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To cite this article:Karel Adamek. Conclusion. *International Journal of Mechanical Engineering and Applications*. Special Issue: Moving Forward to Monitor Democracy: Citizens Engagement in Scrutinizing Election Process in Indonesian 2014 General Election. Vol. 3, No. 1-1, 2015, pp. 53-53.

doi: 10.11648/j.ijmea.s.2015030101.19

Conclusion

The presented papers summarize the results of numerical flow simulations, solved in the last time period in VÚTS in Liberec. Topics are focused, first of all, on the area of air jet weaving and they are spreading in other textile technologies and generally in operating systems and equipment in other areas of technology after incoming requests of solutions. Two principal aims are observed first of all:

1. Verifications of a new hypothesis of solutions – the method of numerical flow simulation enables to confirm or not the hypothesis, defined for a solution of absolutely new problems.

2. The determination of a wrong function of actual equipment – the method of numerical flow simulation defines a relevant flow field (pressure, temperature, velocity, ...) and its evaluation usually implicates not only the reason of the wrong operation, but usually also the way of remedy.

The solution using the method of numerical flow simulation is relative simpler in general, comparing with repeated manufacturing of experimental setups, realization and evaluation of experiments, etc. From the several solved variants, it can be expertly chosen the probably suitable or successful of them and only that is verified by experiment. The experimental verification is necessary in general because the best model remains the simplified approach to the complicated reality, only.

Many received results were published on several international conferences and congresses if it should be

possible regarding the business secrets, company-specific know-how, etc. The references are noted in individual papers. Furthermore, several overview publications were elaborated, too, for instance [1], [2], [3], [4], [5], [6].

This summary and overview publication originated under the support of Czech grant No. LO 1213 – Excellent machinery research with the aim to collect the received results and to set the base for the next progress of the work.

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