

Development of a Software Prototype for the Air Flow Velocity Working Standard

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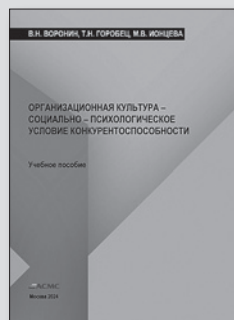
Wind tunnel software development is a rapidly evolving field. The main prospects for development are (a) improving the algorithm for executing the program; (b) improving the user interface. We have discussed the development of a prototype software that automates the testing of a wind tunnel setup and the processing of the obtained data for a reference air flow with a known velocity. The improvements to the algorithm include the possibility of using the software not only for wind tunnels of low and high subsonic speeds, but also for supersonic ones, which is a difficult task for a researcher. Improvements to the user interface include the creation of a full-fledged application that will allow for greater convenience in controlling the system without having to access the program code directly. Specific improvements will depend on the specific test objectives.

References

1. Afanas'ev V.A., Zhigunov M.M., Lanshin A.I., etc. Experimental development and certification testing of aircraft engines: textbook, gen. ed. by A.I. Lanshin and V.A. Afanasyev, Moscow, *Izd-vo MAI*, 2021, 456 P.
2. Afanas'ev V.A., Monakhova V.P., etc., *Trudy MAI*, 2017, is. 95.
3. Tsygan S.A., *Zakonodatel'naya i prikladnaya metrologiya*, 2023, no. 5(185).
4. Petunin A.N. Methods and techniques for measuring gas flow parameters, Moscow, *Mashinostroenie*, 1972, 330 P.

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