

# Repair and Hard-facing welding

Forging Mold, Cement, Continuous casting roller

## Repair and Hard-facing welding for Hot-rolling forging Mold

Class	Product	Dia. (mm)	Hardness (HRC)	Forging mold	Chemical composition(%)						
					C	Si	Mn	Cr	Ni	Mo	
Hard Facing forging mold	K-30RT	1.6~3.2	11~29	Heat Hammer	0.01	0.45	13.19	15.26	2.23	1.54	
	K-40RT	1.6~3.2	35~45	Hammer	0.07	0.57	1.81	2.66	3.33	1.43	
	K-58RT	1.6~3.2	50~60	P e s s	Hard facing	0.32	0.87	0.77	9.87	0.11	2.50
	K-63RT	1.6~3.2	45~55		Cladding	0.15	0.94	0.83	9.65	2.00	1.70
	K-65RT	1.6~3.2	50~60		Hard facing	0.24	0.84	0.61	9.10	1.80	2.50

## Repair and Hard-facing welding for Continuous casting roller

Class	Product	Dia.(mm)	Hardness (HRC)	Feature	Welding Process
Hard Facing forging mold	K-CXA-40HT	1.2~1.6	32~38	Metal cored wire	Repairing welding (manual)
	K-CXA-41HT	1.2~1.6	32~38	Metal cored wire	
	K-13CrLT	2.0~3.2	32~38	Composite wire	SAW + FCW type (with EF-200F)
	K-13CrHT	2.0~3.2	35~45		
	K-13CrNiHT	2.0~3.2	38~44		
	K-15CrHT	2.0~3.2	20~25	Open-arc type	For the first layer Hard facing for the 2st and 3rd layers
	K-430 O	2.0~3.2	20~25		
K-414 N	2.0~3.2	40~45			

## Repair and Hard-facing welding for Cement

Class	Product	Dia. (mm)	Hardness (HRC)	Chemical composition(%)				Feature
				C	Si	Mn	Cr	
Cement	K-HCRHT	2.0~3.2	55~62	5.2	1.0	2.5	28.5	High Cr- carbide type Austenitic Mn steel type
	KX-CRHT	1.2~3.2	62~68	3.0	1.3	0.2	23.5	
	K-CCHT	2.0~3.2	52~58	4.5	0.5	0.9	26.5	
	K-MCHT	2.0~3.2	18~24	0.4	0.3	16.5	13.0	

## Notes on usage and welding condition

- Please contact to R&D center for specific information  
(Tel: 055-269-7285, Fax: 055-266-4487)

## Package

Dia. (mm)	1.2	2.0	3.2
Spool (kg)	5, 12.5, 15, 20		
Pailpack (kg)	100 ~ 300		
POP (kg)	100 ~ 300		

## Proper ranges of welding (DC+)

Dia.(mm)	1.6	2.0	2.4	3.2	Shielding gas	Welding position
Current (A)	180~450	240~500	300~600	400~700	75%Ar-25%CO <sub>2</sub>	Flat
Voltage (V)	26~34	27~35	27~36	28~36		

## Welding positions

