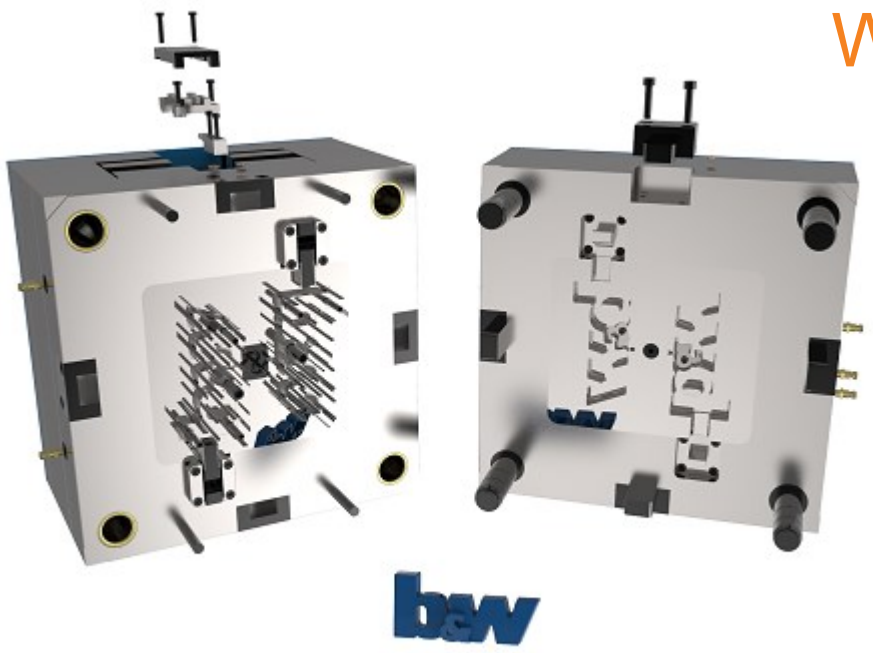
EMX 10 M056

What's New?



Enhancements

New and updated DME EUROPE components available:

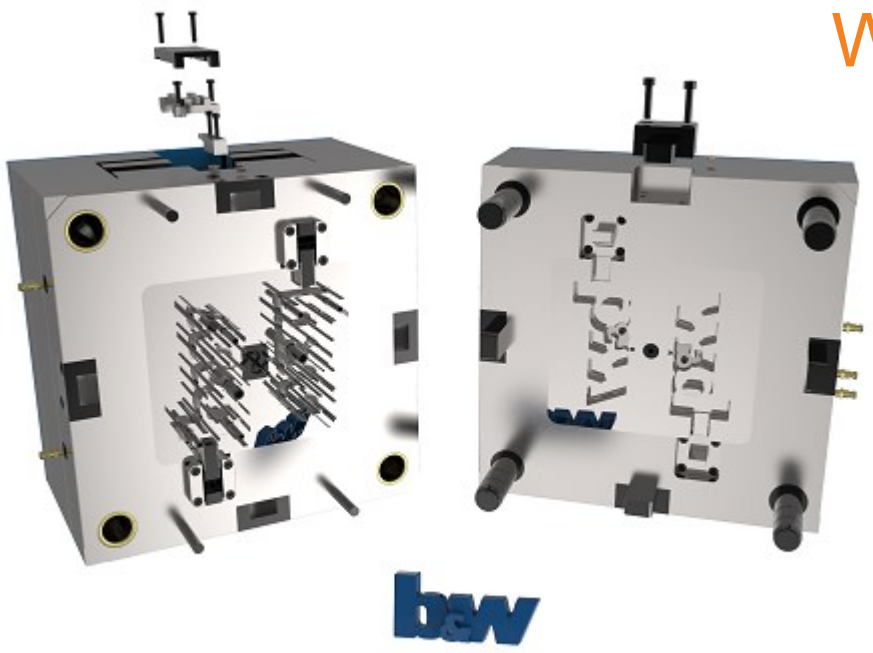
- Locating Rings: F1360, F1367, RB, DHR21, R19, R20, R22, R23, R40, R60, R60L, RB60 and RB90
- Guide components: R01, R02, R03, R03W, R04, R04W, R05, R08, R09, APD, IPWC, IPNH, FBC, FBN, FSC, FSN, FB120, FB140, FW14, GB112, GB113, GB114, GEB, TD, ZH, F1000, F1010, F1020, F1030, F1040, F1100, F1110, F1120, F1121, F1125, F1126, F1127, F1140, F1144, F1145, 1150, F1332 and FW1213
- Support Pillars: SP, FW28, FW29
- Ejector Pins: CHE28, EAH28, ENA05, ENC05, EOA05, EPA05, EPC05, EPD28, ERA05, ERFAQ, EDC, EDH, PCM, FW, FK, S, KS, EAV, F2R and F4R
- Knockout: F1050 and 1515

New and updated MEUSBURGER components available:

- Knockout: E1514 and E1515
- Guiding package: E1325 and E1330

EMX 10 M055

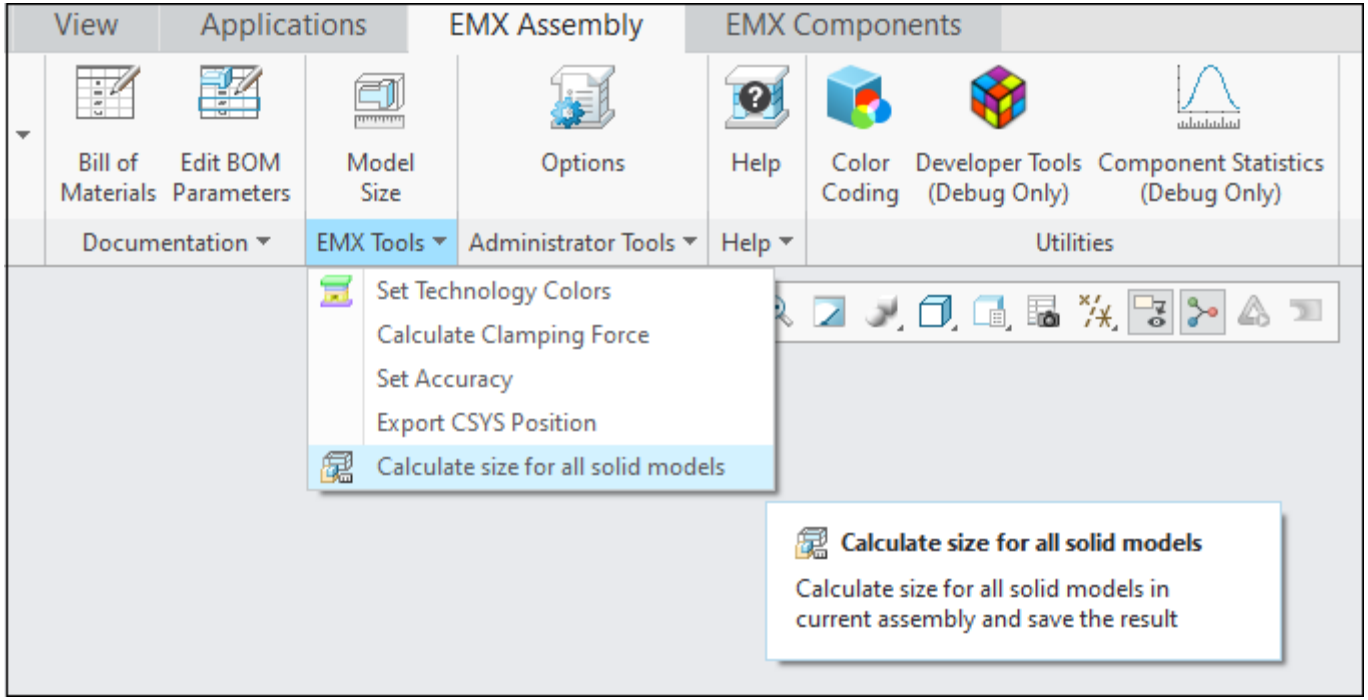
What's New?



Enhancements

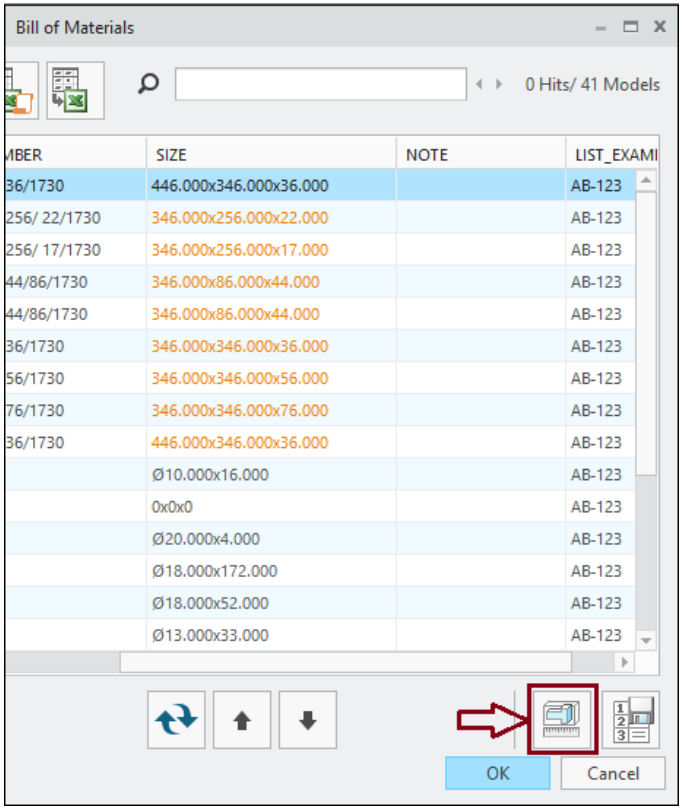
Introduce command to calculate size parameter of all models in assembly:

Calculate size for all solid models without opening the Bill of Materials



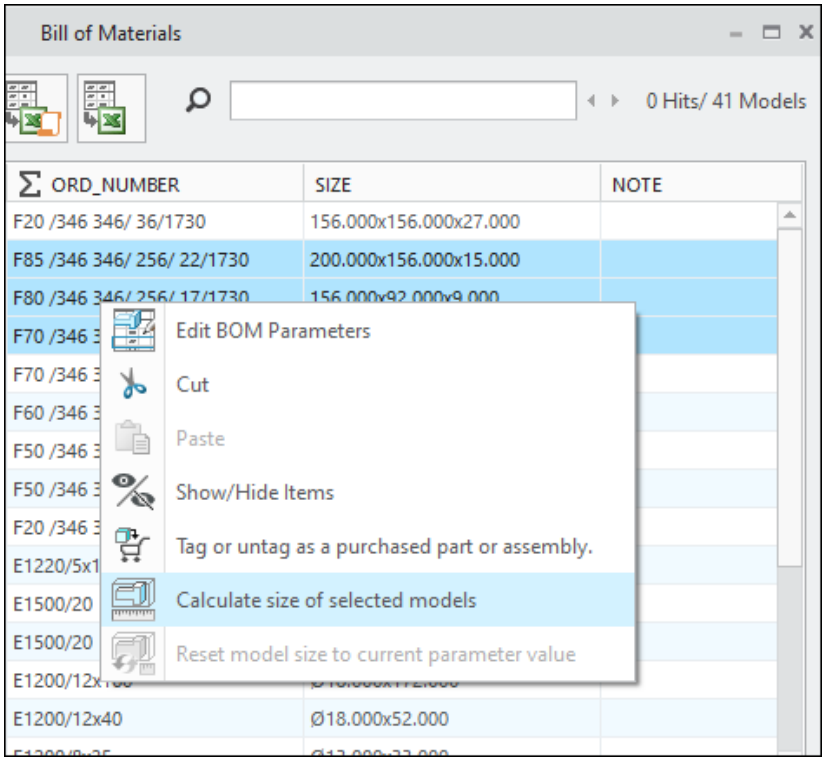
Enhancements

When recalculating size parameter in BOM, all changed values are highlighted:

