

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



Classification: EN 14 700: E Fe 8 DIN 8555: ≈E 6-UM-55-G

ABRADUR 54

Description and application:

Electrode is used when hard deposits with excellent abrasion at high compressive stresses , heavy impact and high metal to metal wear resistance is needed.

It is suitable for hardfacing crusher hammers, mixers, crushers, dredging parts, gears, ploughshares, cams... Weld metal is very difficult machinable.

Base materials:



Heat treatment:

Preheating is not required.

Coating type: Basic	Typical weld metal properties:						
Welding current:	Chemical com	position, wt %:					
ĂC	C	9	Si	Cr			
DC +	0.	5	1.7	9.5			
Welding positions:	Mechanical pr Hardness:	operties: 52-56 HRC	typica	al: 55 HRC 30 HRC (*	(20°C) 500°C)		
Redrying temperature: 300°C / 2h	Wear coeff .:	70%					
Metal recovery: 110%	The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.						

Welding and packing data:

We	Welding parameters			Packing		
φ	Length	Current	Weight/	Weight/	Weight/	
mm	mm	A	packet	Carton	1000 pcs	
			kg	kg	kg *	
2.5	350		4	20	24	
3.25	350	80-150	4	20	42	
4	450	125-190	5.4	27	77	
5	450	180-255	5	25	119	
6	450	250-320				

Approvais:



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:



Heat treatment:

Preheating is not required.

Coating type:

Rutile

Welding current:

DC +

Welding positions:



Redrying temperature: 300°C / 2h

Metal recovery: 180%

rypical weiu i		erties.						
Chemical composition, wt %:								
C		Cr						
3.2		32						
Mechanical prop	perties:							
Hardness:	57-62 HRC	typical: 59 HRC	(20°C)					
Wear coeff .:	2%							
The hardness of conditions and the	the deposit d	lepending on the re omposition of the b	elevant welding					

Welding and packing data:

Typical wold motal properties:

Welding parameters			F	Packing	
φ	Length	Current	Weight/	Weight/	Weight/
mm	mm	A	packet	Carton	1000 pcs
			kg	kg	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

Approvals:



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:

Chemical com	position, wt %:			
С	(Cr V		
3.	ô	32 0,7	,	
Mechanical pro	59-64 HRC	typical: 60 HRC	(20°C)	
Wear coeff .:	ε = 40%			

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

Welding and packing data:

Typical weld metal properties:

	Welding parameters			Packing		
Approvals:	ф mm	Length mm	Current A	Weight/ packet	Weight/ Carton	Weight/ 1000 pcs
	2.5	350	65-95	4.5	22.5	Ny 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



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	Typical weld metal properties:						
Welding current:	Chemical composition, wt %:						
ĂC	С	C	r Nb				
DC +	6	2	6 7.5				
Welding positions:	Mechanical properties:						
	Hardness:	62-65 HRC	typical: 64 HRC	(20°C)			
Redrying temperature: 300°C / 2h	Wear coeff .:	0.5%					
Metal recovery: 190%	The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.						

Welding and packing data:

We	Iding parame	ters	Packing		
φ	Length	Current	Weight/	Weight/	Weight/
mm	mm	A	packet	Carton	1000 pcs
			kg	kg	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

Approvals:	



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:



Heat treatment:

Preheating is not required.

Coating type: Basic	Typical weld metal properties:					
Welding current:						
AC	C	Cr	Mo			
DC +	4.3	9.5	2.0			
Welding positions:	Mechanical properties:					
Redrving temperature:	Hardness: Wear coeff.:	62-67 HRC 2%	typical: 65 HRC	(20°C)		
300°C / 2h Metal recovery: 120%	The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.					

Welding and packing data:

	We	Iding parame	eters	F	Packing	
Approvals:	ф 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



 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:

	and
Ota ala	
Steels	
Cast steels	

Heat treatment:

Preheating is not required.

Coating type: Basic	Typical weld metal properties:						
Welding current:	Chemical	compos	sition, wt %:				
AC	С	Cr	Mo	Nb	W	V	
DC +	6.0	22.0	6.0	6.0	2.0	1.0	
Welding positions:	Mechanic	Mechanical properties:					
Podrying tomporaturo:	Hardness	:	62-67 HRC	typic	al: 66 HRC	C (20°C)	
Metal recovery: 235%	The hardness of the deposit depending on the relevant welding conditions and the chemical composition of the base metal.						

Welding and packing data:

We	Welding parameters			Packing		
φ	Length	Current	Weight/	Weight/	Weight/	
mm	mm	A	packet	carton	1000 pcs	
			kg	kg	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:



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	Typical weld metal properties:				
Welding current:	Chemical composition, wt %:				
ĂC	С		Cr	W	
DC +	3.8		28	4.5	
Welding positions:	Mechanical Hardness:	57-62 HRC	typical: 60 HRC	(20°C)	
Redrying temperature: 300°C / 2h	The hardness conditions an	of the deposit d the chemical	depending on the re composition of the b	elevant welding 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

Approvals:				