

عنوان مقاله:

Research on Thrust Calibration Technology of Aeroengine Indoor Test Bench

محل انتشار:

دوماهنامه مکانیک سیالات کاربردی، دوره 15، شماره 1 (سال: 1401)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Z. Liu - AECC Shenyang Engine Research Institute, Shenyang, Liaoning, 110015, China

S. Zhang - AECC Shenyang Engine Research Institute, Shenyang, Liaoning, 110015, China

Y. Yin - Harbin Engineering University, Harbin, Heilongjiang, 150001, China

Z. Wang - Harbin Engineering University, Harbin, Heilongjiang, 150001, China

Y. Luan - Harbin Engineering University, Harbin, Heilongjiang, 150001, China

S. Zhou - China Ship Research and Design Center, Wuhan, Hubei, 430000, China

خلاصه مقاله:

In order to solve the problem of insufficient thrust measurement accuracy of aeroengine indoor testbed, the thrust calibration experiment technology is studied. Form two aspects of engine static calibration and dynamic calibration, the mechanism of thrust calibration is comprehensively analyzed form the perspective of testbed and engine, and a complete set of operable test specifications is formed. The technical difficulties of engine consistency, inlet temperature deviation and non-standard weather are solved, and the accuracy of thrust transmission process is ensured. The test scheme of indoor test bed calibration is given, and the corresponding ideas and requirements are given according to the test conditions, test bench, calibration engine, test process and result analysis, to ensure the accuracy of calibration results.

کلمات کلیدی:

Aeroengine, Indoor testbed, Thrust calibration, Momentum correction, Thrust transfer

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1361777>