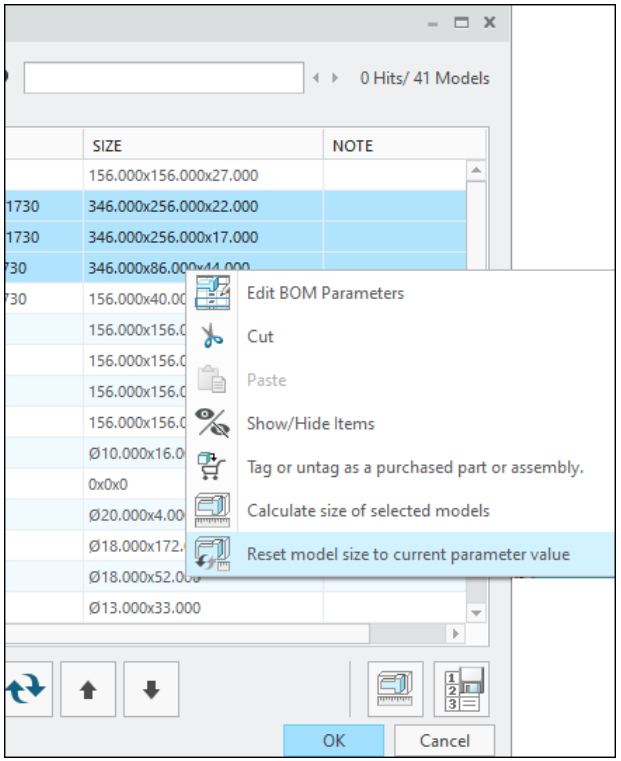


Enhancements

Recalculate size parameters of selected models only from Right Mouse Menu:

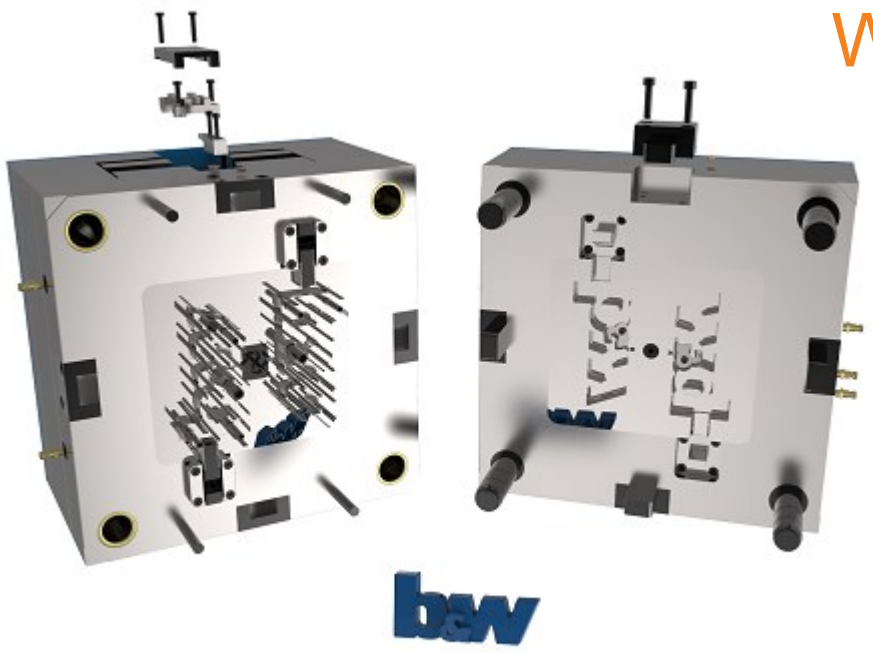


Reset the model size to the current parameter value for selected components from the Right Mouse Menu:



EMX 10 M053

What's New?



Enhancements

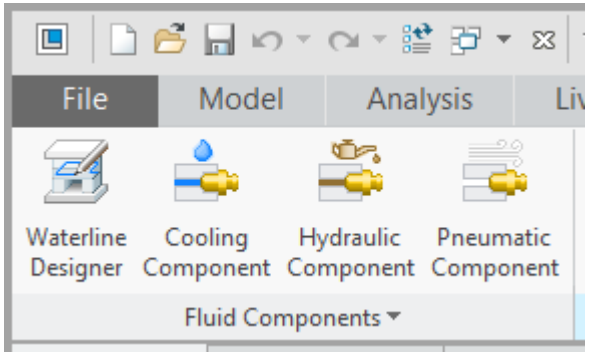
New Commands for Hydraulic and Pneumatic components:

New Hydraulic components:

- Meusburger E1700, E7140

New Pneumatic components

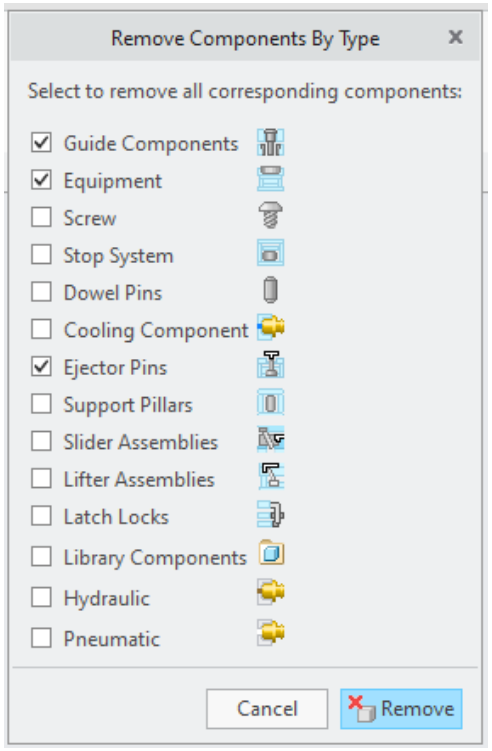
- Festo GS-G-I, QS-R-I



Enhancements

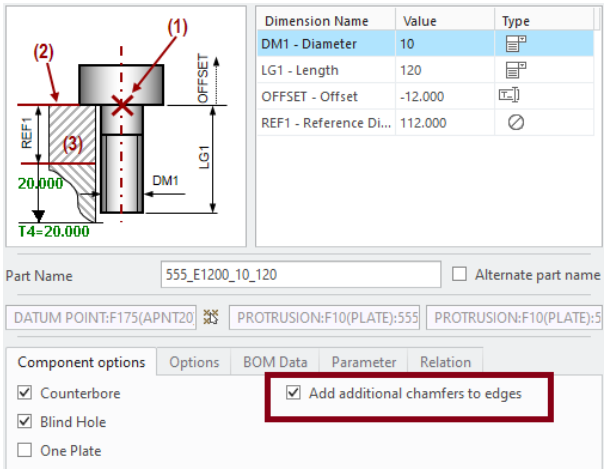
New Dialog to delete all components of a selected type:

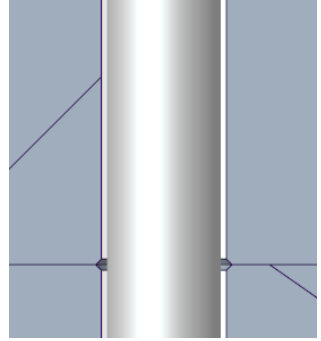
Current function to delete all cooling components or all ejector pins is extended for all different components types.



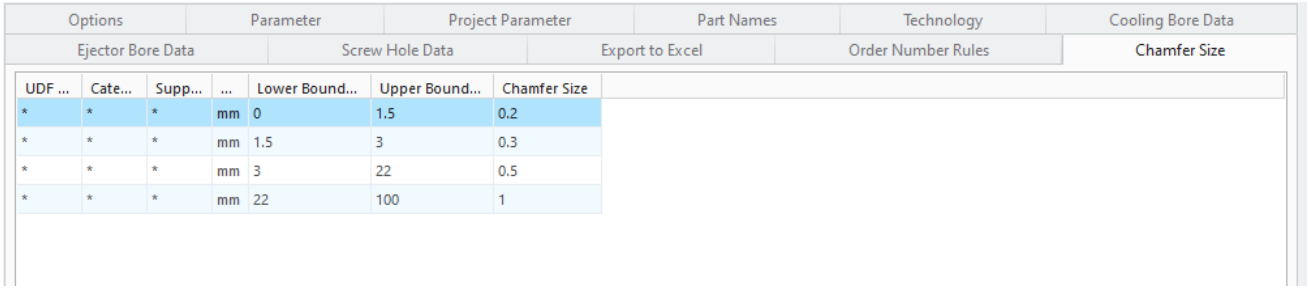
Enhancements

New Option in Component Dialog to automatically create chamfers on edges in cutout UDFs for all kind of components:





A rule set for chamfer sizes can be defined in EMX options.



Enhancements

New Command to transfer surface parameters from reference part to mold volumes:

- Manufacturing information can be transfered from the reference part to further derived models in the cavity.
- Supports model-based definition approach.

Enhancements and Improvements

New Option SOLID_TOLERANCE_STANDARD:

- Set solid tolerance standard independet from unit.

IGES, STEP, DXF export in BOM works with active Windchill workspace

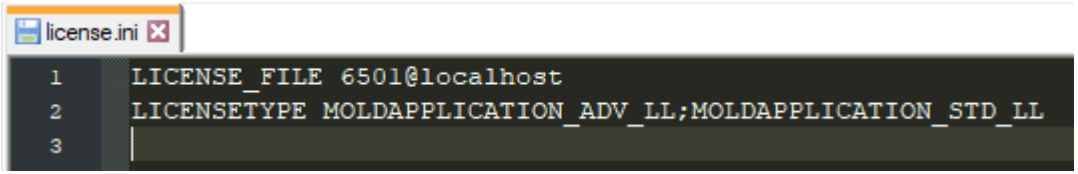
New MEUSBURGER guide components

- E5140, E5152 an E5202

Option BOM_BALLOON_CUSTOM_PARAM works now with component parameters

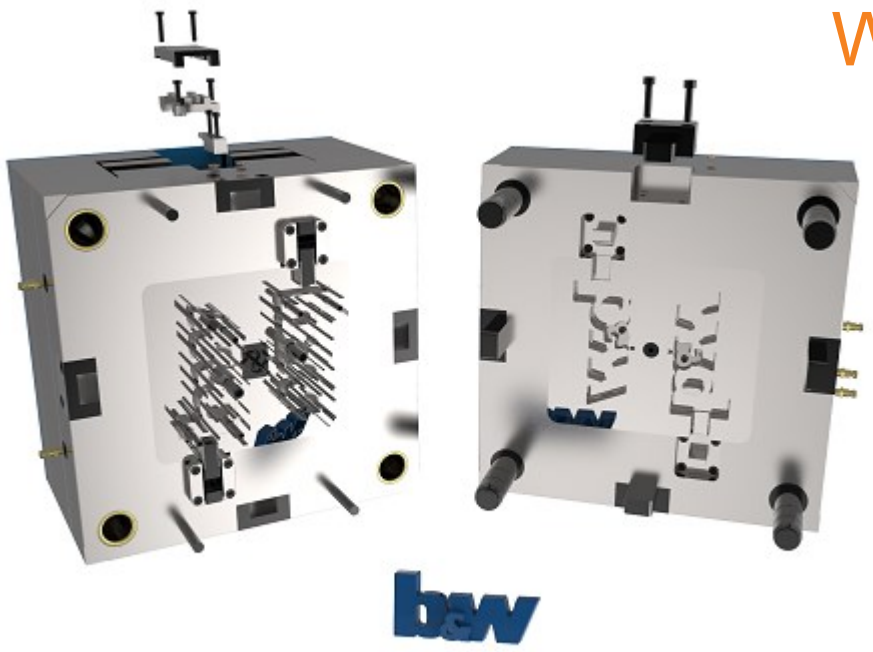
License.ini supports multiple license types on same license server

- In case multiple licenses types are defined a license can be selected froma dialog box.



EMX 10 M052

What's New?



Enhancements

"Trimmed " and "Shortened length" can be added to Ejector Pin notes parameter:

- Create an ejector pin pre or post note string using the EMX options EJP_NOTE_PRE_STRING or EJP_NOTE_POST_STRING
- In case the configuration option contains the placeholder <geometry_option> it will be replaced with „trimmed" or „shorted_length"

Enhancements

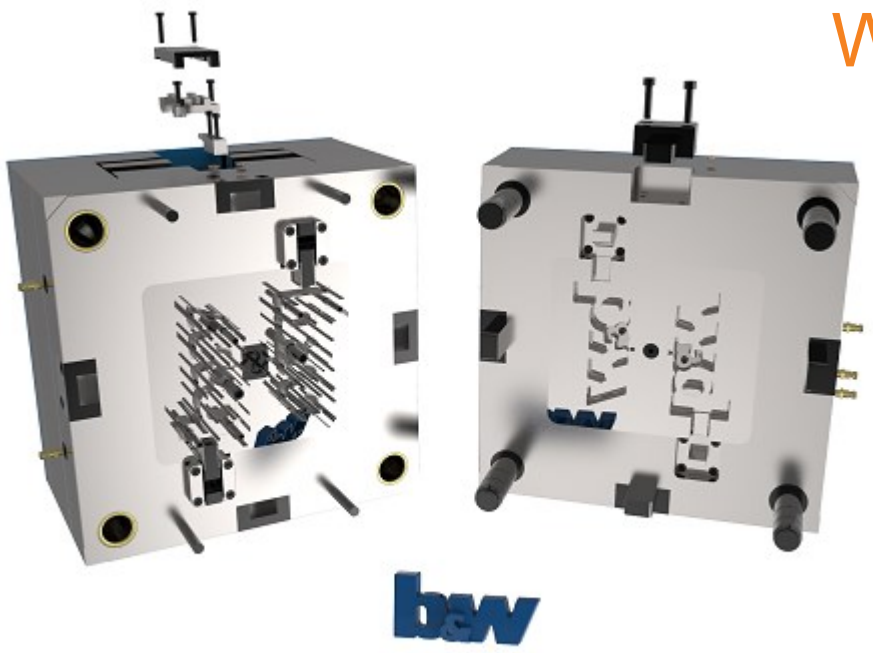
New configuration file customer_number.cfg introduced:

- This config file can be used to overwrite the content of the USER_NUMBER parameter based on supplier, category, type and instance of a component.

