

# **PTC**<sup>®</sup>

# PTC° Creo° Expert Moldbase Extension

Increase Speed and Accuracy in Moldbase Design and Detailing

The greatest challenge facing manufacturing engineers today is finding time to improve quality, speed, and innovation in moldbase design and detailing. The solution that the world's most successful moldmakers turn to is PTC Creo Expert Moldbase Extension (EMX).

PTC Creo EMX is an indispensable add-on tool for moldmakers and toolmakers that eliminates timeconsuming, tedious tasks and the need for data translation that typically slows down the product development process.

PTC Creo EMX allows users to create moldbase layouts in a familiar 2D environment and automatically generate a 3D model to leverage the benefits of 3D design. The 2D process-driven GUI guides you toward your optimal design and updates automatically during the development of the moldbase. You can choose from a catalog of standard components (DME, HASCO, FUTABA, PROGRESSIVE, STARK, etc.) or customized components. The resulting 3D models are then used for interference checking during mold opening, as well as for automatic generation of deliverables such as production detail drawings and BOMs.

PTC Creo EMX increases design speed because the unique graphical interface gives you quick, real-time previewing before the 3D component or assembly is automatically placed. Once your components are placed, operations such as clearance cuts and drilled and tapped holes are automatically created in the appropriate neighboring plates and components, thus eliminating tedious and repetitive mold detailing tasks. PTC Creo EMX also enables moldmaking companies to capture their own unique design standards and best practices directly within the mold assemblies and components. If you're looking to accelerate moldbase design and find more time to development better quality, highly innovative designs, then PTC Creo Expert Moldbase Extension is your perfect solution.

# Key benefits

- Realize an immediate ROI based on significant productivity improvements
- Capture company design standards and best practices directly within mold assemblies and components as you preserve in-house mold design expertise
- Enable concurrent engineering between design and manufacturing



This moldbase was developed with PTC Creo Expert Moldbase Extension and rendered in PTC Creo Parametric™.



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- Eliminate data translation with a native, fully associative PTC Creo 3D CAD solution
- Incorporate late changes in the design cycle easily as modifications update automatically
- Reduce the costs of scrap and rework by simulating interferences and by using standard components
- Shorten the learning curve using the intuitive tutorials and documentation

## **Features and specifications**

- Specialized 2D GUI enables instant customization of moldbases and components
- Automatic assembly of components 'pick & place' ease
- All necessary clearance holes, threads, counterbores, etc, are automatically added to plates
- Part-level features already fully dimensioned
- Custom components can be created, saved, and reused
- Automatic layers and simplified representations for easy viewing
- Standard and nonstandard mold components are marked
- Ability to take your customer parts through the complete process
- Supplier catalogs include: DME, DMS, EOC, FUTABA (Misumi), HASCO, KLA, MEUSBURGER, PEDROTTI, RABOURDIN, STRACK, PROGRESSIVE, NATIONAL, PCS, LKM, and others

#### Smart moldbase assemblies and components

- Automatic functions, such as on-the-fly customization, component sizing, placement, trimming, and clearance cut and thread creation, are provided for the following:
  - Complete Moldbase Assemblies (include double shot mold)

- Plates and Insulation
- Guide, Leader and Return Pin Assemblies
- Multi-Cavity and Family Molds Supported
- Support Pillar Assemblies
- Latch Lock Assemblies
- Locating Rings and Sprue Bushing
- Ejector Pins, including Sleeve Ejection
- Screws and Washers
- Dowel Pins
- Cooling Circuit with Fittings, Plugs and O-Rings
- Slider and Lifter Assemblies



Moldbase selection in PTC Creo Expert Moldbase Extension.

#### Automatic drawing, hole chart and BOM creation

As the assembly is created and optimized, PTC Creo EMX updates the Bill of Materials (BOM) and assembly drawing. Drawings of all assemblies and plates, complete with hole charts, are created automatically. Drawings and BOM layouts are also customizable.

#### Mold opening and ejection simulation

Mold opening simulation complete with slider, lifter, and ejector simulation, is created automatically. Interference can be checked automatically during the mold opening sequence.



## Capture company specific best practices and standards

Company specific best practices and standards can be captured in the catalogs. Employees can modify existing catalog models or create new models based on company accepted standards.

### Language support

• English, German, French, Italian, Spanish, Japanese, Chinese (Simplified and Traditional), Russian and Korean

#### Platform support and system requirements

Microsoft<sup>®</sup> Windows<sup>®</sup>

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