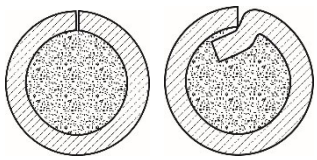
GRADE	CLASSIFICATION FEATURES	STRUCTURE TYPE

Hardsteel 36Mo

TU U 28.7-21459234-021:2008

Diameter: 3.0 – 4.0 mm
Shielding: flux
Structure: tubular, overlapping



General description

Flux-cored wire of **Hardsteel 36Mo** grade is designed for automatic and semi-automatic submerged-arc hardfacing of carbon or low-alloy steel parts exposed to metal-to-metal friction at normal and increased temperatures. It is desirable to perform hardfacing using reversed polarity direct current.

Welding process properties

Recommended flux	- **EFA-1**, AN-348A, AN-60
Weld formation	- good
Slag separation	- good
Deposit factor, g/A·h	- 10 – 15
Crack susceptibility	- low
Wire consumption, kg	- 1.1 – 1.2
Hardness of weld metal	- **HRC 30 – 42**

Operating conditions (submerged-arc)

Wire diameter, mm	Current, A	Voltage, V	Deposition rate, m/h
3.0	250 – 360	30 – 32	18 – 23
3.2	300 – 400	30 – 32	20 – 25
3.6	340 – 450	30 – 33	20 – 25
4.0	390 – 470	30 – 34	22 – 27

Properties of weld metal

Wear resistance: high under the recommended operating conditions. Impact resistance: good.
The weld metal can be machined with cutting tools.

Process features

For parts with the carbon content in steel below 0.25%, hardfacing does not require pre-heating. Otherwise, pre-heating to 250-300°C is required.

Application

Hardfacing of tracked vehicle undercarriage wheels and rollers, rubber mixer chambers and augers, steel crankshafts, universal joint spiders, multi-bucket excavator chain drum teeth, etc.