

EQUIPMENT FOR ULTRASONIC FINISHING TREATMENT



USFT equipment (an instrument with a tungsten carbide tip; US generator)

Areas of Application

The equipment is designed for ultrasonic finishing treatment (USFT) of high-strength and quenched components to reduce their roughness and to increase their wear resistance and fatigue strength

Specification

USG voltage, V	170 – 240
Output power, W	≤800
USG weight, kg	4.6
Instrument weight, kg	1.2
Vibration amplitude of instrument tip, μm	10 – 20
Static pressing force	≤500

Advantages

The equipment has significant advantages over the conventional surface plastic deformation methods. It is notable for a high performance, a low power consumption, and the ability to handle high-strength components. It provides a lower surface roughness and enables to create the so-called "white layer" ensuring a high resistance to corrosion and wear and an increased fatigue strength of components

Stage of Development. Suggestions for Commercialization

IRL5, TRL6
Manufacture, delivery, warranty service, and staff training, upon request

IPR Protection

IPR3

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