AT-303 WIND TUNNEL

Description
AT-303 wind tunnel is designed for the studying fundamental and applied problems related to the provisions for long-term flights of advanced scramjet powered hypersonic aircraft in the dense layers of the atmosphere.

Technical-appraisal and economic benefits
- Provides full-scale Reynolds numbers for the Mach number range $M = 8\div20$.
- Long running time (40-500 ms) that is sufficient for obtaining a steady flow.
- High purity working gas.

Application areas
Used for studies of gas thermodynamics problems of hypersonic ramjet aircraft.

Development stage
In 2000 the wind tunnel was put into operation at the Institute of Theoretical and Applied Mechanics.

Patent situation
RF patent (2001).

Commercial offers
Rendering of services:
- development and performance of aerodynamic tests within the Mach number range $M = 8\div20$ at high Reynolds numbers;
- modeling of ramjet operation under the conditions of a pure air flow;
• aerodynamic tests using arbitrary gases and mixtures for generation of the working stream.

Estimated Cost
Cost of one launch of the wind tunnel is US$ 200.

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