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INSTITUTE OF FLUID-FLOW MACHINERY
POLISH ACADEMY OF SCIENCES



TRANSACTIONS
OF THE INSTITUTE OF
FLUID-FLOW MACHINERY

113

Selected papers from the International Conference
on *Turbines of Large Output*
devoted to 100th Anniversary of
Prof. Robert Szewalski Birthday,
Gdańsk, September 22-24, 2003



GDAŃSK 2003

TRANSACTIONS OF THE INSTITUTE OF FLUID-FLOW MACHINERY

Appears since 1960

Aims and Scope

Transactions of the Institute of Fluid-Flow Machinery have primarily been established to publish papers from four disciplines represented at the Institute of Fluid-Flow Machinery of Polish Academy of Sciences, such as:

- Liquid flows in hydraulic machinery including exploitation problems,
- Gas and liquid flows with heat transport, particularly two-phase flows,
- Various aspects of development of plasma and laser engineering,
- Solid mechanics, machine mechanics including exploitation problems.

The periodical, where originally were published papers describing the research conducted at the Institute, has now appeared to be the place for publication of works by authors both from Poland and abroad. A traditional scope of topics has been preserved.

Only original and written in English works are published, which represent both theoretical and applied sciences. All papers are reviewed by two independent referees.

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Editorial

These Special Issues of the *Transactions of Fluid-Flow Machinery*, Nos. 113 and 114 contain selected papers from the International Conference on *Turbines of Large Output* devoted to commemorate 100th Birthday Anniversary of Prof. Robert Szewalski. The conference was held in Gdańsk, Poland on September 22-24, 2003.

The Conference is a continuation of previous conferences held at the Institute of Fluid-Flow Machinery PAS in former years dedicated to technology of steam turbines. Series of conferences bearing the same name took place in the years 1962, 1965, 1968, 1993. In 1997 organised has been a conference on steam turbines and related topics, but with a slightly amended title – *Problems of Fluid-Flow Machinery*. At present at the Institute of Fluid Flow Machinery there are conducted research of fundamental character encompassing both the issues related to steam turbines and fundamentals of power engineering.

Organisers of the present conference have returned to the traditional name, i.e. Conference on *Turbines of Large Output* to mark the respect to the memory of Professor Robert Szewalski (1903-1993), the founder and a director of the Institute of Fluid-Flow Machinery for several years, and initiator of the conference series devoted to the problems of steam turbines.

The Editors are very grateful to the referees of the papers presented in this issue of the *Transactions of Fluid-Flow Machinery*: J. Badur, W. Batko, E. S. Burka, J.T. Cieśliński, P. Doerffer, A. Gardzilewicz, B. Grochal, J. Kiciński, G. Kosman, T. Król, J. Krzyżanowski, J. Mikieliewicz, A. Neyman, W. Ostachowicz, R. Puzyrewski, R. Rządkowski, J. Świryczuk, M. Trela, T. Uhl and Z. Walczyk.

We appreciate cordially the manifested authors interest in our conference. Special thanks are conveyed to Ms 'Maya' Bagińska, for her fruitful editorial help related to directing the papers to reviewers and correspondence with the authors of contributions.

Prof. Jarosław Mikieliewicz
Editor-in-Chief

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Managing Editor

C O N T E N T S

Chmielniak T. and Kosman G.: Steam turbines for supercritical power plants – design and operation problems	5
Domachowski Z.: An impact of ambient parameters change on steam and gas turbosets control	25
Łuniewicz B. and Kietliński K.: Experience of Alstom Power in large output turboset modernisations in Poland	35
Uhl T., Cholewa W., Kiciński J., Sobera H. and Rydz E.: Monitoring and diagnostic system for high power turbine units	51
Augustyn G. Ł., Batko W. and Wierzbiński J.: Context filtering in diagnostics	67
Badyda K., Bujalski W., Lewandowski J. and Miller A.: Steam turbines identification based on archived process data .	75
Badyda K., Lewandowski J., Kopczyński O. and Miller A.: A concept of thermo-flow state diagnostic system for steam turbines	85
Banaszkiewicz M. and Gerdes R.: Probabilistic approach to lifetime assessment of steam turbines	95
Butrymowicz D. and Trela M.: Problems of condensation heat transfer in power plant heat exchangers	107
Chmielniak T., Łukowicz H., Wróblewski W. and Dykas S.: Numerical prediction of losses in the low pressure last stage blade	119
Dzięcioł E. and Szczepankowski A.: Microwave detector as used to monitor health/maintenance status of aircraft engine's turbine blades in hot gas	129
Feldberg L. A., Semenov V. N. and Popov S. A.: Measurement of dispersivity and moisture content in experimental turbines by optical methods	137
Gampe U., Altmann H., Buchheim G. and Barth G.: Cyclic operation of large-capacity steam turbines	147

Gardzilewicz A., Świryczuk J., Badur J., Karcz M., Werner R. and Szyrejko C.: Methodology of CFD computations applied for analysing flows through steam turbine exhaust hoods	157
Gardzilewicz A., Marcinkowski S., Adamkowski A., Janicki W. and Sobera H.: Measuring of unsteady pressures at the steam turbine exit	169
Głuch J.: On implementation of selected methods of artificial intelligence in expert systems for thermal and flow diagnostics	179
Jonáš P., Mazur O., Řehák V. and Uruba V.: The improvement of the hot-wire anemometer measurement procedure in the LP stage of a full scale steam turbine	191
Karcz M. and Badur J.: An alternative turbulent heat flux modelling for gas turbine cooling application	201
Kiciński J.: Coupled forms of vibrations in rotating machinery ...	213
Kořakowski L. and Krzyślak P.: Analysis of transient heat transfer operation in tube wall	225
Kosman G., Nawart K. and Kosman W.: Operation decision support regarding components of steam turbines wear in steady state	235
Kosowski K. and Stępień R.: Theoretical investigations into flows in rotor blade shroud clearance	249
Kubiak J., Sierra F., García-Gutiérrez A., Urquiza G., González G.: Algorithms and expert system for the diagnosis of faults for steam, gas turbines and compressors	263