- This allows the configuration of custumer number values without modifying the component *dat files at all.

EMX 10 M051

What's New?



Enhancements

New Function in Bill of Materials:

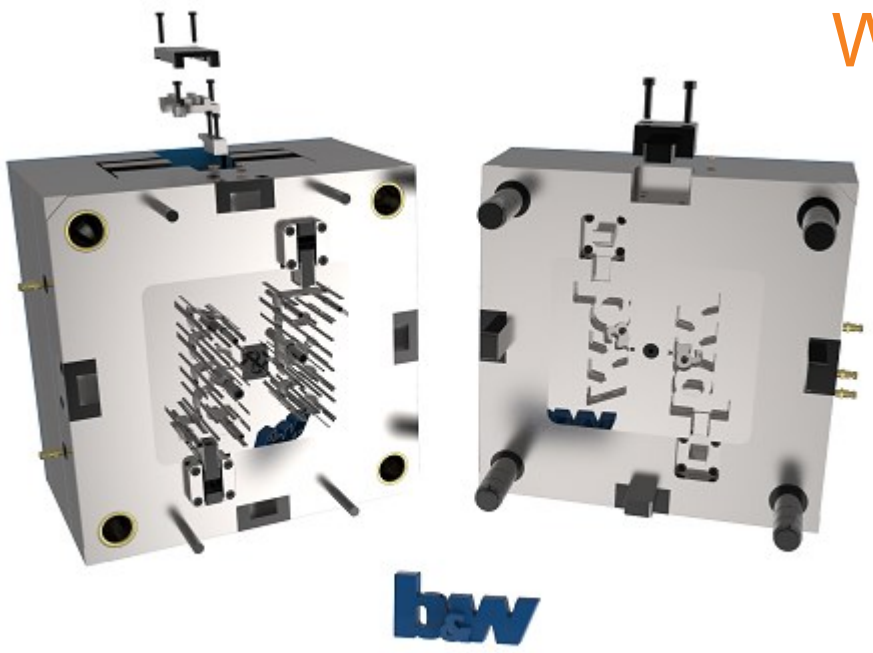
- All balloons on drawing can be deleted with one click

STRACK components updated, new guide components

- Guides: Z4412, Z4415, Z4416

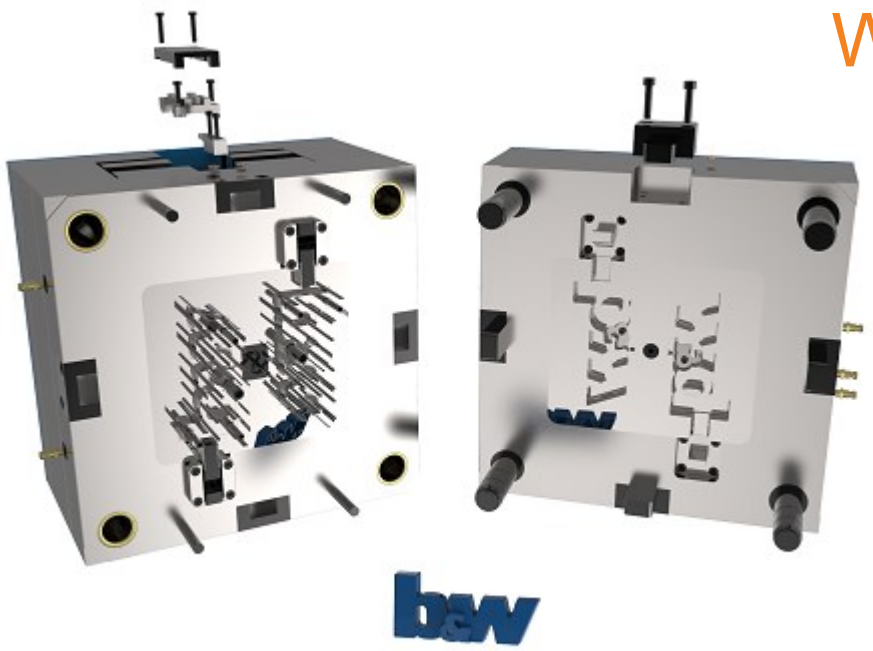
EMX 10 M050

What's New?



EMX 10 M040

What's New?



Components

New HASCO screws:

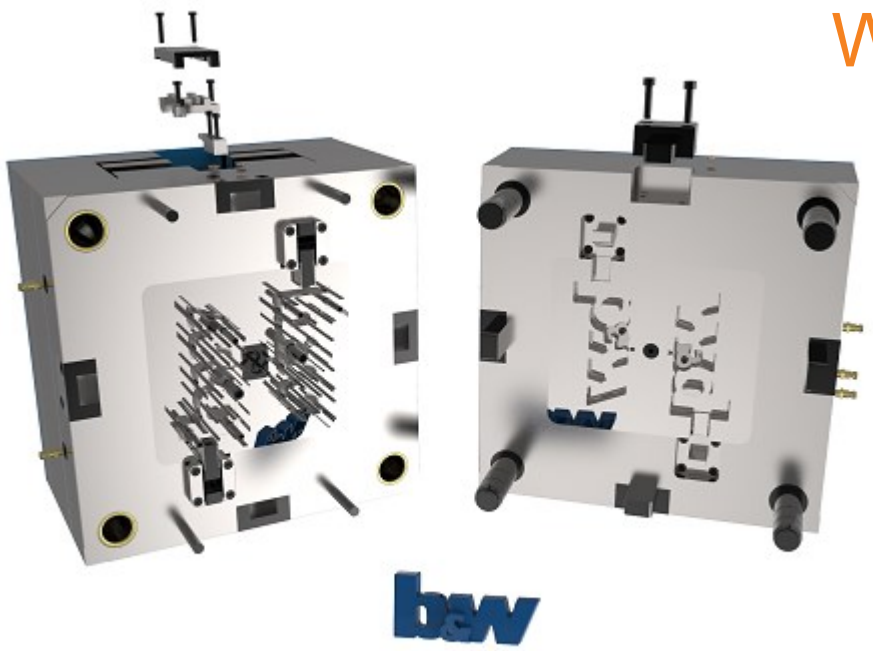
- Z34, Z351, Z371, Z372, Z3721, Z721

New HASCO sprue bushings:

- Z510, Z530

EMX 10 M033

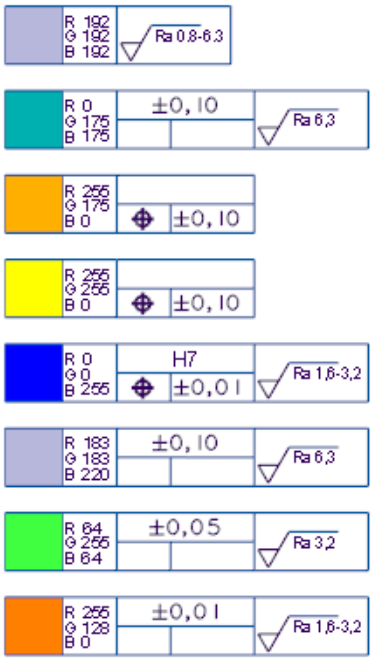
What's New?

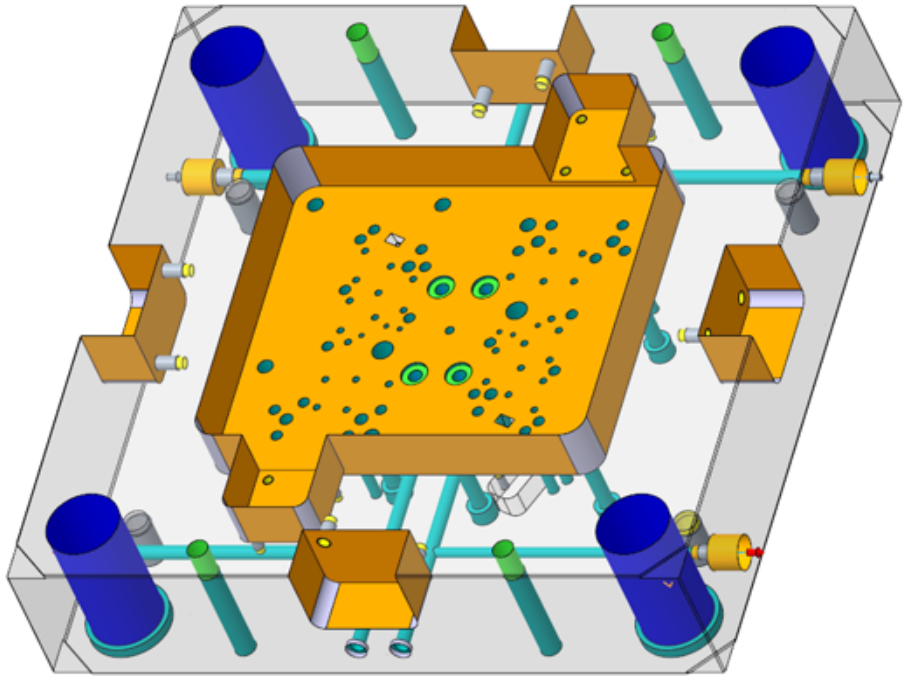


Enhancements

EMX is now SMARTColor ready!

- Apply color coding rules with B&W SMARTColor application
- More information on our website: SMARTColor in EMX





Enhancements

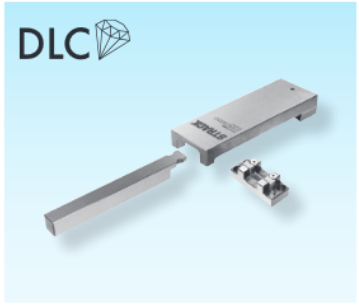
New STRACK Z4 latch lock assembly

- New assembly contains all variation of the Z4 latch lock

STRACK® NORMALIEN

Entformungselemente – indirekt | Demoulding elements – indirect
Eléments de démoulage – indirects

