



CHEMICAL MACHINERY

The field of chemical machinery provides unique training and research competence in the field of technological development (chemical operations, process simulation testing, chemical processes) and the implementation and operation of technologies (factory construction, design and operation of pressure systems).

COMPETENCIES

- Theoretical and simulation calculations of chemical operations related to technological processes
- Process modelling
- Strength design of pressure systems and equipment
- Numerical flow simulation of processes



SERVICES

- Analytical and simulation calculations of chemical operations
- Analysis of technological systems with a process simulator
- Strength stress analysis of pressure equipment, performance of standard strength measurements
- Preparation of 2D/3D static and dynamic CFD (Computational Fluid Dynamics) analyses
- Highly specific training courses in relevant areas



TOOLS

- Quantum X measuring and data collection system with sensors and transmitters
- High performance computer system for numerical simulation and simulation environments: ANSYS, SC/Tetra, Unisim Design, ChemCad, Visual Vessel Design



REFERENCES

- Design documentation of the shell change of the PL201ABCD autoclave in BorsodChem Zrt.
- Energy rationalisation of the Plant VCM in BorsodChem Zrt., basic engineering
- Development of a proposal for the complex examination of the oil system of generators in Paks Nuclear Power Plant Zrt.
- Strength test of AKG Zrt.'s own molded flanged DN150 PN40 gate valve in accordance with the MSZ 27003 standard, in accordance with the nuclear power plant regulations, to satisfy the conditions for classification into ABOS2 (FBOS2) class
- Kerogoil Kft., OLP-Tech Kft. (GINOP-2.1.2.8.4-16), fluid dynamic calculations of the pressurised part of the ultrasupercritical water generator (USKVG) equipment, sizing and designing some of the equipment in the boiler circuit.