

DYNAMIC TESTS OF PROBES FOR MEASUREMENT OF PULSATIONS PRESSURE AT THE RAISED AVERAGE PRESSURE

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Dynamic tests of probes for measurement of pulsations of pressure in flowing part GTD with devices of correction of frequency characteristics are spent with a view of check of the developed mathematical models of processes and working off (operational development) of pre-production models of probes before them are direct application at various tests газотурбинных engines. For carrying out of dynamic tests with the purpose of experimental working off of probes for measurement of pulsations for conformity of their frequency characteristics settlement on faculty ASEU SGAU efforts of authors had been created the bench equipment and the измерительно-регистрационный комплекс, allowed to spend frequency tests at the raised{increased} average pressure. The created equipment has allowed to define{determine} experimentally frequency characteristics of probes at average pressure up to 25 kg/sm² to frequency of fluctuations of pressure up to 1000 Hz.

Measurements of pulsations of pressure, probes, dynamic tests, flowing path GTD, an oscillator of pressure, the stand for frequency tests of probes

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References

1. Shorin V.P., Gimadiev A.G., Bystrov N.D. Hydraulic and gas circuits of transfer of the information // M.: Mashinostroenie, 2000. – 328 p.

2. Acoustic methods and means of measurement of pulsations pressure // Shorin V.P., Shahmatov E.V., Gimadiev A.G., Bystrov N.D. -Samara, The Samara state space university, 2007.-132 p.