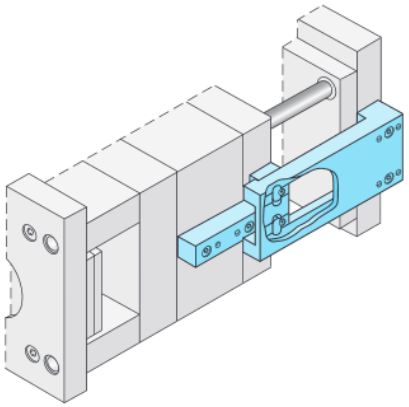
Klinkenzüge	Latch locks	Ouvres-moules

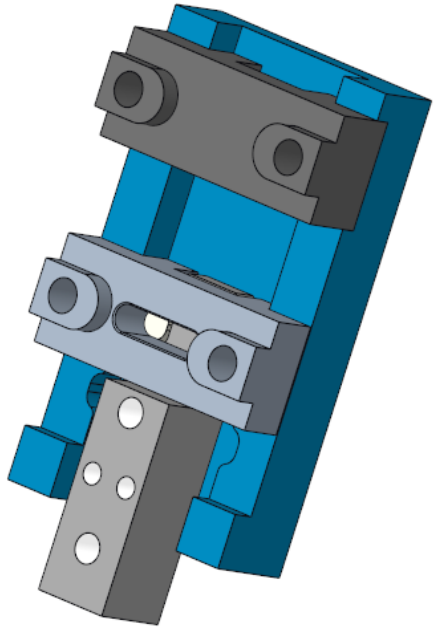


Z4-1-

deutsch 6.84-94
english 6.95-105
français 6.106-116

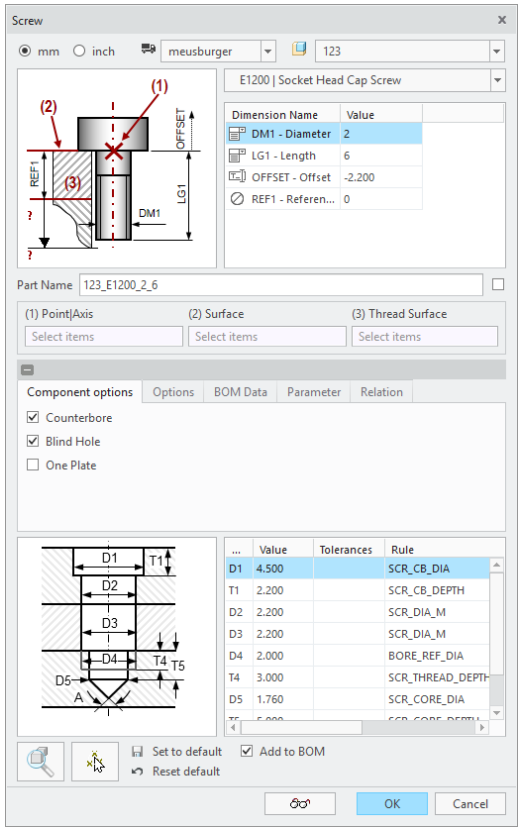
Z4-1-Type



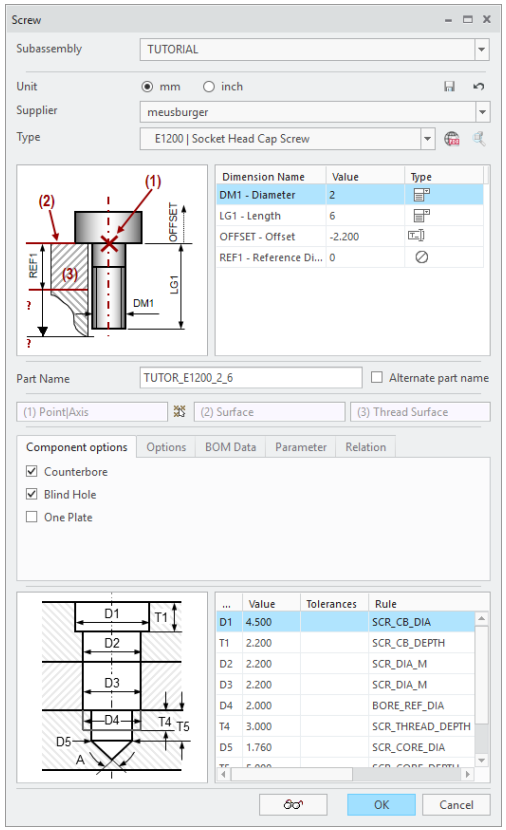


Enhancements

Streamlined UI of Component Dialog:



- Old



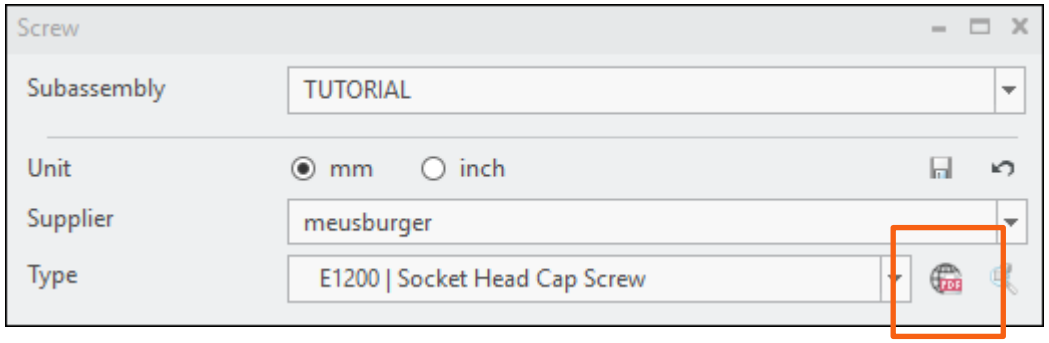
- New

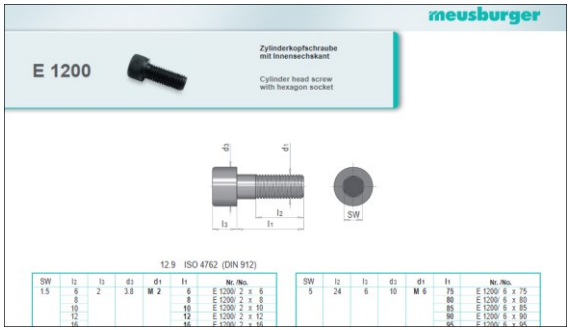
- Type selection improved
- Buttons moved from bottom area to related UI elements
- Dialog is resizable and can be maximized
- Missing UI descriptions added

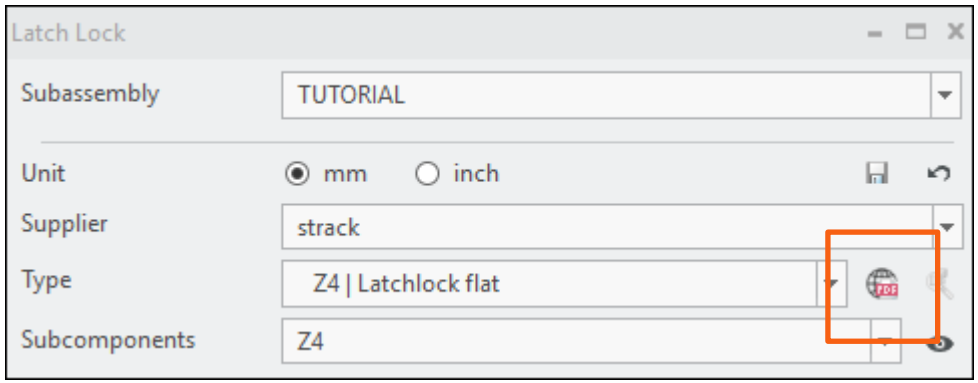
Enhancements

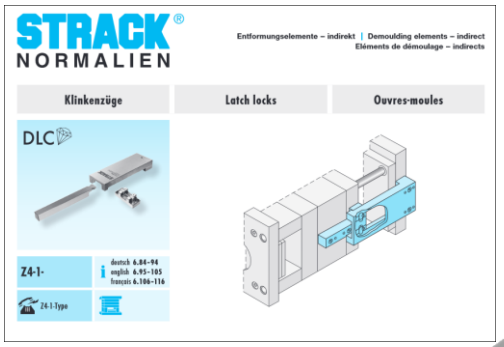
New weblink button in Component Dialog:

- Access data sheets on supplier website with one click!









Plates

HASCO plates updated:

- All plates and instance updated to latest revision

New KNARR plates added:

- KNARR – F (Meusburger compatible) and K (Hasco compatible) plates are now available

Components

New KNARR guide components:

- 551000, 551000DLC, 551010, 551010DLC and 551100

New KNARR ejector pins:

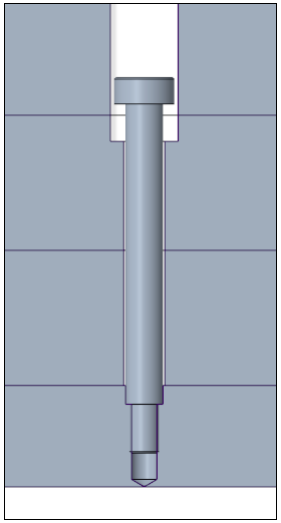
- 539111, 39111DLC and 39414

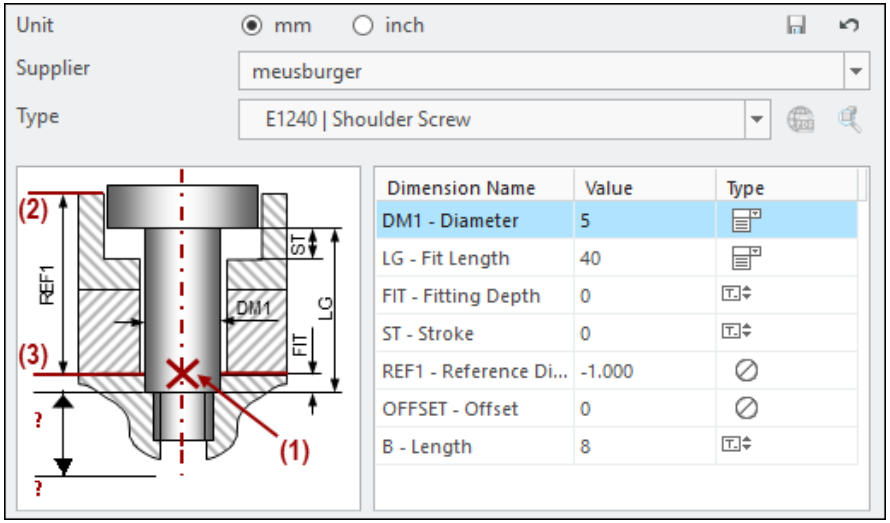
New KNARR insulation plates:

- 77335 and 77336

Improved shoulder screw functionality:

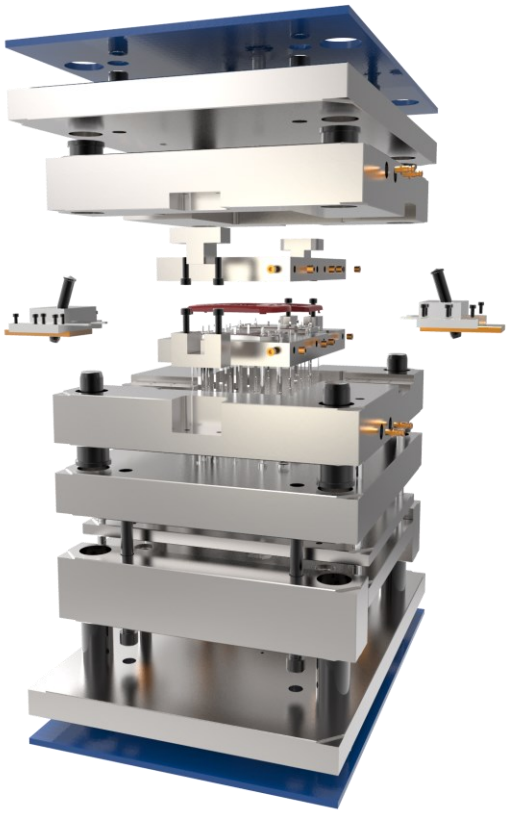
- Meusburger E1240, Hasco Z38, Knarr 40038, DME WZ412 and DIN 7379





EMX 10 M032

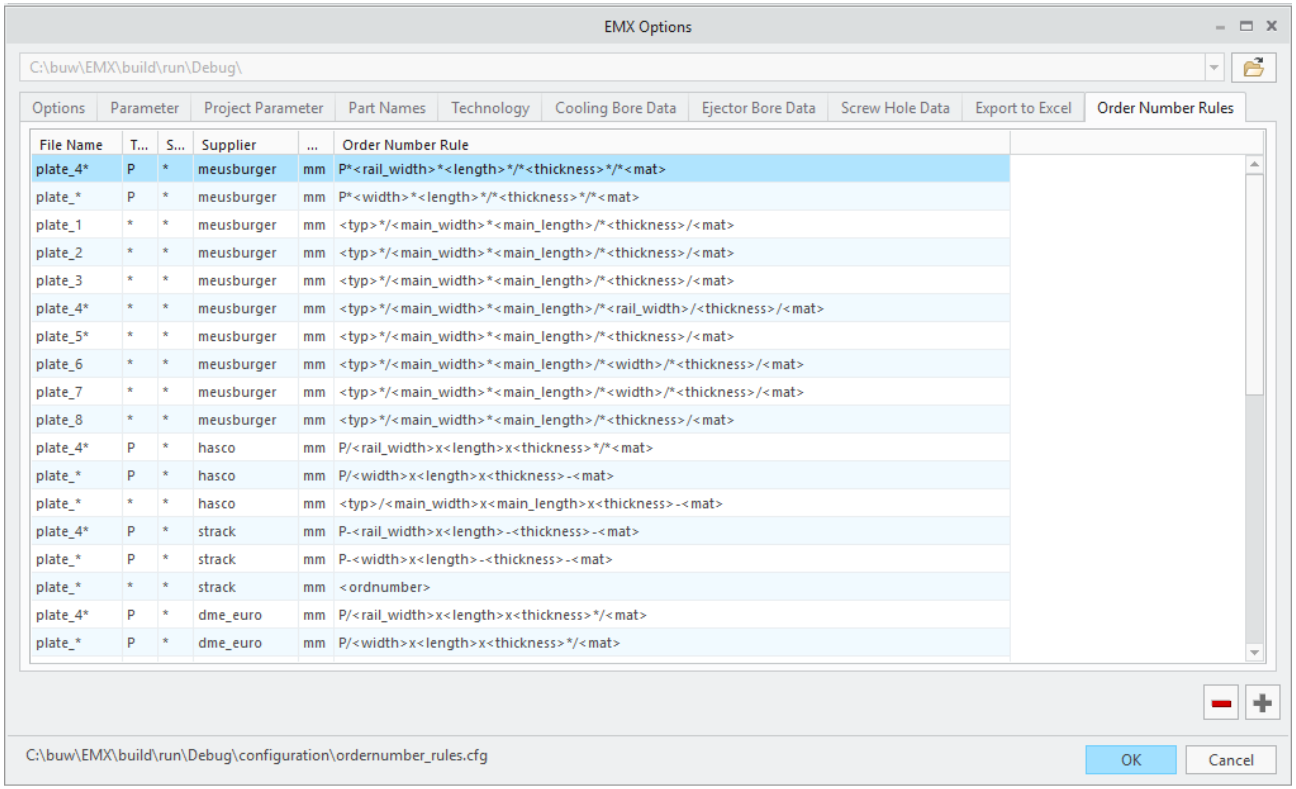
What's New?



