.25	350	110-140	4.4	22	55.5
4	450	160-200	5	25	111
5	450	210-270	5	25	172.5

* approximate data

Approvals:



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Classification:

EN 14 700: E Fe 16
DIN 8555: =E 10-UM-65-G

ABRADUR 65

Description and application:

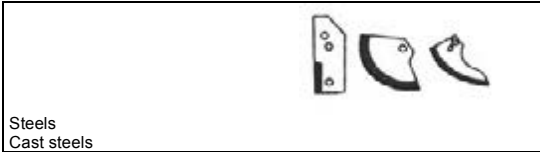
Electrode produces hard deposits extremely resistant to abrasive wear against the minerals at medium impact up to 500°C.

It is suitable to hardfacing on earth moving equipment, pump bodies, ploughshares, nut oil presses, conveyor belt guides, mill blades and scratches, clinker mills, centre risers.

Welding of buffer layers with Inox B 18/8/6 or E Mn17Cr13 electrodes is recommended.

The weld metal can be treated with grinding.

Base materials:



Steels
Cast steels

Heat treatment:

Preheating is not required.

Coating type:

Basic

Welding current:

AC
DC +

Welding positions:



Redrying temperature:

300°C / 2h

Metal recovery:

120%

Typical weld metal properties:

Chemical composition, wt %:

C	Cr	Mo
4.3	9.5	2.0

Mechanical properties:

Hardness: 62-67 HRC typical: 65 HRC (20°C)
Wear coeff.: 2%

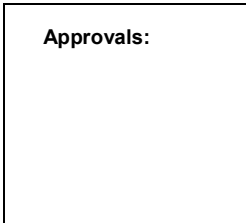
The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Welding parameters			Packing		
φ mm	Length mm	Current A	Weight/ packet kg	Weight/ carton kg	Weight/ 1000 pcs kg *
3.25	350	100-130	4.4	22	37.8
4	450	160-190	5.4	27	59
5	450	220-250	4.5	22.5	88

* approximate data

Approvals:





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Classification:

EN 14 700: E Fe 16
DIN 8555: ≈E 10-UM-65-GR

ABRADUR 66

Description and application:

Electrode produces extremely hard deposits extremely resistant to abrasive wear against the minerals at medium impact up to 600°C.
It is suitable to hardfacing on earth moving equipment, wearing parts in the cement and brick making industry, fire grate bars, fire grate teeth in the iron and steel industry.
Welding of buffer layers with Inox 18/8/6 or EMn17Cr13 electrodes is recommended.
The weld metal can be treated with grinding.

Base materials:



Steels
Cast steels

Heat treatment:

Preheating is not required.

Coating type:

Basic

Welding current:

AC
DC +

Welding positions:



Redrying temperature:

300°C / 2h

Metal recovery:

235%

Typical weld metal properties:

Chemical composition, wt %:

C	Cr	Mo	Nb	W	V
6.0	22.0	6.0	6.0	2.0	1.0

Mechanical properties:

Hardness: 62-67 HRC typical: 66 HRC (20°C)
50 HRC (600°C)

The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Welding parameters			Packing		
φ mm	Length mm	Current A	Weight/ packet kg	Weight/ carton kg	Weight/ 1000 pcs kg *
3.25	350	100-130	4	20	65.8
4	350	160-190	5.4	26	
4	450	160-190	5	25	128
5	450	220-250	5	25	200

* approximate data

Approvals:



elektrode jesenice d.o.o.

Classification:

EN 14 700: E Fe 16
DIN 8555: ≈E 10-UM-60-C

CrWC 600

Description and application:

Electrode produces extremely hard deposits resistant to abrasive wear against the minerals and other materials. Weld metal is not recommended to shock-loadings. Welding of buffer layers with INOX B 18/8/6 and combination welding with E DUR 600 is recommended. It is suitable to weld string beads on earth moving, cement mill and brick making equipment.

Base materials:

Steels
Cast steel
Austenitic manganese steels

Heat treatment:

Preheating is not required.

Coating type:

Basic

Welding current:

AC
DC +

Welding positions:



Redrying temperature:

300°C / 2h

Typical weld metal properties:

Chemical composition, wt %:

C	Cr	W
3.8	28	4.5

Mechanical properties:

Hardness: 57-62 HRC typical: 60 HRC (20°C)

The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.

Welding and packing data:

Welding parameters			Packing		
φ mm	Length mm	Current A	Weight/ packet kg	Weight/ carton kg	Weight/ 1000 pcs kg *
3.25	350	100-130	4	20	47.5
4	450	160-190	5.2	26	96.3
5	450	220-250	5.2	26	157.6

* approximate data

Approvals: