

# SC 7018-1 H4R

Mild steel electrode

## Classification

AWS A5.1: E 7018-1 H4R

EN 499: E 42 5 B 42 H5

EN ISO 2560: 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.

- 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 microalloyed & low alloy structural steels.
- Recommended for critical security welding applications.
- Suitable for marine and off shore applications.

## Base materials

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

## All weld metal mechanical properties (typical)

Heat Treatment	Tensile strength Rm (N/mm <sup>2</sup> )	Yield strength Rm (N/mm <sup>2</sup> )	Elongation A5 (%)	Impact energy ISO- V (J) -45°C	Impact energy ISO- V (J) -50°C
As welded	550-640	>450	28	85	80

## Typical weld metal chemical composition (%)

C	Si	Mn	P	S
0.07	0.35	1.50	0.020	0.020

## Amperes (A)

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

## Storage

Keep dry and avoid condensation.

## Welding positions



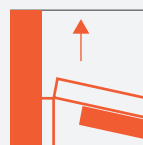
1G/PA



2F/PB



2G/PC



3G/PF



4G/PE



PF2

