

MMA Electrodes C-Mn and low-alloy steels

STARBLAZE PRIME 7018S(SP)

- Ultra smooth finely rippled weld beads.
- Good impact notch toughness.
- Superior reliability for the critical welding of C, Mn microlloyed & low alloy structural steels.
- Excellent mechanical properties in class
- Recommended for severe service conditions in sour gas services.
- Conform NACE TM-0284 & TM-0177 requirements.

AWS A5.1 : E 7018 - 1 EN 499 : E 42 5 B 32 H5 Classification

> **IS 814** EN ISO 2560-A: E 42 5 B 32 H5 : EB 5629H3JX

Description and applications

Basic heavy coated, low hydrogen, iron powder type 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 is of radiographic quality and has good toughness properties down to -50°C.

The excellent mechanical properties makes this electrode suitable for critical applications in such industries as offshore, nuclear and pressure vessels as well as construction of equipments subject to heavy dynamic load, impact and severe service conditions in sour gas services.

Base materials

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

Typical Weld **Metal Chemical** Composition (%)

С	Mn	Si	Р	S	Ni	Мо
0.06	1.40	0.30	0.015	0.010	0.10	0.10

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All weld metal Mechanical **Properties** (Typical)

Heat Treatment	Yield strength R _p (N/mm²)	Tensile strength R _m (N/mm²)	Elongation A ₅ (%)	Charpy Impact value (ISO-V J –50°C)	Hardness
Œ ÁY ^ å^å	450	5F0ÆÄF€	3€	Ì 5ÆR	200 BHN Max.

Corrosion Tests-Conforming NACE standard TM-0284(HIC) and TM-0177 (SSCC)

Diffusible hydrogen	< 1 ml
(per 100gm weld metal):	< 4 ml.

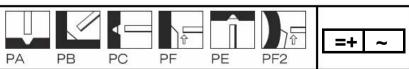
Amperes (A)

2.50mm	3.15mm	4.00mm	5.00mm
60-80	110-135	140-180	180-230

Welding instruction

Keep dry and avoid condensation, HD≤5: Re-dry at 200-300°C for 1 to 2 hours, 5 times max. HD≤10: Re-dry at 250-350°C for 1 to 2 hours, 5 times max.

Welding Position



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