Enhancements

New configuration section: Define custom order number rules

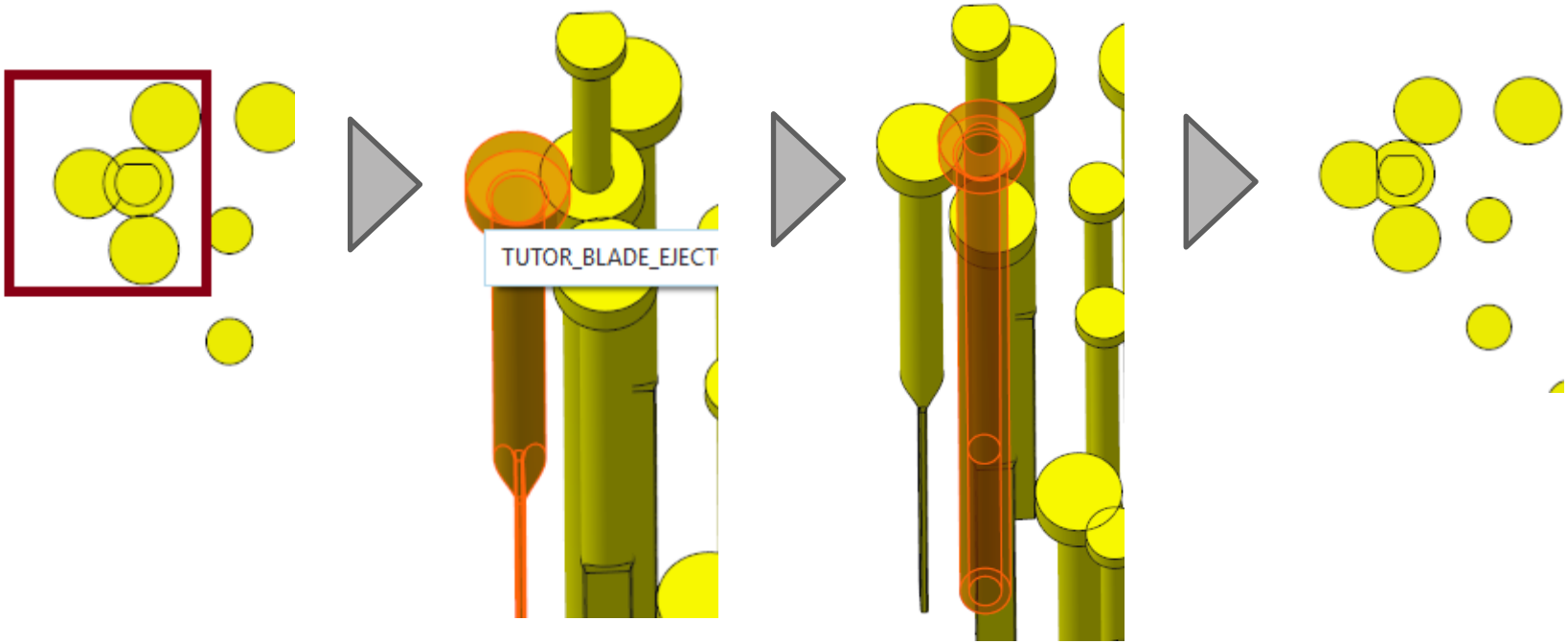
- Rules can now be different for different suppliers, type, units and file names



Enhancements

New Feature: Trim Ejector Pin heads against each other

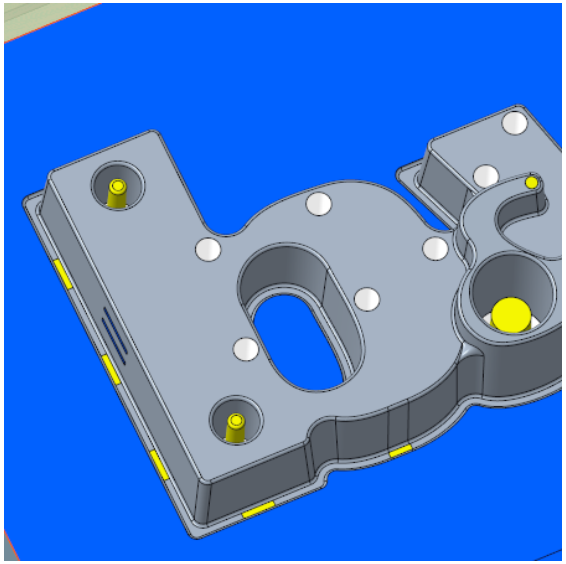
- Interfering ejector pin heads can be trimmed by selecting to different ejector pins

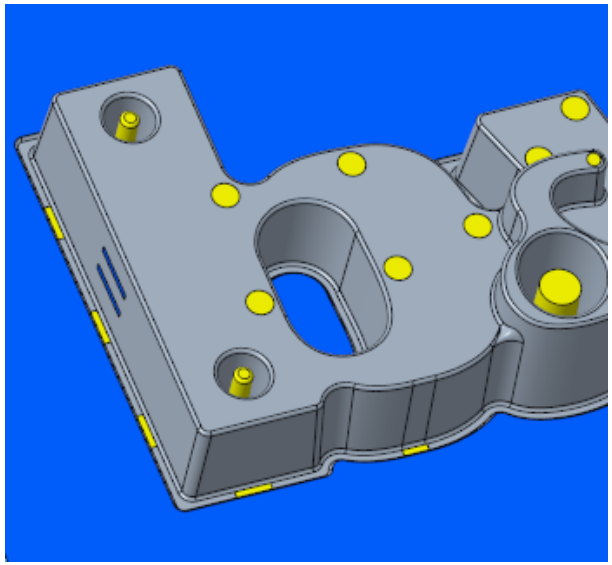


Enhancements

New Feature: Update Existing Ejector Pins Dialog

- New command in Ribbon
- Update ejector pins length and order number in case required reference distance has changed.

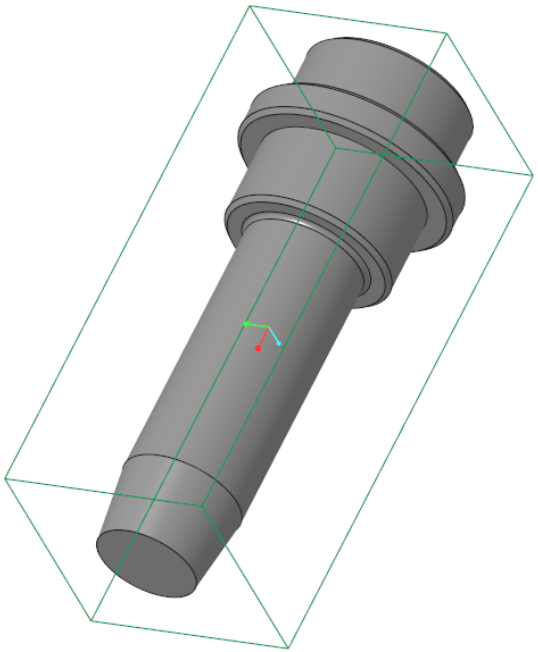


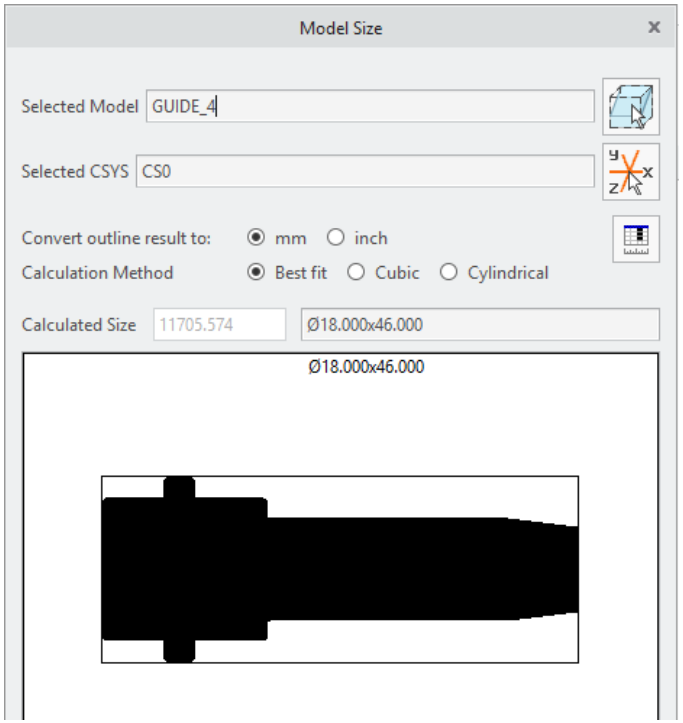


Enhancements

Improvement for Model Size Dialog

- Display outline values in drawing area
- Allow user to toggle between cubical and cylindrical result in case cylindrical result was determined.
- Improve algorithm to detect cylindrical parts



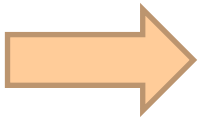


Enhancements

Improved performance of parameter read and write function

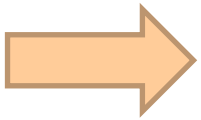
Reduce time working with EMX!

- Assembling of Components



i.e. 240 Ejector Pins: ~45 % faster

- Bill of Materials

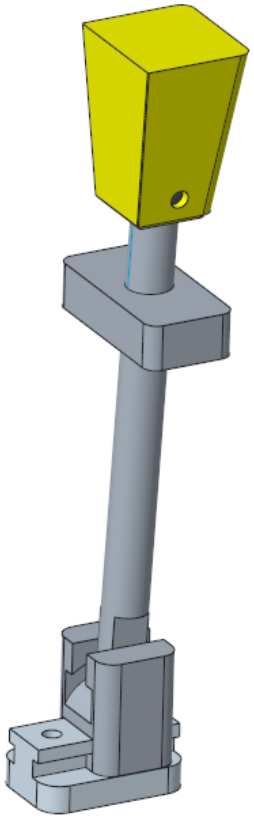


i.e. Open Bill Of Materials Dialog: ~ 40 % faster
i.e. Close Bill Of Materials Dialog: ~ 55 % faster

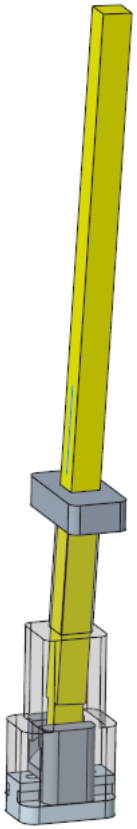
Enhancements

New MEUSBURGER Lifter assemblies added

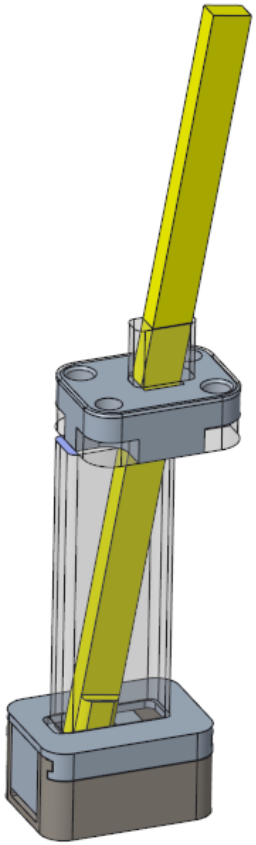
- Additional improvement: Trimmed body can be displayed in Preview



- E3244 + E3240



- E3246 + E3240

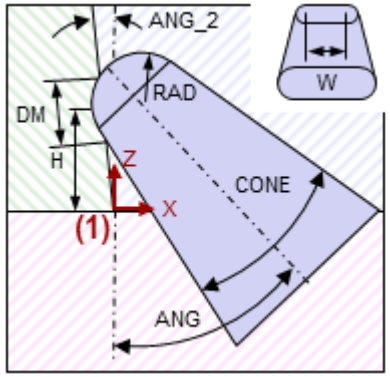


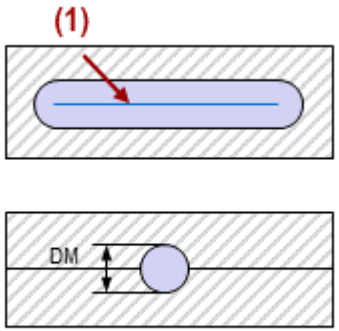
- E32481 + E3248 + E3249

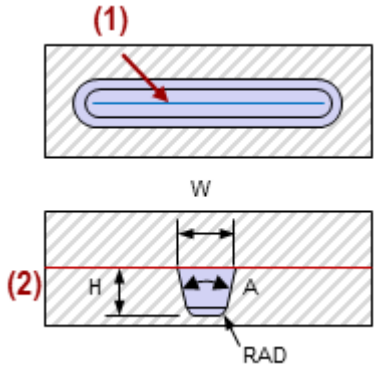
Enhancements

New Runner Library Components

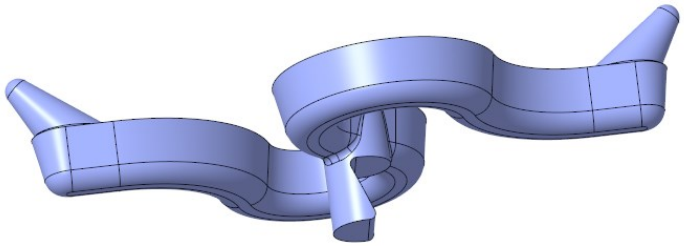
- With the new library components and UDFs runners can be designed easily.







