

C-Mn and low-alloy steels

STARBLAZE 7018S

- ★ Ultra smooth finely rippled weld beads.
- ★ Less than 4.0 ml diffusible hydrogen level.
- ★ Highest impact notch toughness in class.
- ★ Superior reliability for the critical welding of C-Mn microalloyed & low alloy structural steels.

Classifications AWS A5.1: E 7018-1 H4 **DIN EN ISO 2560-A:** E 42 5 B 32 H5 **IS 814 :** EB 5629H3JX

Description and applications

Basic heavy coated, electrode for producing tough and crack-free welded joints even on steels having a carbon content up to 0.40%. Weld metal recovery is approximately 115%. Good operating characteristics when positional welding. Weld metal has good toughness properties down to -50°C. Ultimate mechanical properties in 7018-1 group. Suitable for buffer layers.

Base materials

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

All weld metal mechanical properties (typical)

| Heat Treatment | Tensile Strength R_m (N/mm ²) | Yield Strength R_p (N/mm ²) | Elongation A_5 (%) | Charpy Impact value (ISO-V J -45°C) |
|----------------|--|--|-------------------------|--|
| As welded | 550-620 | 450 | 30 | 80 |

Typical weld metal Chemical Composition (%)

| C | Si | Mn | P | S |
|------|------|------|-------|-------|
| 0.07 | 0.35 | 1.40 | 0.020 | 0.020 |

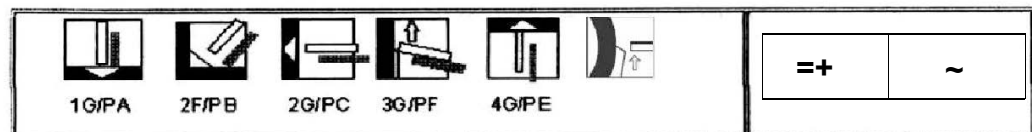
Amperes (A)

| 2.50mm | 3.15mm | 3.20mm | 4.00mm | 5.00mm |
|--------|---------|---------|---------|---------|
| 50-90 | 100-140 | 100-140 | 130-180 | 180-230 |

Welding Instruction

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,

Welding Positions



Stellaris Specialities India Ltd.

(Division: StarBlaze India)

GST No.: 06AAICS2482B1ZK / Legal Metrology No.: GOI/DL/2022/4850

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Plant 3: B-100, Mayapuri Industrial Area, Phase-1, Near Police Station, New Delhi-110064

Plant 4: A-334, RIICO Industrial Area, Karoli, Bhiwadi, Rajasthan - 301707

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