

## C-Mn and low-alloy steels

## STARBLAZE PRIME 7018S H4R

- H4R grade, outstanding low moisture pick up.
- Ultra smooth finely rippled weld beads.
- Less than 4.0 ml /100g diffusible hydrogen level.
- Excellent impact notch toughness at -50°C.
- Superior reliability for the critical welding of C-Mn microlloyed & low alloy structural steels.
- Recommended for critical security welding applications.
- Suitable for marine and off shore applications.

Classification AWS A5.1: E 7018-1 H4R

**DIN EN ISO 2560-A:** E 42 5 B 42 H5

**Description and** applications

Basic heavy coated, iron powder extremely low moisture pick up, 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 -50°C. Ultimate mechanical properties in 7018-1 group.

**Base Materials** 

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

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

С	Si	Mn	Р	S
0.07	0.35	1.50	0.020	0.020

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

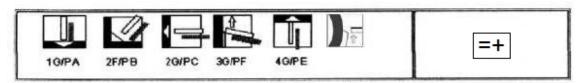
Heat Treatment	Tensile Strength R <sub>m</sub> (N/mm²)	Yield Strength R <sub>p</sub> (N/mm²)	Elongation A₅(%)	Charpy Impact Value (ISO-V J -45°C)	Charpy Impact Value (ISO-V J -50°C)
As welded	550-640	>450	28	85	80

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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