

# SC-90M

TYPE : Metal-Cored

AWS A5.28/ ASME SFA5.28 E90C-G  
EN ISO 18276-A T 55 Z Z M M 1 H5

## Applications

SC-90M is used for welding in structural and mechanical fabrication automated or robotic welding

## Characteristics on Usage

SC-90M is a metal cored wire designed for single or multipass welding on 90Grade high-tensile steel. SC-90M provides an exceptionally smooth and stable arc, low spatter and minimal slag coverage and achieves good impact value at low temperature.

## Notes on Usage

- ① Proper preheating(50~150°C)(122~302°F) and interpass temperature must be used in order to release hydrogen which may cause cracking in weld metal when electrodes are used for medium and heavy plates.
- ② Use Ar + 20~25% CO<sub>2</sub> gas.

## Welding Position



1G 2F 3G 4G  
(PA) (PB) (PF) (PE)

## Current

DC +

## Shielding Gas

Ar + 20~25% CO<sub>2</sub> gas.

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

| C    | Si   | Mn   | P     | S     | Ni   | Mo   |
|------|------|------|-------|-------|------|------|
| 0.07 | 0.54 | 1.35 | 0.012 | 0.010 | 1.17 | 0.18 |

## 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) |
|---------------------------------|---------------------------------|-----------|------------------|----------------------------------|
| 610 (88,450)                    | 672 (97,400)                    | 25.5      | -50 (-58)        | 60 (44)                          |

## Approval

## I Packing(Including Ball Pac)

|           |      |      |           |    |
|-----------|------|------|-----------|----|
| Dia. (mm) | 1.2  | 1.4  | Spool(kg) | 15 |
| (in)      | .045 | .052 | (lbs)     | 33 |

## Sizes Available and Recommended Currents (Amp.)

|             |            |            |
|-------------|------------|------------|
| Size mm(in) | 1.2 (.045) | 1.4 (.052) |
| F & HF      | 200~300    | 260~340    |
| V-up, OH    | 100~150    | 140~180    |