

EQUIPMENT FOR ULTRASONIC IMPACT TREATMENT OF METALS

Areas of Application

The equipment is designed for ultrasonic impact treatment (UIT) of welded joints in responsible constructions, metallic surfaces of cast products, as well as for various machine-building products for their strengthening, redistribution of residual stress, reduction of stress concentrators, reduction of surface roughness and improvement of corrosion resistance during operation and maintenance



Equipment for UIT of metallic products
(an impact instrument and USG)

Advantages

There are no analogs of such equipment in Ukraine. It enables UIT while manufacturing various products and weld structures. Its high performance is achieved due to a high frequency and a high energy of impacts. The power consumption is 1.3 times less as compared with shot-blasting and 1.7 times less than in the case of pneumatic treatment

Specification

The equipment is air-cooled.

USG voltage, V	170 – 240
Output power, W	≤ 800
USG weight, kg	4.6
Instrument weight, kg	3.8
Vibration amplitude of instrument tip, μm	10 – 25

Stage of Development. Suggestions for Commercialization

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

IPR Protection

IPR3

Contact Information

Vitalii P. Bevz, G.V. Kurdyumov Institute for Metal Physics of the NAS of Ukraine;
+38 044 424 12 05, e-mail: BevzV@ukr.net