

RolClad-58-S

/TF-81

Characteristics and Applications:

RolClad-58-S/TF-81 is a submerged arc flux-cored wire / flux. The impact resistance is excellent and the crack susceptibility is low. RolClad-58-S can be used for hardfacing on rollers and idlers where there is metal-to-metal wear. It is also suitable for hardfacing of the parts subjected to severe soil abrasion, such as Roller Press.

Notes on usage:

1. When the carbon content of the carbon steel reaches 0.5% or the carbon content of the low alloy steel exceeds 0.45%, preheat the base material to a temperature of 350 ~ 400 °C and use TWH-17-S as the root pass will reduce the cracks and provide better bonding between the base material and the hardfacing surface.
2. When the curvature of the workpiece is too large, the thickness is too thick, or the shape is too complicated, the weld bead is prone to high internal stress after welding and may cause cracks. A higher preheating temperature and interlayer temperature of 300 ~ 400 °C is required. The cooling rate after welding should not be too fast, and stress relief annealing should be implemented as soon as possible.
3. Keep the product dry, while it is stored or delivered. Re-bake of flux at 300~350°C for 1 hour is required if the flux is damp.
4. The number of welding layers better not exceed 4 layers.

Typical chemical composition (wt%):

| | C | Si | Mn | Cr | W |
|---------------|------|-----|-----|-----|-----|
| Typical value | 0.43 | 2.6 | 0.9 | 6.8 | 0.5 |

Range of weld metal hardness (on mild steel):

| Layer | 4th layer |
|----------------|-----------|
| Hardness (HRC) | 57-59 |

Suggested welding parameter (DC<+>):

| Diameter (mm) | 3.2 |
|----------------------------------|---------|
| Parameters | |
| Voltage (Volt) | 25-30 |
| Current (Amp) | 300-450 |
| Flow rate of shield gas (l/min.) | 30-40 |

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