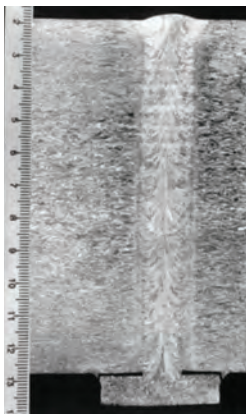
EQUIPMENT FOR NARROW-GAP ARGON TITAN WELDING WITH MAGNETOCONTROLLABLE ARC



Macrosection of 110 mm thick weld joint (left)
TV surveillance system that provides control over welding (right)

Narrow-gap argon titan welding equipment with magnetocontrollable arc

Areas of Application

The technology and equipment are designed for welding butt joints of titan and titan-based alloys (the thickness of elements welded ranges from 20 to 110 mm)

Specification

Dimensions of weld products, mm	
thickness	20—100
length	≤4000
Tungsten electrode diameter, mm	4.0; 5.0
Welding current, A	150—500
Welding rate, m/h	2.5—15
Welding stick diameter, mm	2.0; 2.5; 3.0

Advantages

As compared with the known techniques for thick titan welding (immersed arc, ESW), this welding technology has a lower heat input, a reduced area of thermal action, and, as a result, a lesser deformation of products; a simpler butt joint preparation, a shorter pretreatment, and a lower cost of pre- and welding works; a much lower argon consumption, a lower titan rod and power consumption; provides a high quality of welds, irrespective of thickness of elements welded

Stage of Development. Suggestions for Commercialization

IRL6, TRL6
Manufactured upon request

IPR Protection

IPR1

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