- Conic Gate
- Round runner section UDF
- Trapezoid runner section UDF



New Components

MEUSBURGER

- New Cooling Components: O-Ring E21311
- New Ejector Pins: E17003 and E1723
- New Side Interlocks: W44, Z38,Z46

HASCO

- New slide plates Z555, Z556 and Z557
- New and updated Ejector Pins Z412, Z4650, Z4651, Z4670, Z4671, Z413, Z443, Z457, Z461, Z465, Z44, Z441, Z45 and Z45
- New Guides Z14 and Z1105
- New Cooling Components Z9430 and Z9400

Updated Components

MEUSBURGER

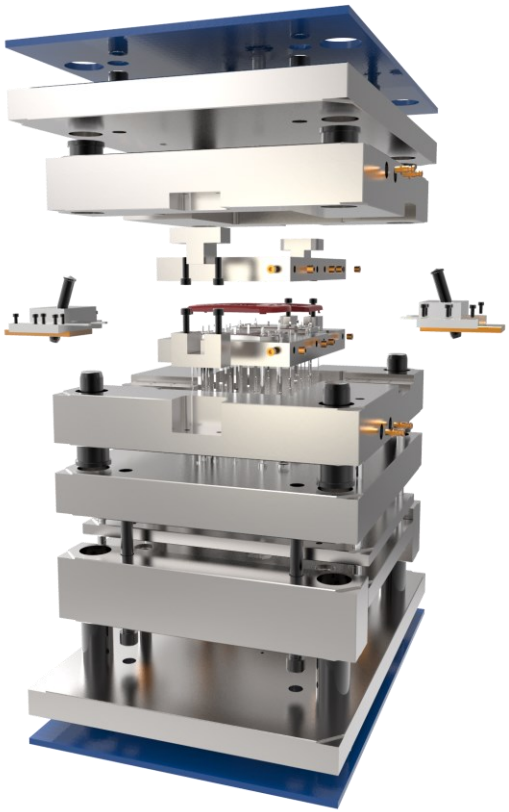
- Update E-Components to latest state: 1st quarter 2019

HASCO

- Remove deprecated Z30 screw
- Screws: Z30 and Z33
- Knockouts: Z02
- Locating Rings: K100, K107, K500, K501, K505, K506, K1000, Z7510, Z7515, Z7520, Z7525, Z7530, Z7535 and Z7540.
- Dowel Pins: Z25 and Z26
- Guides: Z01, Z010, ZU10, Z20, Z040 and Z0100
- Cooling Components: Z94, Z940 and Z9661

DIN

- More screw lengths are available for DIN screws



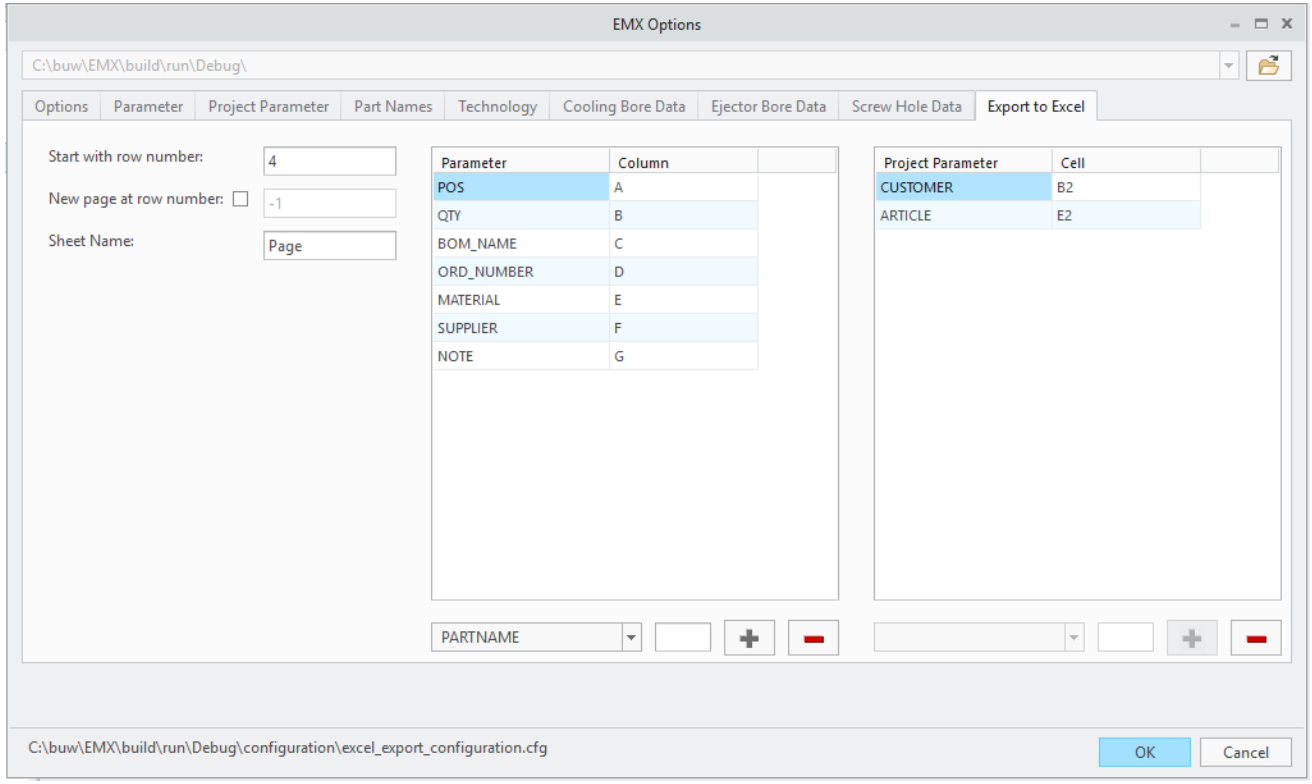
EMX 10 M031

What's New?

Enhancements

New Feature: Direct Interface for Export to Excel available

- No more Visual Basic macro in Excel required.
- Settings can be configured in EMX Options.
- Export to any selected Excel BOM template possible.



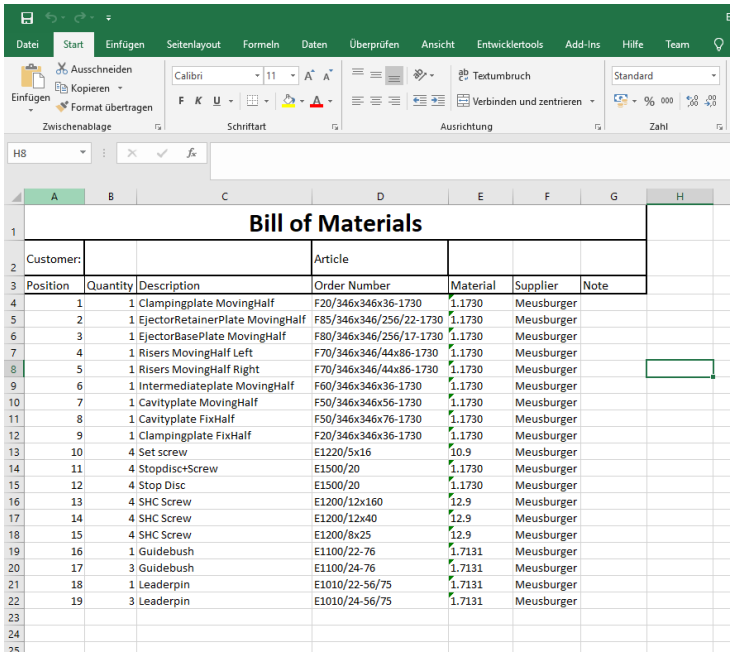
Enhancements

New Feature: Direct Interface for Export to Excel available

Both Options still available:

1. Direct Interface

2. Export by VBA-Macro



Bill of Materials

Customer:			Article			
Position	Quantity	Description	Order Number	Material	Supplier	Note
1	1	Clampingplate MovingHalf	F20/346x346x36-1730	1.1730	Meusburger	
2	1	EjectorRetainerPlate MovingHalf	F85/346x346/256/22-1730	1.1730	Meusburger	
3	1	EjectorBasePlate MovingHalf	F80/346x346/256/17-1730	1.1730	Meusburger	
4	1	Risers MovingHalf Left	F70/346x346/44x86-1730	1.1730	Meusburger	
5	1	Risers MovingHalf Right	F70/346x346/44x86-1730	1.1730	Meusburger	
6	1	Intermediateplate MovingHalf	F60/346x346x36-1730	1.1730	Meusburger	
7	1	Cavityplate MovingHalf	F50/346x346x56-1730	1.1730	Meusburger	
8	1	Cavityplate FixHalf	F50/346x346x76-1730	1.1730	Meusburger	
9	1	Clampingplate FixHalf	F20/346x346x36-1730	1.1730	Meusburger	
10	4	Set screw	E1220/5x16	10.9	Meusburger	
11	4	Stopdisc+Screw	E1500/20	1.1730	Meusburger	
12	4	Stop Disc	E1500/20	1.1730	Meusburger	
13	4	SHC Screw	E1200/12x160	12.9	Meusburger	
14	4	SHC Screw	E1200/12x40	12.9	Meusburger	
15	4	SHC Screw	E1200/8x25	12.9	Meusburger	
16	1	Guidebush	E1100/22-76	1.7131	Meusburger	
17	3	Guidebush	E1100/24-76	1.7131	Meusburger	
18	1	Leaderpin	E1010/22-56/75	1.7131	Meusburger	
19	3	Leaderpin	E1010/24-56/75	1.7131	Meusburger	

What's Possible:

- Parameter to defined column.
- Project Parameter to defined cell.
- Start from defined row number
- Optional: New sheet at defined row number.

Enhancements

New STRACK Sliders:

New Types:
Z4290, Z4290L, Z4292, Z4293, Z4294, Z4294L, Z4295, Z4296, Z4296L and Z4298

Z4290L

Z4294L

Z4296L

Quelle: https://www.strack.de

Enhancements

New Components:

- STRACK – Ejector Pins: R1628 and R1634

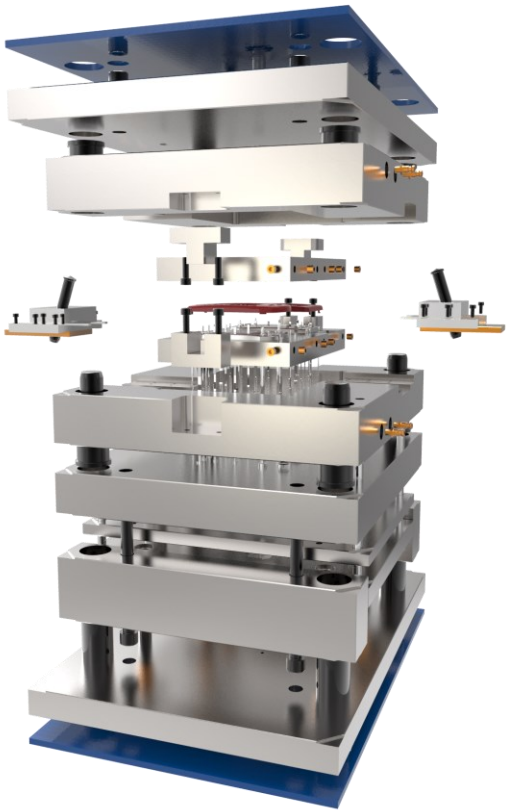
- HASCO – Torx Screw: Z330

- MEUSBURGER - Cooling Component: E2112
- MEUSBURGER - Guide Component: E5000 and E5200
- MEUSBURGER - Ejector Pins: E1711 and E17264DLC

- DIN – Ejector Pins: DIN1530-D, DIN6751, DIN8405, DIN8693 and DIN8694.

