

S-707T X H-14

Type : Neutral



Conformances

AWS A5.17 / ASME SFA5.17 F7A(P)6-EH14
 JIS Z3352 SA AB1
 EN ISO 14174-S A AB 1 / EN ISO 14171-A-S4
 KR 3T, 3YT, 4YM
 ABS 4YM, 3T, 3YT
 LR 4YM, 3T, 3YT

BV A4YM, A3T, A3YT
 DNV-GL IVYM, IIIYT
 NK KAW53T, KAW54M
 CE
 RINA 4YM, 3YT
 RS 3T, 3YT, 4Y40T, 4Y40M H10

Applications

- Shipbuilding

Features

- Both side single-layer welding
- Low consumption of flux
- Density : 1.2g/cm³

Current

AC, DC +

Basicity Index

1.8

Packages (Flux)

Tin Can 20kg(44lbs)
 PE Bag 20kg(44lbs)

Flux Composition

| Consumable | Chemical Composition, wt% | | |
|------------|---|------------------------------|-----------|
| | SiO ₂ + Al ₂ O ₃ | MgO + CaF ₂ + CaO | MnO + FeO |
| S-707T | 50 | 45 | 5 |

Diameter / Packaging

| Diameter mm (in) | Spool | | | Basket | | | | | | Coil | | | | Pac | | | | |
|---------------------|-----------------|-----------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|--|--|--|
| | 20kg (44lbs) | 25kg (55lbs) | 100kg (220lbs) | 25kg (55lbs) | 100kg (220lbs) | 200kg (440lbs) | 250kg (551lbs) | 300kg (661lbs) | 500kg (1102lbs) | 200kg (440lbs) | 250kg (551lbs) | 300kg (661lbs) | 350kg (771lbs) | 400kg (881lbs) | | | | |
| 1.6 (1/16) | ✓ | | | ✓ | | | | | | | ✓ | | | ✓ | | | | |
| 2.0 (5/64) | ✓ | | | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | | | | | | |
| 2.4 (3/32) | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | | | | | | |
| 3.2 (1/8) | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | | | |
| 4.0 (5/32) | | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 4.8 (3/16) | ✓ | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | |
| 6.4 (1/4) | | | | ✓ | ✓ | | | | | | | | | | | | | |

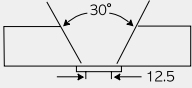
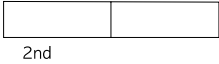
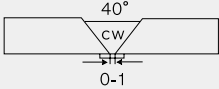
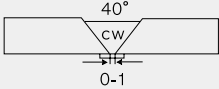
Typical Chemical Composition of All-Weld Metal(%)

| Wire | C | Si | Mn | P | S | BM | Th.(mm) |
|------|------|------|------|-------|-------|-------|---------|
| H-14 | 0.10 | 0.37 | 1.54 | 0.020 | 0.012 | SS400 | 25 |
| | 0.14 | 0.41 | 1.43 | 0.018 | 0.008 | EH36 | 20 |
| | 0.11 | 0.29 | 1.52 | 0.018 | 0.009 | DH36 | 25 |

Typical Mechanical Properties of All-Weld Metal

| Wire | YS MPa(lbs/in ²) | TS MPa(lbs/in ²) | EL (%) | Position of fracture | CVN-Impact Value J (ft·lbs) | | | BM | Th.(mm) |
|------|---------------------------------|---------------------------------|-----------|-------------------------|-----------------------------|--------------|---------------|-------|---------|
| | | | | | 0°C (32°F) | -20°C (-4°F) | -51°C (-60°F) | | |
| H-14 | 570 (82,800) | 605 (87,900) | 28.0 | - | - | - | 80 (59) | SS400 | 25 |
| | - | 570 (82,800) | - | BM | - | 50 (37) | - | EH36 | 20 |
| | - | 580 (84,200) | 23.0 | - | 70 (52) | - | - | DH36 | 25 |

Typical Welding Parameters

| Wire | Dia. (mm) | Th. (mm) | Groove Design (mm) | Pass | Amp. (A) | Volt. (V) | Speed (cm/min) | Remarks |
|------|--------------|-------------|---|--------------|----------------|--------------|-------------------|---------------------|
| H-14 | 4.0 | 25 |  | 1-13 | 550 | 30 | 40 | AWS A5.17 |
| H-14 | 4.8 | 20 |  | 1st | L(DC+) 1100 | 37 | 100 | Tandem |
| | | | | T(AC) 700 | 42 | | | |
| H-14 | 4.8 | 25 |  | 2nd | L(DC+) 1200 | 37 | 100 | SL |
| | | | | T(AC) 700 | 42 | | | |
| H-14 | 4.8 | 25 |  | 1 | 1150 | 35 | 20 | FAB OSW (DC+) |