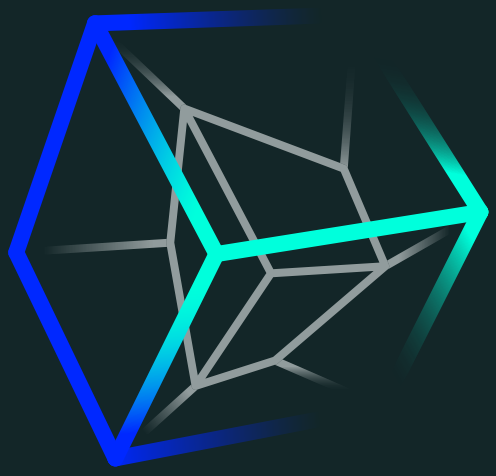
VARIMOS



Automatic, target-oriented optimization of plastic systems

From product design through to series production – fully automatic optimization of the entire product development process.

SIMCON

VARIMOS

A large number of decisions need to be made in the course of product development and, if costs and lead times are to be kept as low as possible, then these must be the right decisions. In many cases, the “trial and error” approach of conventional process simulation is adopted.

PRODUCT DESIGN — secure feasibility
PART DESIGN — optimized part
MOLD MAKING / TOOL SHOP — compensated mold
SAMPLING / TRIAL SHOTS — optimized production process
SERIAL PRODUCTION — controlled serial production

FASTER TIME-TO-MARKET & HIGH COST SAVINGS

VARIMOS systematically and comprehensively simulates a large number of widely varying scenarios and conditions for injection molding processes. The results of all the simulations are collated in VARIMOS, where they are analyzed automatically. The system thus creates a comprehensive knowledge pool as a basis on which to make the right decisions and achieve the best possible results.

AUTOMATIC OPTIMIZATION

- The entire product development process is verified and depicted in full.
- VARIMOS is based on more than 30 years’ expertise and practical experience in the fields of virtual simulation technology and real-process optimization.
- Each step, from the design phase through to serial production, is optimized in this way.
- The system generates unique and comprehensive process knowledge through the combination of the Cadmould 3D-F injection molding simulation and the CQC quality control system.

AI

- The developers define the target and VARIMOS automatically determines the optimal solution.
- Targeted process control and mold compensation, plus defined product properties like dimensions and cycle times, all determined fully automatically.
- Compilation of specific geometry and process parameters.
- Use of all the advantages of simulation technology and consideration of data volumes that have not been processed to date.
- Guaranteed to automatically find the optimal solution early on at all the different stages of the development process.

BENEFIT

- Fully automatic optimization and quality assurance for the part, mold and process.
- Minimization of iteration loops.
- Reduction of development and production costs.
- Ready for series production up to 50% faster.
- 100% fully automatic quality monitoring and documentation (e.g. for use in audits).
- Optimal use of resources through clearly defined project processes and responsibilities.

VARIMOS VIRTUAL

Varimos virtual combines injection molding simulation with the systematic design of experiments (DOE) and automatic optimization. Expert software for virtual optimization of the part, mold and process. By varying geometrical and process parameters, the tool automatically optimizes shrinkage and warpage behavior to ensure dimensional accuracy.

VARIMOS REAL

Automatic optimization of the machine settings to produce in-spec parts with the shortest possible cycle time. This is based on a statistical design of experiments (DOE) and measurement of the injection molded parts from the experiments.

Varimos is a stand-alone software bundle, running under Windows operating systems.

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