

Low alloy high- strength steels

STARBLAZE PRIME 120-M (MOD)

Classification **AWS A5.5 : E 12018-M EN ISO 18275-A : E 79 5 Z B 32 H5 IS 1395 :E 83 B M4 26 Fe**

Description and applications Basic coated low hydrogen iron powder type electrode for welding of high strength steels having yield strength upto 850N/mm². The electrode features stable and concentrated arc, low spatters, very easy slag removal, finely rippled weld beads. Ni-Cr-Mn-Mo alloyed weld deposit is excellent crack resistant. Welds are of radiographic quality. Excellent mechanical properties and impact toughness at -50°C. Diffusible hydrogen less than 3ml/100gm weld metal.

Base Materials **S 890, S(P)690, HY 80, N-A-XTRA 70, USST1 grades etc.**

Typical Weld Metal Chemical Composition (%)

| C | Si | Mn | Ni | Cr | Mo | S | P |
|------|------|------|------|------|------|-------|-------|
| 0.07 | 0.60 | 1.80 | 2.30 | 0.80 | 0.45 | 0.010 | 0.020 |

Hardness

30-35 HRc (Pure weld metal)

All weld metal Mechanical Properties (Typical)

| Test Condition | Yield strength R _p (N/mm ²) | Tensile strength R _m (N/mm ²) | Elongation A ₅ (%) | Charpy impact value (ISO-V J -51°C) |
|----------------|---|---|----------------------------------|--|
| As Welded | 745-825 | ≥ 830 | ≥ 18 | ≥ 47 |

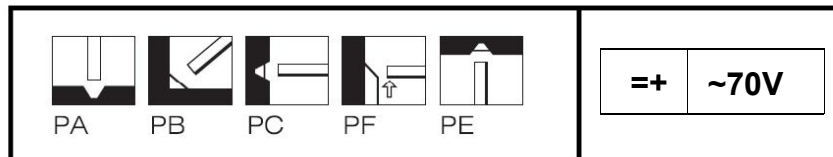
Amperes (A)

| 2.50mm | 3.15mm | 4.00mm | 5.00mm |
|--------|--------|---------|---------|
| 50-90 | 90-140 | 130-180 | 180-240 |

Welding instruction

Keep dry and avoid condensation.
Re-dry at 300 - 350°C for 1-2 hours.

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

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