



Kieback&Peter

PRESS RELEASE

Model Predictive Control 2.0 **A foresighted predictive control system**

Model Predictive Control (MPC) is a predictive control system based on mathematical models. MPC works with predictive algorithms and appropriate control commands. The MPC programs are based on complex calculation models which also take account of the inertia of buildings and technical systems. As well as real-time values, they work with other factors, e.g. historical system data.

MPC 2.0 from Kieback&Peter goes two steps further in digital evolution: the smart control also uses external data such as visitor and climate forecasts. And it works with artificial intelligence (AI) – the algorithms of MPC 2.0 are continually developing through machine learning. The intelligent controller becomes ever more familiar with user, building and HVAC system behavior. For example, MPC 2.0 learns how slowly individual rooms cool down. With this knowledge, MPC 2.0 lowers the temperature well before the end of the day. The good thing is that users don't notice it because there is enough residual heat to maintain comfort levels.

MPC 2.0 understands the physical and technical interrelationship of all the systems as a whole. The smart control system is thus able not only to optimize efficiency and comfort continuously. It can also manage the peak loads of entire properties in such a way that operators can exploit price advantages on the energy and resource markets.

MPC 2.0 builds on existing systems and can be integrated cost-effectively with little effort.

