



# LOTHERME HF- 18



## Composite submerged arc welding wires recommended with Maxflux SAF-704 flux for re-building of Rollers

### Characteristics & Applications:

LOTHERME HF-18 is a composite SAW wire of 0.5– 1.2 Cr, 1 to 2 % Ni, low carbon with controlled addition of Silicon & Molybdenum for buffer layer deposits. The weld metal has excellent bonding property, resistance to solidification cracking and is easily machinable.

MAXFLUX SAF-704 is an agglomerated basic flux, shall be re-dried at 350°C before use.

LOTHERME HF-18 wire is used for buffer layer prior to hard-surfacing of higher carbon (>0.25%) CC rolls and equivalent grade steel rolls. Single layer deposit is recommended as buffer layer.

For surface re-building, the wire can be used on multi-layers welding.

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

| Element | C        | Mn        | Si       | Cr      | Ni      | Mo        | N         |
|---------|----------|-----------|----------|---------|---------|-----------|-----------|
| Typical | 0.08 max | 0.50-1.20 | 0.60 max | 0.5-1.2 | 1.0-2.0 | 0.20-0.50 | 0.06-0.15 |

### Typical Mechanical Properties of All Weld Metal:

Weld Metal hardness after 3rd layer on MS Plate with LoTherme SAF-704 (AW) - 20-25 HRC

### Current and Packing Data: DC (+):

| Size (mm) | Current (A) | Volt.(V) | Linear travel speed, mm/min. |
|-----------|-------------|----------|------------------------------|
| 3.2       | 350-450     | 28-30    | 400-500                      |

### Packaging:

1. Wire size is 3.2mm. The wire is supplied in a layer wound 25 kg metallic ring packed in a shrink-wrapped corrugated box.
2. Wire is also available in 200/250kg card-board drum packing on a pallet.