Replaces 1001

HOBART® HN-511

AWS A5.17-07	F7A6-EM12K
	F7A8/P8-EH12K
AWS A5.23-07	F8A6-EA2-A2
	F9A6/P4-EF3-F3
	F11A4-EG-G
EN 756	S 38 5 FB S2Si
	S 46 6 FB S3Si
	S 46 5 FB S2Mo
EN 760	S A FB 155 AC H5

Description：

HN-511 is a high–basic agglomerated submerged arc flux. It is suitable for use with both DC and AC and is applicable for single as well multi wire process.

It provide excellent weldability and due to neutral behavior, high mechanical properties of weld metal can be controlled by using the appropriate wire grade.

Application:

1. Fine grain structural steels for low temperature requirements.
2. Construction steels (heavy wall).
3. Off-shore applications.
4. High tensile fine grain steels.
5. Pressure vessel.
6. Pipes.

Notes on Usage :

1. Any flux exposed to atmosphere for an excess period must be re-baked at 350-400 ℃ for 1 hour.
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. It is recommended to use heated hoppers for storage of flux in production.

Typical chemical composition all weld metal, weight %

with wire	C	Si	Mn	P	S	Ni	Cr	Mo
Hobart M12K (S2Si)	0.06	0.23	1.16	0.026	0.004	--	--	--
Hobart H12K (S3Si)	0.07	0.32	1.57	0.026	0.002	--	--	--
Hobart 12 E (S2Mo)	0.07	0.17	1.12	0.021	0.004	--	--	0.41
Hobart 41E (S3Ni1Mo)	0.07	0.22	1.55	0.026	0.001	0.98	--	0.48
Hobart E5G	0.075	0.31	1.518	0.02	0.002	2.04	0.756	0.422

Typical mechanical properties , all weld metal

with wire	Yield stress N/mm^2	Tensile strength N/mm^2	Elongation %	Charpy I.V. J	Temp. °C	PWHT
Hobart M12K	414	493	38	190	-50	--
Hobart H12K	466	544	35	99	-60	AW
	410	509	35	105	-60	620℃*1HR
Hobart 12 E	523	567	32	100	-50	--
Hobart 41E	655	716	26	59	-50	AW
	571	644	29	76	-40	620℃*12HR
Hobart E5G	813	865	22	72	-40	--

HOBART BROTHERS HOBART Performance Welding