IDENTIFICATION OF MOTION

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Nowadays, science is developing very rapidly, and people need to test the new inventions in practice. But some of these tests are very expensive, some dangerous, or we can't hold them in the Earth conditions, such as the explosion of atomic bomb or rocket launch into space. In the recent past, people spent months or even years, with millions of dollars to prepare such experiments and if something goes wrong then started again incurring huge financial losses. But now we can avoid this by changing a few keystrokes, using FlowVision.

Program complex FlowVision – leader of the numerical simulation of steady and unsteady motion of liquid and gas. FlowVision solves the problems of internal and external aero-hydrodynamics. Numerical integration of equations of fluid motion is based on the finite volume method.

FlowVision has unique features: dual solves the problem of interaction flow with the body, expects the joint motion of the free surface and floating bodies, automatically builds a grid for the calculated areas of any difficulty.

In turbo mechanical engineering FlowVision effectively counts for a aggregate with rotating parts. If the rotating parts can be surrounded by cylindrical surfaces we use the technology of "sliding grids". If the rotors can not be surrounded by a cylindrical surfaces - the technology of "movable bodies".

FlowVision is used to simulate the mixing of liquids in a variety of chemical reactors. During the simulation process is controlled by the quality of mixing. In such way increase the productivity of the unit.

Summing up should be added that the ability to solve difficult problems in power engineering and thermal physics makes FlowVision invaluable for all engineers. Set of models of physical processes helps to calculate the motion of gases and liquids inside burners, engines, boilers, pumps, turbines, compressors, etc.

Every engineer in the world in the beginning of any calculation of liquid or gas motion faces with a problem of identification of motion.

In the recent past to solve this problem engineer have to build very difficult systems of equipments and in the end of calculation they takes not at accurate results with errors. But now we can solve it in five minutes with the help of FlowVision Complex.

There are two main types of motion: laminar flow, turbulent flow.

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