

# RolClad-19-S /TF-R85

## Characteristics and Applications:

RolClad-19-S/TF-R85 is a submerged arc flux-cored wire / flux which produces low impurities weld deposit (2~3 layers) with a typical hardness of 32RC. It features good resistance to impact and strong resistance for high temperature softness, as well as resistance of corrosion, cold work deformation. It is suitable for build-up welding on high carbon base metal, such as S45C, S50C, S60C...etc. Crack susceptibility is very low particularly in multiplayer that can weld up to 20mm thickness and without micro-fissure. RolClad-19-S can be used for both build-up and hardfacing on rollers and idlers where there is metal-to-metal wear. Typical applications include high carbon steel crane wheels, idlers, mine car wheels and house rollers, etc..

- It is suitable for welding on high carbon base metal, such as S45C, S50C, S60C...etc.
- It has good impact resistance and low crack susceptibility.
- It has good resistance for pitting corrosion.

## Notes on usage:

1. RolClad-19-S has good resistance to cross checking and is not restricted with regard to deposit thickness.
2. Applications that are inherently crack sensitive may require one or more of the following:
  - High preheat and interpass temperatures 350-400°C. for 1<sup>st</sup> layer.
  - Controlled slow cooling.

## Typical chemical composition (wt%):

	C	Mn	Si	(Cr+Mo+Nb+V)
Typical value	0.07	2.1	0.6	3.0

## Range of weld metal hardness (On Mild Steel):

Layer	1st layer	2nd layer
Hardness (HRC)	26-29	26-33

## Suggested welding parameter (DC<+>):

Diameter (mm)	3.2
Parameters	
Voltage (Volt)	25-32
Current (Amp)	300-450
Flow rate of shield gas (l/min.)	30-40

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