

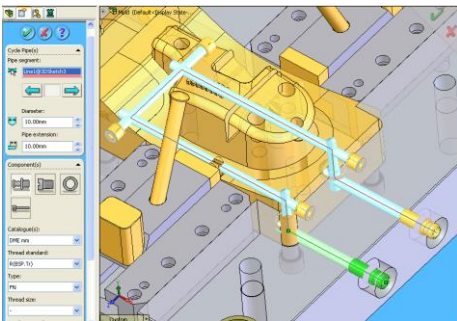
# MoldWorks Product Overview

MoldWorks® the preferred mold base solution for SOLIDWORKS®

MoldWorks is the most powerful and flexible solution available today for the mold industry.

## FEATURES

- Initial Mold Base Library with over 15 commercial catalogues.
- Specific FeatureManager tree with RHM button menus for easy access to MoldWorks menus.
- Intelligent Component Wizard.
- Heat Exchange module.
- Runners & Gates module.
- Automatic slider and lifter generation.
- Fully associative component and plate modification.
- Integrated user library.



Heat Exchange Preview



**Initial Mold Base Library** creation includes inserts pocket and slider creation with automatic pre-estimation of the mold. You can choose the initial component options and visualize the exact standard or non-standard mold base before creating it with a click of a button. Equations and mates are added so that the mold retains its coherence throughout the mold design process. Advanced functionality allows you to customize the component options, the plate sizes and configurations according to your company standards.

**The MoldWorks FeatureManager tree** contains the technological/mold design data you are creating allowing you to focus on the process instead of the underlying CAD geometry. RHM button menus on selected data access the relevant MoldWorks menus facilitating a mold centric environment using traditional industry terminology.

**A Dedicated Intelligent Component Wizard** guides you through the creation of standard (by default) and non-standard (through key-in) components and their respective holes, according to “oversize” values, in the relevant plates and a **smart component** option which automatically sizes matching components i.e. core pins & ejector sleeves, pins and springs etc..

The **Heat Exchange module** creates cooling cycles from 2D and 3D sketches. A dynamic preview is created showing pipe extensions, default components and collisions. You can then browse through the pipe segments one by one modifying extension directions (where relevant), diameter and extension parameters as well as component types (**connectors, plugs, baffles or o-rings**) from any of the available catalogues.

The **Runners & Gates module** creates runners from 2D/3D sketches with dynamic preview, includes choice of profile, w/o sinks and extensions, by sketch, path or segment. Gate types are added directly or to the runner system sketch. The system creates the gate by finding the cavity in the selected direction.

**Modification tools** at the mold design level include collision and thin wall identification. With these tools you can quickly and efficiently modify components and plates, at the same time ensuring the integrity of the mold at every stage, giving you unparalleled flexibility during the design process.

**A User Library facility** to create your own component palette folders allows you to customize MoldWorks to your own specifications by leveraging standard SOLIDWORKS tools. This feature extends the functionality of MoldWorks, customizing it to your needs, capturing company know-how, and making sure that you will always be able to complete your work within the mold design environment.

# MoldWorks /Technical Specifications

## PARAMETRIC MOLD DESIGN

- Based on 3D solid parametric technology.
- Mold plates connected through mating and equations.
- Components and component holes (including “oversize” values) created according to their functional behavior.
- Component positioning controlled through parametric sketches.
- Automatic component recalculation after mold plate(s) modification.
- 3D Heat Exchange system creation.
- Runners & Gates module.

## SINGLE ENGINEERING MODEL FOR ADVANCED MOLD DESIGN DEVELOPMENT

- One window integration with SOLIDWORKS (Gold Partner Status).
- Seamless ensemble to perform modeling, detailing, and mold base development.
- MoldWorks FeatureManager tree containing mold data and RHM button functionality.

## MOLDWORKS FUNCTIONALITY

### New Mold

- Automatic mold size estimation.
- Integration of inserts, sliders and lifters.
- Over fifteen popular catalogs of standard components including: **D-M-E English and Metric, HASCO English and Metric, NATIONAL, RABOURDIN, FUTABA, DMS, E.O.C., STRACK, PEDROTTI, SIDECO, TVMP, P.C.S., PROGRESSIVE, RTI, MEUSBERGER (including 3 plate), VAP, OMNI, MUD, LKM, ...**
- Mold composed of standard nine-plate mold or non-standard base.
- Plate thickness parametrically driven.
- Initial standard component selection according to specific catalogue options.
- One click creation of initial mold base, including selected standard component options.

### Components

- Component parameters retrieved from standard catalogs.
- Automatic detection of plates to be drilled for components.
- Components created using oversize parametric dimensions can be customized to fit standards of your tool shop.
- Supported components:  
**Leader pins, Bushings, Ejectors, Sleeves, Screws, Shoulder screws, Dowel pins, Tabular dowel pins, Lifting holes, Conical interlocks, O-rings, Spru Bushings, Ejector guides, Support pillars, Locating rings, Spacers, Springs, Stamps, ...**
- Modification of component or plates at any stage of the design process, and automatic updating of the mold with intelligent healing capabilities.
- Automatic 2D drafting with ordinate dimensions.

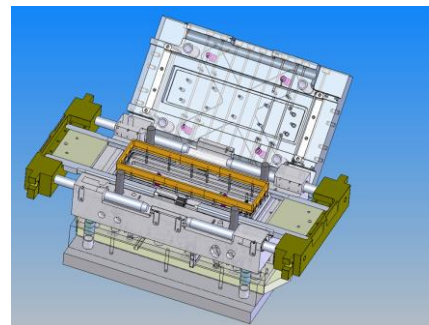
### Heat Exchange

- Automatic preview of cooling cycle with pipes and components on **2D** and/or **3D** sketches according to intelligent analysis algorithm.
- Dynamic preview and modification of pipe extension direction, component types and parameters while browsing through the cycle.
- Modification and management of cooling environment through virtual **MoldWorks FeatureManager** tree.

### Runners & Gates

- Automatic preview of runners on **2D** and/or **3D** sketches and browsing mechanism at segment, path or sketch level with profile selection and sink extensions.

Gates are added by selecting a face or a runner sketch point, the system then proposes a gate according to the runner definitions and gate type selected.



Courtesy of Regba

## MISCELLANEOUS

### Transformation

- Components can be copied by translation/reflection/rotation etc.

### Bill of Material

- All the plates, inserts, component information, dimensions and catalog numbers are integrated into the SOLIDWORKS standard BOM.

### Change Catalog

- User can use components from different catalogs at any time.

### Collision Checking

- Analysis of mold components detects collisions.

### Screw hole and rule table

- Excel driven hole definition and screw rule table.

## System requirements

- Microsoft Windows Windows7/10 64 bit
- Intel or AMD class processor
- 16 GB RAM or greater recommended.
- Prerequisites: SOLIDWORKS.

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