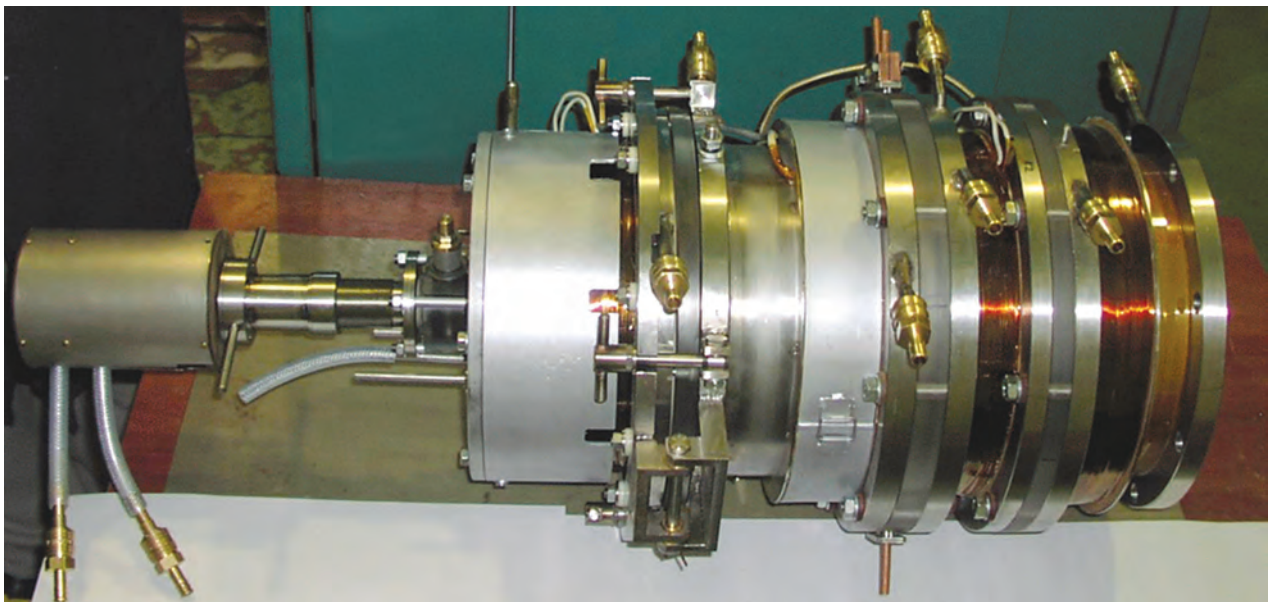
HIGH-PERFORMANCE LINEAR VACUUM ARC CATHODE PLASMA SOURCE WITH MACROPARTICLES FILTRATION



Areas of Application

The device is to be used for application of functional coatings to elements of machines and mechanisms in machine-building, instrument engineering, textile, aviation, and chemical industries, optical engineering, and electronics

Advantages

Effectiveness and degree of macroparticles separation from plasma are 1.5—2 times higher than those of existing analogs; uniform thickness of coating over large surfaces; surface polishing after coating deposition is not required; stability of the source parameters does not depend on cathode burnout; simple configuration

IPR Protection

IPR3, IPR5

Specification

Multicomponent wear resistant coatings based on nitrides, carbides, oxides or their mixes. Optically transparent, dielectric, chemically inert, biologically inert, and decorative coatings.

Output ion current (at an arc current of 100 A), A	5
Coating diameter, is 180 mm at a thickness tolerance, 180%	±5
Ti coating deposition rate at a distance of 150 mm from the exit filter, μm/h	20

Stage of Development. Suggestions for Commercialization

IRL6, TRL6
License sale; manufacture upon request; joint development of coating deposition technology

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