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NEW THRUST MEASUREMENT DEVICE FOR 10N ROCKET ENGINE

**Abstract**

10N rocket engine is the common engine used in the orbit and attitude control system for satellite. The thrust measurement precision of the 10N rocket engine is important to the orbit and attitude control of satellite, and it is also import to the life of satellite. A new thrust measurement device was developed for high precision measurement of the 10N rocket engine. The dynamic characteristics of the device were analyzed with finite element and test. The result of the finite element and test show that the frequency of the device is about 10Hz, and the device can be used for the steady measurement of the 10N rocket engine.