Stanvac

Product Data Sheet

C-Mn and low-alloy steels — STAVINOX 7018

- ★ Ultra smooth finely rippled weld beads.
- ★ Less than 4.0 ml diffusible hydrogen level.
- ★ Excellent impact notch toughness.
- ★ Superior reliability for the critical welding of C-Mn microlloyed & low alloy structural steels.
- ★ Recommended for critical security welding applications.
- ★ Radiographic out of position welds including pipe welding.
- ★ Suitable for off shore applications.

Classification

***AWS A*5.1:** E 7018 H4 ***EN 499*:** E 42 4 B 32 H5

EN ISO 2560: E 42 4 B 32 H5

Description and applications

Basic heavy coated, iron powder, low hydrogen electrode for producing tough and crack-free welded joints even on steels having a carbon content up to 0.40%. Good operating characteristics when positional welding. Weld metal has good toughness properties down to -40°C.
Used in structural engineering, boilers, tanks, bridges, ship building, vehicle constructions….

Base materials

S(P)235-S(P)420; GP240-GP280; L245-L360

Approvals

ABS, BV, LRA

All weld metal mechanical properties (typical)

Heat Treatment	Tensile Strength R_m (N/mm^2)	Yield Strength R_m (N/mm^2)	Elongation A_5%	Impact Energy ISO-V(J)- 30°C
As welded	550-620	450	28	80 J

Typical weld metal Chemical Composition (%)

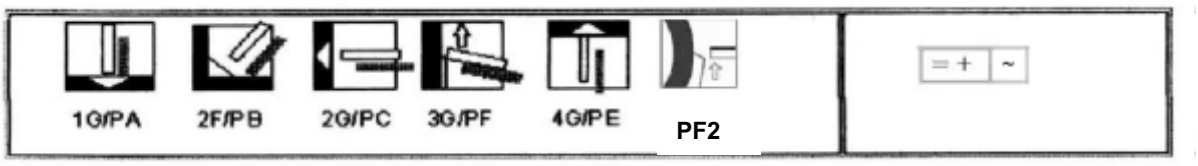
C	Si	Mn	P	S
0.07	0.40	1.20	0.020	0.020

Amperes (A)

2.40	3.20	4.00	5.00
60-80	110- 135	140- 180	180-230

Storage and Redrying :

Keep dry and avoid condensation,
HD≤5: Re-dry at 340-360°C for 2 hours, 5 times max.
HD≤10: Re-dry at 300-350°C for 2 hours, 5 times max,



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