

#### For welding of general light structural steels.

AWS A5.1 E6013 KS D7004 E4313 JIS Z3211 E4313

#### **Applications**

Welding of vehicles, machines and light structural steels. Surface dressing of heavy steel structure

#### Characteristics

CR-13 is a high titania type electrode, whose usability is excellent in all position welding. CR-13 is especially suitable for welding of light structural steels because arc stability, slag removal and bead appearance are good and its penetration is shallow.

#### Notes on usage

- (1) Pay attention not to exceed the range of proper currents. Welding with excessive current not only lowers X-ray soundness, but also causes increase of spatter, undercut and insufficient slag covering.
- (2) Dry the electrodes at 70~100℃ for 30~60 minutes before use. Excessive moisture absorption lowers usability and may result in some porosities.

## Typical chemical composition of weld metal (%)

С	Mn	Si	Р	S
0.08	0.38	0.28	0.017	0.011

# Typical mechanical properties of weld metal

YP	TS	EL	
N/mm²(kgf/mm²)	N/mm²(kgf/mm²)	%	
430(44)	480(49)	29	

### Size & recommended current range (AC or DC ±)

Dia.	(mm)	2.0	2.6	3.2	4.0	5.0	6.0
L (r	nm)	300	350	350	400	400	450
Amp.	F	35-65	45-100	60-130	105-170	150-220	200-280
	V&OH	30-65	45-90	60-110	100-150	125-190	-

<sup>·</sup> Approval : ABS, DNV, KR, LR, NK