

## Pro/ENGINEER® 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 Pro/ENGINEER Expert Moldbase Extension (EMX).

Pro/ENGINEER EMX is an indispensable add-on tool for moldmakers and toolmakers that eliminates time-consuming, tedious tasks and the need for data translation that typically slows down the product development process.

Pro/ENGINEER 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.

Pro/ENGINEER 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. 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 higher quality, highly innovative designs – then Pro/ENGINEER Expert Moldbase Extension is your perfect solution.



This moldbase was developed with Pro/ENGINEER Expert Moldbase Extension and rendered in Pro/ENGINEER.

### 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
- Eliminate data translation with a native, fully associative Pro/ENGINEER application
- 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

# Pro/ENGINEER Expert Moldbase Extension

## 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 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
- 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

## Automatic Drawing, Hole Chart and BOM Creation

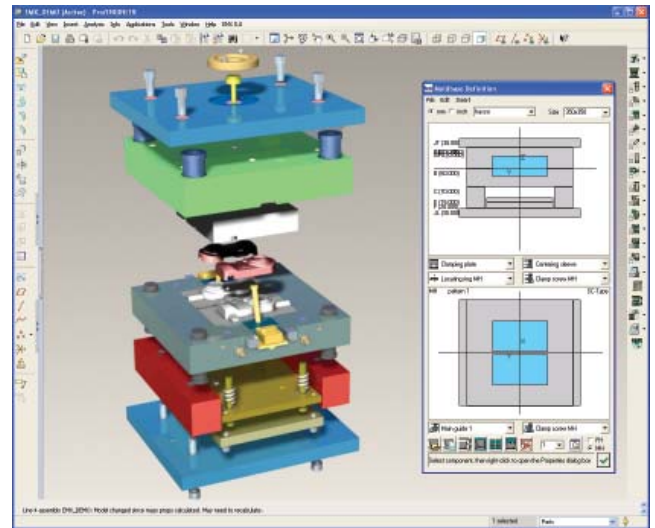
As the assembly is created and optimized, Pro/ENGINEER EMX updates the BOM and assembly drawing. Drawings of all assemblies and plates, complete with hole charts, are created automatically. Drawings and BOM layouts are also customizable.

## 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.



Moldbase selection in Pro/ENGINEER Expert Moldbase Extension.

## Language Support

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

## Platform Requirements

- Microsoft Windows (XP, 2000 and NT 4.0)

For specific operating system levels, visit:

[www.ptc.com/partners/hardware/current/support.htm](http://www.ptc.com/partners/hardware/current/support.htm)

## The Pro/ENGINEER Advantage

When you compare Pro/ENGINEER to other 3D CAD products on the market, you'll quickly see many advantages that save you considerable time, effort and money. Pro/ENGINEER Expert Moldbase Extension provides a level of automation, data integration, UI viewing, flexibility and design intelligence that is not available in any competing product. The result: you get better quality moldbase designs to market faster because you're not burdened with manual, time-consuming, tedious tasks. Discover why Pro/ENGINEER is considered the world's most powerful tool among product development professionals in virtually every design discipline.

©2006, PTC (Parametric Technology Corporation) – All rights reserved under copyright laws of the United States and other countries. Information described herein is furnished for informational use only, is subject to change without notice, and should not be construed as a guarantee, commitment, condition or offer by PTC. PTC, the PTC Logo, Pro/ENGINEER, Windchill ProjectLink, and all PTC product names and logos are trademarks or registered trademarks of PTC and/or its subsidiaries in the United States and in other countries.