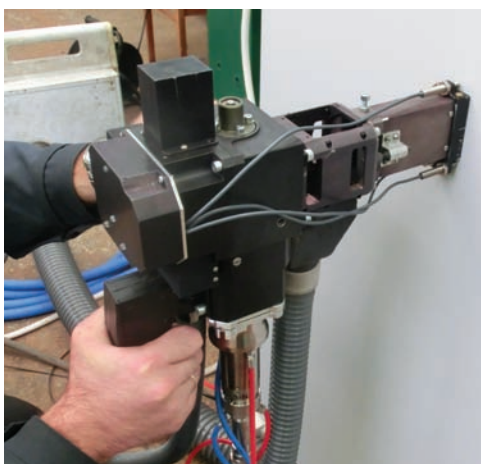


## UNIT FOR MANUAL LASER WELDING

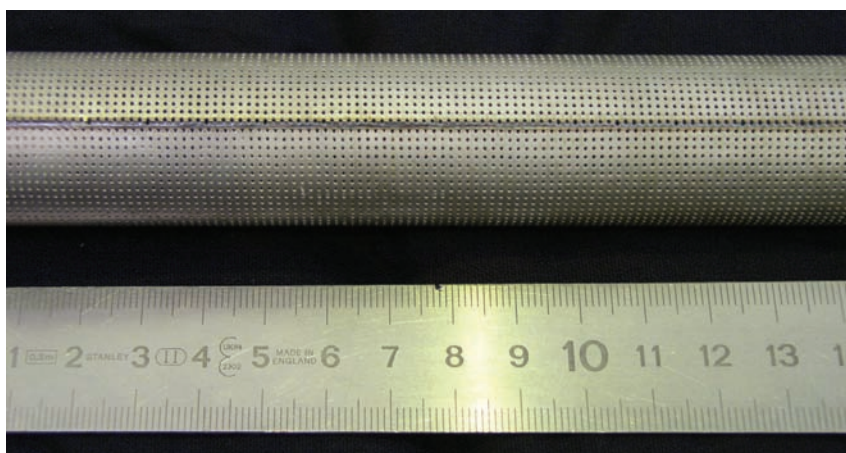
PWI by the order of carriage works (Changchun, China) has developed the unit for manual laser welding of car elements of modern high-speed trains. Weight-dimensions characteristics of the developed tool allow welding in different spatial positions. Carried metallographic investigations and mechanical tests of the welds produced with developed manual laser tool showed that the level of mechanical characteristics of given welded joints are as good as characteristics of the joints made using automatic laser welding.



## LASER WELDING

### OF BODY ELEMENTS WITH LOOSE EDGES

A technology for brazing of body elements of filters of 0.5–0.6 mm thickness stainless steels for paints and lacquers was replaced with laser welding using filler material in form of metallic powder. As a result, amount of defective products became 10 times smaller (spoilage in laser welding is 0.5 %). Strength and corrosion resistance of the joint is on the level of body base metal.



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