

Specialists of the Kurchatov Institute presented the prototype of a new unelectric plasma engine. A device that consumes up to 150 kilowatts of energy is considered as a promising development for future space missions, including flights to Mars and other planets.

According to the Vice President of the Center Alexander Blagov at the Technoprom-2025 forum, now scientists are working to bring a prototype to the stage of ready-made sample flights. The main advantage of the new development is Exceptionally a high specific impulse, which reaches ten million seconds. This is a key parameter for long -term interplanetary flights.

Unlike traditional liquid engines, which create great traction to overcome earthly attraction, the plasma engine works differently. It provides a small, but prolonged acceleration. This allows the spacecraft to gain the necessary speed not in minutes, but in a few days or weeks, but with much greater efficiency.

The concept of such an engine was proposed by the Soviet physicist Alexei Morozov. Today, similar, but less powerful engines are used to correct the orbit of satellites.