# **HOBART HN-528**

## **Characteristics and Applications:**

HOBART HN-528 is a basic agglomerated submerged-arc welding flux that is recommended for high productive welding procedures in unalloyed and fine-grained low alloy steels requiring good quality welds with high toughness properties at low temperatures. HN-528 is established for welding wind towers and providing a high level of consistency and mechanical property performance. The flux promotes a very stable arc which providing excellent slag detachment in narrow gap welds. The weld is of a uniform even profile with regular fine ripple formation and smooth toe blending. HN-528 is suitable for use with DC+ or AC and is ideal for single wire, twin wire, tandem arc.

#### Notes on Usage:

- 1. The flux must be re-dried at a temperature of 300~350°C for 2~4hr holding time when it is affected by moisture pick-up.
- 2. Re-circulation of flux should be limited to three cycles. After this, the flux should be mixed with twice its volume of new flux prior to further use.
- 3. We recommend using heated hoppers for storage of flux in production.

# Typical Chemical Composition of Weld Metal (wt%)

Wire	Weld metal classification		C	Mn	Si	Р	S
	AWS A5.17	EN ISO 14171-A	C	1111	5	Г	3
HOBART M12K	F7A6-EM12K	S 38 5 FB S2Si	0.06	1.16	0.26	0.020	0.005
HOBART H12K	F7A8-EH12K	S 46 6 FB S3Si	0.08	1.51	0.33	0.024	0.007

## **Typical Mechanical Properties of Weld Metal**

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Wire	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf)	Temperature °C(°F)
HOBART M12K	448(65)	532(77)	33	186(137)	-51(-60)
HOBART H12K	498(72)	575(84)	28	152(112)	-51(-60)
				148(109)	-62(-80)

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