

# S-76LTH

Type : Basic



## Conformances

AWS A5.5/ ASME SFA5.5 E7016-G  
 JIS Z3211 E4916-N1 AP L  
 EN ISO 2560-A-E42 6 Z B H5

ABS 5Y, 5Y400 H5  
 LR 5Y40 H5  
 DNV-GL 5Y40 H5  
 CE

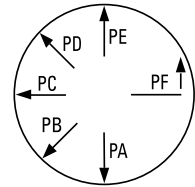
## Applications

- Low temperature strength steel
- Offshore structure
- LPG, LNG storage tank

## Features

- Low hydrogen electrode (HDM ≤ 5ml/100g)
- Good impact value at -60°C
- CTOD properties at -40°C (-40°F) temperature

## Welding Position



## Current

AC or DC +

## Redrying Conditions

350~400°C (662~752°F) X  
 0.5~1hr

## Diameter / Packaging

| Diameter   | Length   | Standard   |             | Vacuum        |              |            |             | P.V.C      |             |
|------------|----------|------------|-------------|---------------|--------------|------------|-------------|------------|-------------|
|            |          | packet     | carton      | packet        | carton       | packet     | carton      | packet     | carton      |
| mm (in)    | mm (in)  | 5kg(11lbs) | 20kg(44lbs) | 1.5kg(3.3lbs) | 15kg(3.3lbs) | 5kg(11lbs) | 20kg(44lbs) | 5kg(11lbs) | 20kg(44lbs) |
| 2.6 (3/32) | 350 (14) | ✓          |             | ✓             |              | ✓          |             | ✓          |             |
| 3.2 (1/8)  | 350 (14) | ✓          |             | ✓             |              | ✓          |             | ✓          |             |
| 4.0 (5/32) | 400 (16) | ✓          |             | ✓             |              | ✓          |             | ✓          |             |
| 5.0 (3/16) | 400 (16) | ✓          |             | ✓             |              | ✓          |             | ✓          |             |

SAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX

### Typical Chemical Composition of All-Weld Metal (%)

| C    | Si   | Mn   | P     | S     | Ni   | Ti    | B      |
|------|------|------|-------|-------|------|-------|--------|
| 0.08 | 0.35 | 1.35 | 0.013 | 0.004 | 0.45 | 0.018 | 0.0015 |

### Typical Mechanical Properties of All-Weld Metal

| YS<br>MPa(lbs/in <sup>2</sup> ) | TS<br>MPa(lbs/in <sup>2</sup> ) | EL<br>(%) | Temp<br>°C(°F) | CVN-Impact Value<br>J (ft.-lbs) |
|---------------------------------|---------------------------------|-----------|----------------|---------------------------------|
| 540 (78,400)                    | 590 (85,600)                    | 30.0      | -46 (-51)      | 190 (137)                       |
|                                 |                                 |           | -60 (-76)      | 100 (72)                        |

### Typical Welding Parameters / Amp.(A)

| Diameter mm (in) | 2.6 (3/32) | 3.2 (1/8) | 4.0 (5/32) | 5.0 (3/16) |
|------------------|------------|-----------|------------|------------|
| Length mm (in)   | 350 (14)   | 400 (16)  | 450 (18)   | 450 (18)   |
| F                | 60~90      | 90~140    | 130~190    | 180~240    |
| V-up, OH         | 50~80      | 80~120    | 120~170    | 150~200    |