Liquid control system

In this project the liquid level measurement is used in order to maintain a preselectable filling level height with a control loop. In the process, the filling level is controlled by the digital controller of the COM3LAB control technology. The system is very clear and shows the interplay of reference and actual value on closed control loops in didactical form. Filling level and flow can both be examined on one unit.

Temperature controlled system

The task is to control the precisely defined temperature profiles for the casting metal in its housing, in order to keep it constant. These temperature profiles are set by using the thermally quick temperature control system. The good control dynamics shorten the measuring time. The temperature control system can be actively cooled via the COM3LAB control technology and the control behavior can be analyzed using switchable disturbance variables.

Set of machines

With the course COM3LAB control technology, the output voltage of the generator is kept constant even when changing the load. The set of machines used here enables a multitude of experiments to be carried out. With the virtual laboratory of COM3LAB, the step response of the system can be recorded, the optimum control parameters identified or timeline diagrams of the controlled system recorded.

Experiments are operated and evaluated with COM3LAB CBT.