Updated Components:

- MEUSBURGER – Plates and Component
- HASCO – Insulation Plates



EMX 10 M030

What's New?

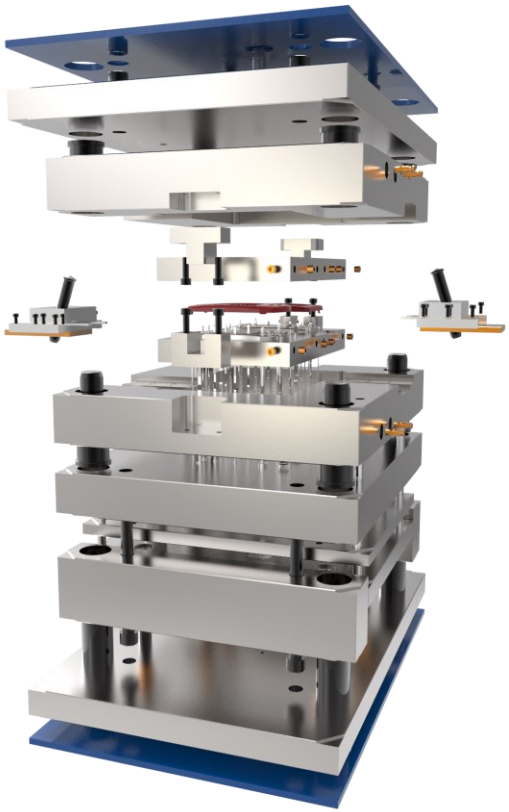
Enhancements

New Option: USE_LAYERS_FOR_SIDE_VIEWS

- Instead of simplified representations all EMX components can be put on layers to display the moving and fixed half in the View functionalities.

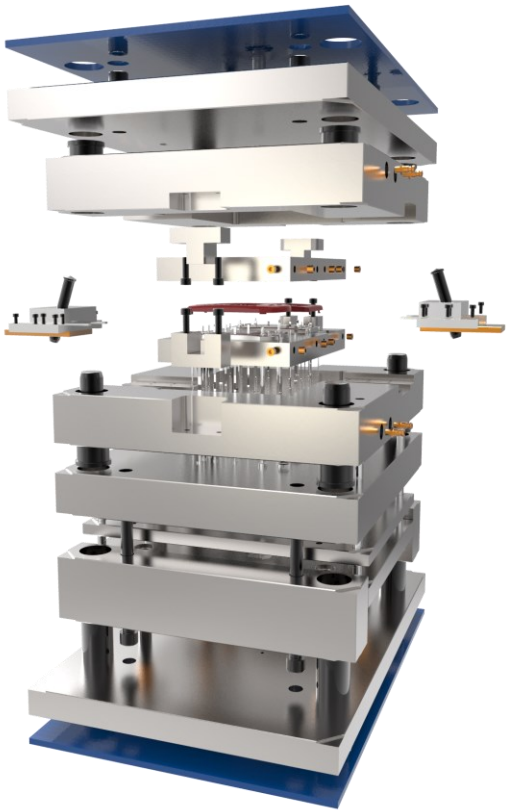
Major Bug Fixes

- Creo Toolkit API function ProMathExpressionEvaluate behaves different beginning with Creo 4 M080. An Update to EMX 10.0 M030 is required.



EMX 10 M022

What's New?



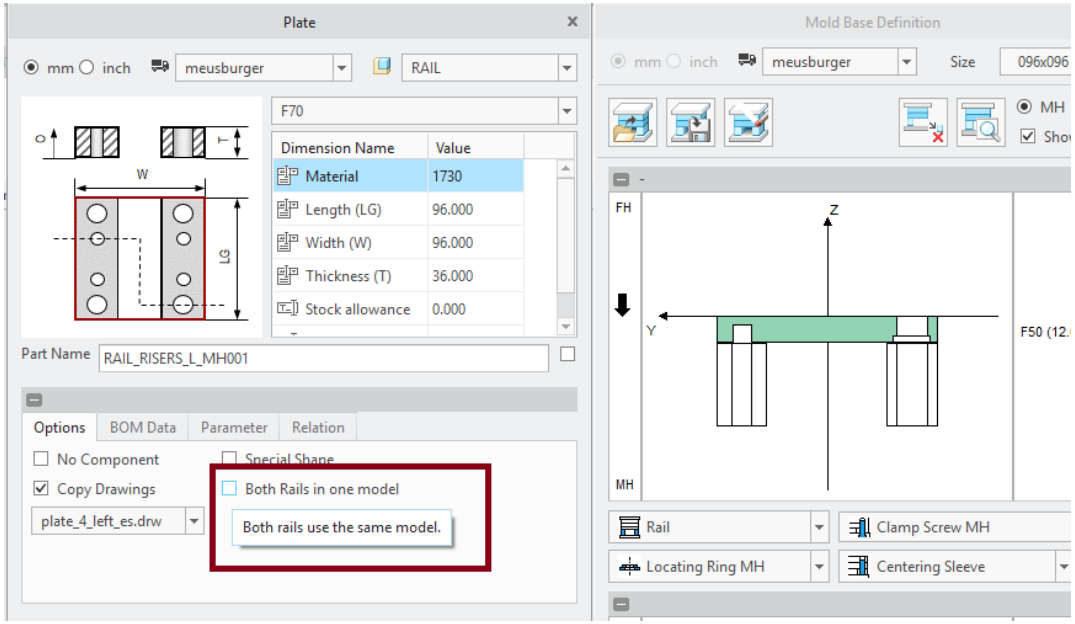
EMX 10 M021

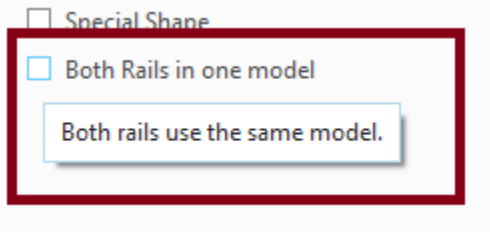
What's New?

Enhancements

“Use One Model Rail” can be modified from Rail Plate Dialog

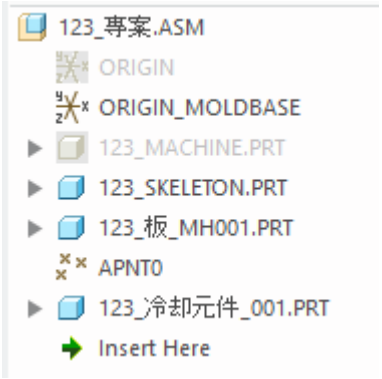
- The EMX Option USE_ONE_MODEL_RAIL only sets the default for check button
- Different types of rail models can be assembled to one mold base

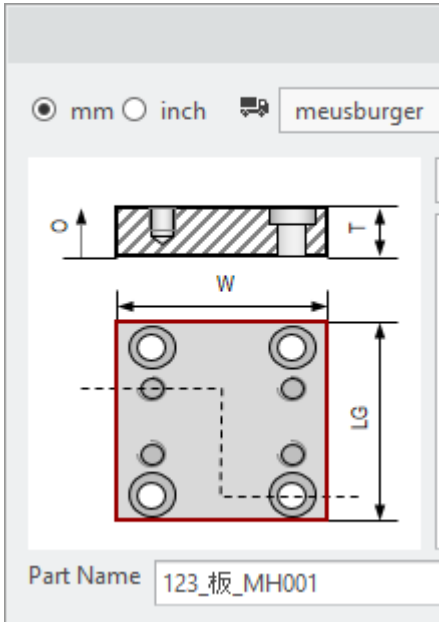


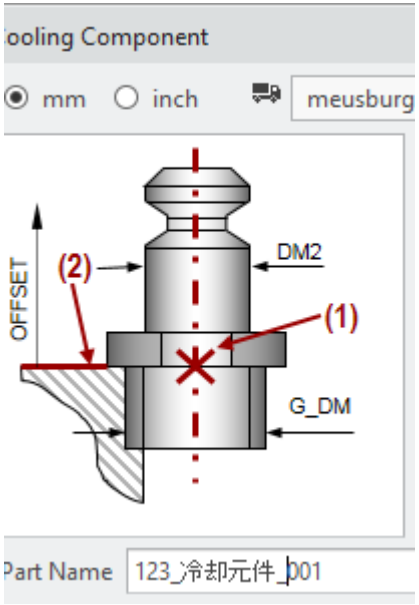


Enhancements

Unicode characters are supported for file names, parameter names and parameter values.







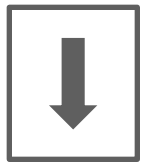
Enhancements

In BOM Dialog use UP and DOWN arrow keys to jump to next cell at top or bottom.

- Reduces clicks when working in the BOM
- Current cell value is confirmed and next cell is activated

PARTID	BOM_NAME	S
01-0001	Aufspannplatte Auswerferseite	M
01-0001	Auswerfergplatte Auswerferse...	M
01-0001	Auswerferplatte Auswerferseite	M
01-0001	Leiste Auswerferseite	M
01-0001	Leiste Auswerferseite	M
01-0001	Zwischenplatte Auswerferseite	M
01-0001	Rahmenplatte Auswerferseite	M
01-0001	Rahmenplatte Duesenseite	M
01-0001	Leiste Duesenseite	M
01-0001	Leiste Duesenseite	M
01-0002	Aufspannplatte Duesenseite	M
01-0001	Auswerfergplatte Duesenseite	M
01-0001	Auswerferplatte Duesenseite	M

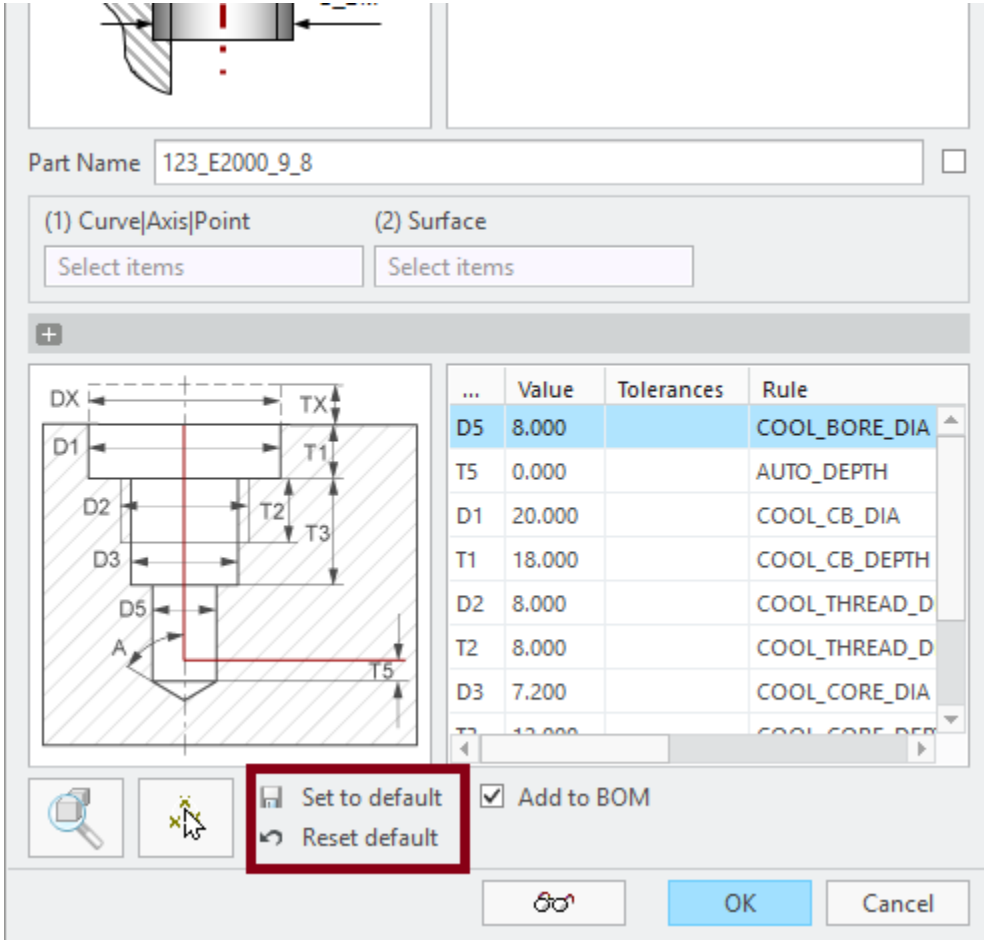
01-0001	Auswerferplatte Auswerferseite	
01-0001	Leiste Auswerferseite	
01-0001	Leiste Auswerferseitep	
01-0001	Zwischenplatte Auswerferseite	
01-0001	Rahmenplatte Auswerferseite	



