

## C-Mn and low-alloy steels

## STARBLAZE PRIME 7018H4R

- ★ H4R grade, outstanding low moisture pick up.
- ★ Ultra smooth finely rippled weld beads.
- ★ Less than 4.0 ml /100g diffusible hydrogen.
- ★ Excellent impact notch toughness at -40°C.
- ★ Superior reliability for the critical welding of C-Mn microalloyed & low alloy structural steels.
- ★ Recommended for critical security welding applications.
- ★ Radiographic out of position welds including pipe welding.
- ★ Suitable for marine and off shore applications.

**Classification**      **AWS A5.1 : E 7018 H4R**      **DIN EN ISO 2560-A : E 42 4 B 42 H5**

**Description and applications**      Basic heavy coated, iron powder, low hydrogen LMA 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 has good toughness properties down to -40°C.

Used in structural engineering, boilers, tanks, bridges, ship building, vehicle construction...

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

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

C	Si	Mn	P	S
0.07	0.38	1.30	0.020	0.020

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

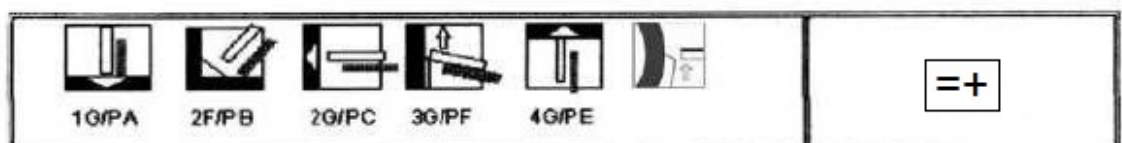
Heat Treatment	Tensile Strength $R_m$ (N/mm <sup>2</sup> )	Yield Strength $R_p$ (N/mm <sup>2</sup> )	Elongation $A_5$ (%)	Charpy Impact Value (ISO-V J -40°C)
As welded	550-640	>450	28	80

**Amperes (A)**

2.40mm	2.50mm	3.15mm	3.20mm	4.00mm	4.80mm	5.00mm
60-90	60-90	110-140	110-140	140- 190	180- 230	180-230

**Welding instruction**      Keep dry and avoid condensation.

**Welding Positions**



**Stellaris Specialities India Ltd.**

(Division: StarBlaze India)

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

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