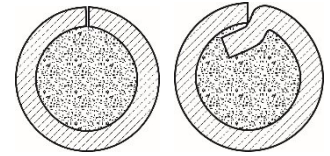


PP-Np-19GST*(Np-19MnSiTi)*

TU U 28.7-21459234-021:2008

Diameter: 1.2 – 4.0 mm
 Shielding: self-shielding
 Structure: tubular, overlapping

**General description**

Self-shielding flux-cored wire of **PP-Np-19GST** grade is designed for automatic and semi-automatic open-arc hardfacing of carbon steel parts exposed to metal-to-metal friction. It is desirable to perform hardfacing using reversed polarity direct current.

Welding process properties

Weld formation	- good
Slag separation	- good
Deposit factor, g/A·h	- 10 – 15
Crack susceptibility	- low
Wire consumption, kg	- 1.1 – 1.25
Hardness of weld metall	- HRC 26 – 35

Operating conditions

Wire diameter, mm	Current, A	Voltage, V	Deposition rate, m/h	Wire stick-out, mm
1.6	150 – 230	23 – 27	10 – 15	30 – 40
2.0	180 – 280	24 – 28	15 – 20	30 – 40
2.4	220 – 320	25 – 28	20 – 25	30 – 40
2.8	250 – 350	27 – 30	20 – 25	30 – 40

Properties of weld metall

Easily-machinable with cutting tools. In case of single-pad deposit welding, subsequent machining may be difficult due to increase of the weld pad hardness to HB 380 – 430 (40 – 45 HRC).

Process features

Hardfacing not require the parts to be pre-heated and the pad thickness to be limited.

Overvoltage may result in pore formation.

Wire diameters up to 2.2 mm can be supplied on metal spools K-300 (15 kg).

Application

Hardfacing of axles, shafts and their seats, rail car wheels, railway vehicle parts, gear teeth, resizing of carbon steel parts, etc.

