# 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. RolCald-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 suit able 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 1st layer.
  - · Controlled slow cooling.

#### Typical chemical composition (wt%):

С	Mn	Si	(Cr+Mo+Nb+V)
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) Parameters	3.2
Voltage (Volt)	25-32
Current (Amp)	300-450
Flow rate of shield gas (I/min.)	30-40

<sup>\*</sup> The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and TienTai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by TienTai Electrode Co., Ltd.

