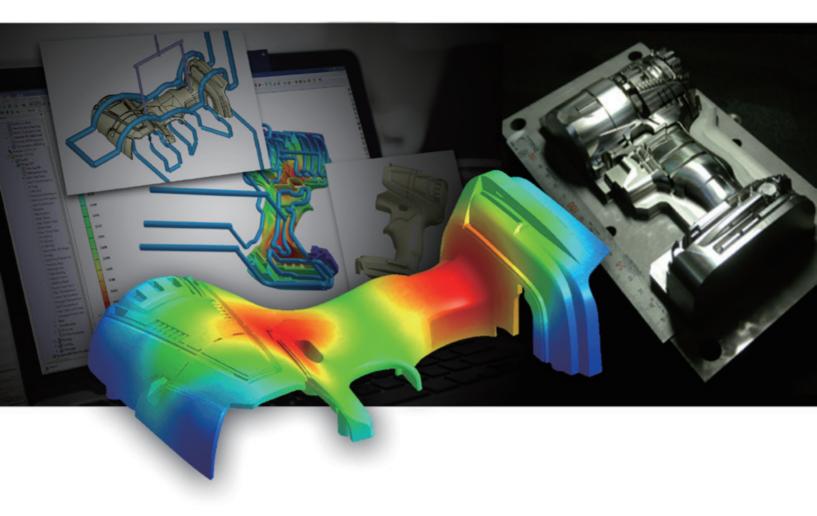


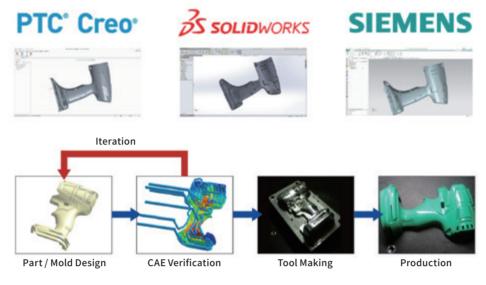
# **Moldex3D SYNC** Full Integration with CAE and CAD Systems



www.moldex3d.com

### **Direct Molding Simulation in CAD Environment**

Moldex3D SYNC is a CAD-embedded software with intuitive workflow from CAD modeling to simulations. Users can synchronize design changes in a fast and easy way with no file translation needed for quick iteration for mold design validation and optimization.



### Why Choose Moldex3D SYNC

How to reduce molding costs and increase design change efficiency are very important issues for development in industries. Moldex3D SYNC lets the users experience superior integrated CADto-CAE workflow which considers the balance between cost savings and manufacturing efficiency for users.

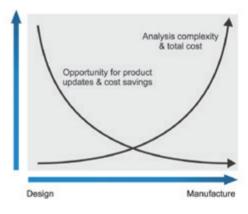
The intuitive workflow allows direct access to CAD systems for model designs, performs complete product evaluation, perfectly simplifies the complicated model preparation, and requires no additional learning cost to process CAD models seamlessly with no worries for the data lost and tolerance problems.

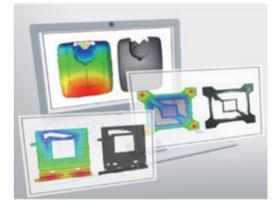
Moldex3D SYNC ensures the molding simulation accuracy and process efficiency. The users can definitely get satisfied with its usability to evaluate and optimize the Design for Manufacturing (DFM) and perfectly meet the market demands with higher cost savings.

# Accurate Insights of Possible Defects

Moldex3D SYNC provides significant solutions for plastic injection molding issues. With the built-in features of automatic meshing engine and intelligent process wizards, users can finish different analyses and validate product designs shortly even for the beginners. Moldex3D SYNC, complete molding analysis technology, gives users efficient validation for defects, such as short shot, flash, sink marks, weld lines, etc. during the molding design process before manufacturing.

Moldex3D SYNC, high interoperability, improves the modeling and simulation efficiencies, gives users competitive advantages of market, and further maximizes the software core value to prove the analysis capabilities on product designs.





## Moldex3D SYNC

Moldex3D SYNC, complete market strategy and positioning, explains the wide application range extended from the fields of product design to mold design.

urement

Powerful

tools

#### **Tooling Validation**

- Clamping force Multi-cavity flow
- balance
- Runner balance
- Injection pressure
- Packing pressure
- warpage Validation of flow balance Validation of

Prediction of

Ouality

- residual stress Material degra-
- dation Prediction of shrinkage
- **Product Life Cycle** Accuracy
  - Sensor and meas- Efficiency
  - HPC/Remote Computing post-processing
    - Reduction of
    - cooling time

#### **Complex Process**

- **Fiber orientation**
- Valve gate control
- Conformal cool-ing
  - Multi-Component Molding

### **Pioneering Functions to Boost Competitiveness**

### **High-Speed Automated Tools**

Moldex3D SYNC enables users to easily validate the optimal multi-gate locations, cooling time, potential areas of flow mark, and L/T ratio. With automatic 3D meshing engine, intelligent process wizards, and full support of Flow/Pack/Cool/Warp analysis capabilities, Moldex3D SYNC completely boosts work efficiency for quick design validation and process optimization.

### **Multi-Component Molding**

Moldex3D SYNC supports advanced multicomponent injection molding process to analyze how physical properties interact and the behavioral effects between different materials. Accurate shrinkage and warpage prediction can be expected. High-quality product to market is not a challenging goal anymore!

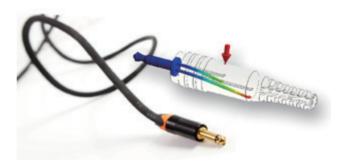
### More than 7,000 materials databank

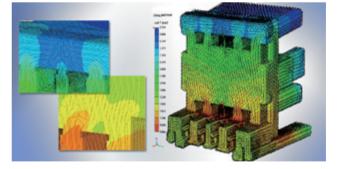
Precise data ensures simulation accuracy. Moldex3D exclusive databank supports more than 7,000 materials for plastic industries even complicated fiber-reinforced materials analysis for stress behavior validation and mechanical property optimization.

#### **High-Performance Parallel Processing**

Moldex3D SYNC supports parallel processing for multi-core, multi-CPU, and multi-PC cluster. The strength of computing technology enables users to speed up the simulation efficiency for complex models, shorten the time costs and contribute to outstanding performance for those models with large number of mesh elements.









# Moldex3D SYNC Package

Moldex3D SYNC Package provides integrated workflow to help designers find the solutions for efficient product validation.

The flexibility gives an easy access to modeling and simulation. Design changes can be synchronized with immediate analysis results. Every user can easily learn and get satisfied with the intuitive workflow. Plus equipped features of full automatic mesh generation and precise 3D display technology, users can have deep insights of filling behaviors and thermal property variation to find out the potential effects, further enhance the product quality, and increase the competitiveness to the market.

- CAD-embedded environments
- Complete Flow/Pack/Cool/Warp analyses
- Fiber-reinforced polymer simulation
- Multi-component injection molding process
- Parallel computing technology
- Moldex3D Designer
- Moldex3D Project

Platform	
Software	
OS	Windows 10, 8.1, 8, 7
Moldex3D	Moldex3D R16
NX	NX 8.5, 9.0, 10.0, 11.0
PTC <sup>®</sup> Creo <sup>®</sup> Parametric	Creo2.0, Creo3.0, Creo4.0
SOLIDWORKS®	SOLIDWORKS 2013, 2014, 2015, 2016, 2017





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