01-0001	Auswerferplatte Auswerferseite
01-0001	Leiste Auswerferseite
01-0001	Leiste Auswerferseite
01-0001	Zwischenplatte Auswerferseite
01-0001	Rahmenplatte Auswerferseite

Enhancements

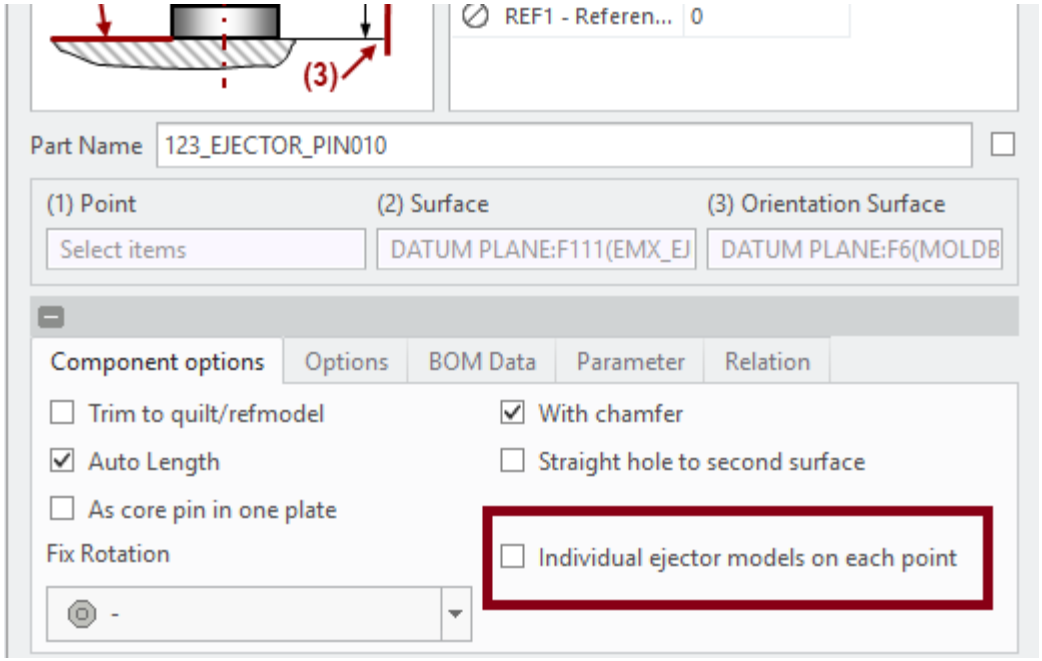
New button in Component Dialog to reset saved component instances to default.



Enhancements

Ejector pins defined on multi point features can be forced to be created as individual models.

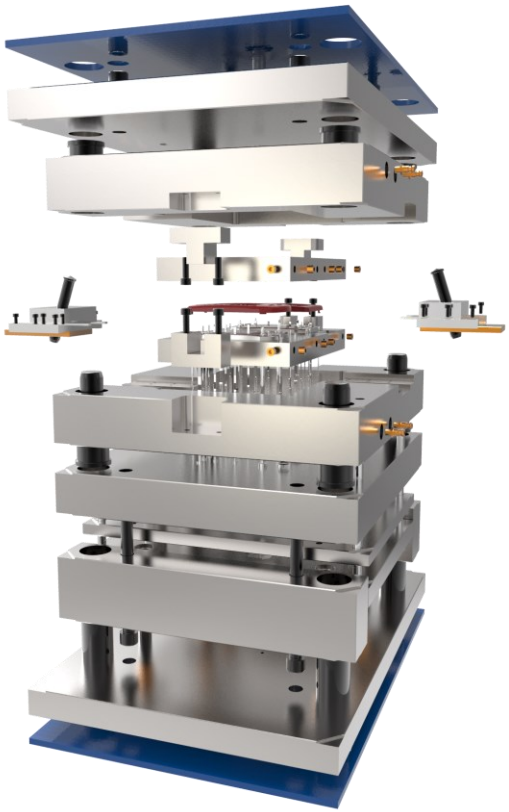
- Previously option ENABLE_MULTI_EJP behavior in EMX Options
- The EMX Option ENABLE_MULTI_EJP only the sets default for check button



Components

New components

- MEUSBURGER cooling components E20749 and E2074D.



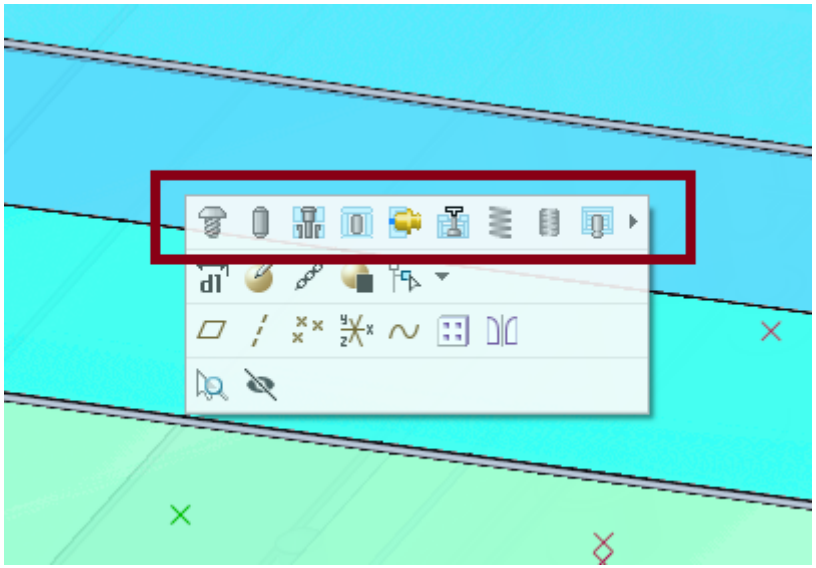
EMX 10 M020

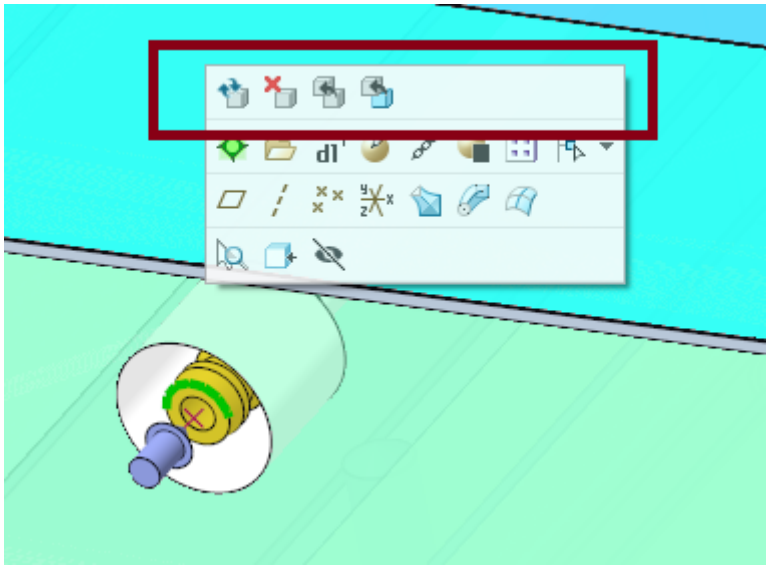
What's New?

Enhancements

Enable Mini Tool Bar with EMX 10 and Creo 4.0

- Select Datum Points and Axis
- Create Components by Mini Tool bar commands
- Selection of selected datums is immediately stored in Component Dialog

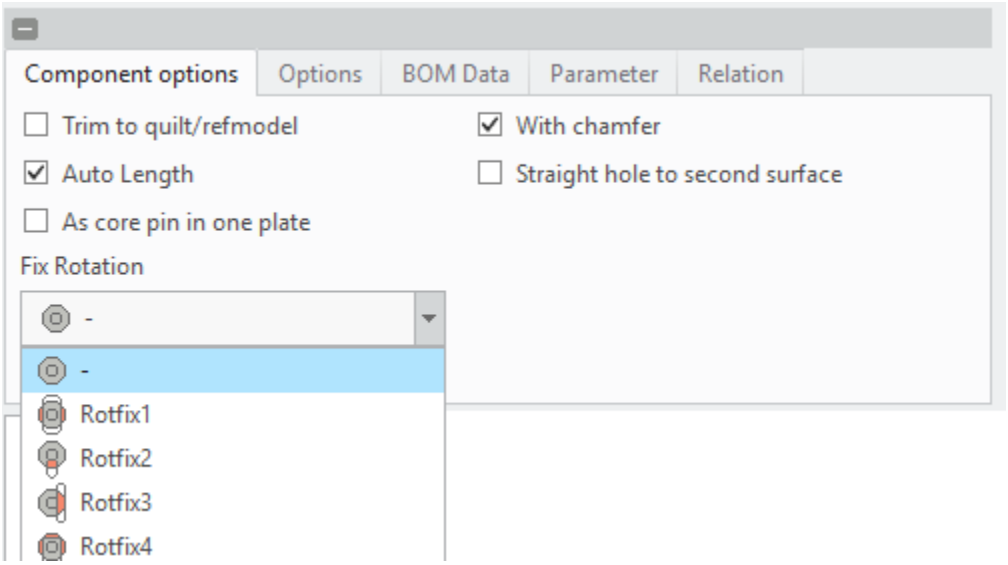




Enhancements

Improve Ejector UDFs and Options

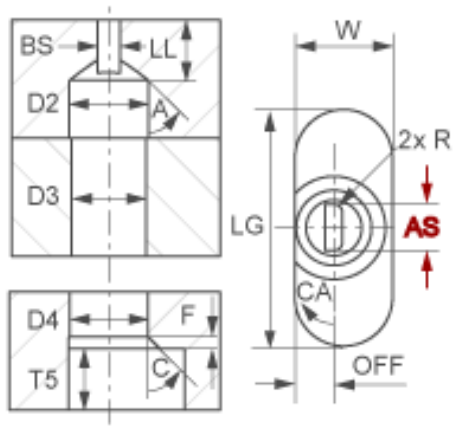
- New Rotation Fixture Type
- New Chamfer Option
- Visualization of Trim Option
- Separate Rotation Fixture Angle for all UDF Types
- Improved Preview Sketch UDFs
- Separate Tabs for Component Options and Assembly Options

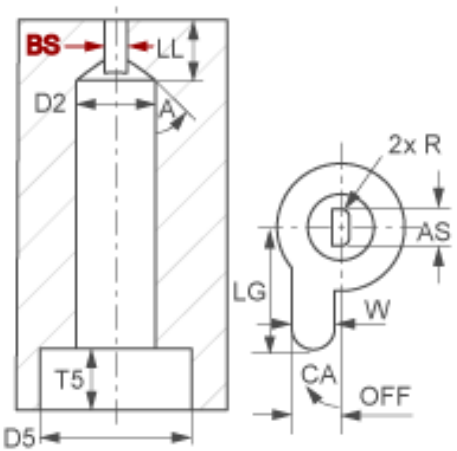


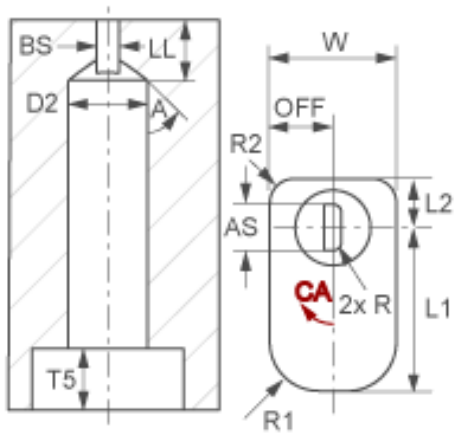
Enhancements

New UDF Images for Cooling Components, Guides, Ejector Pins and Dowel Pins

- Verification of all visualized UDF dimensions
- New Design



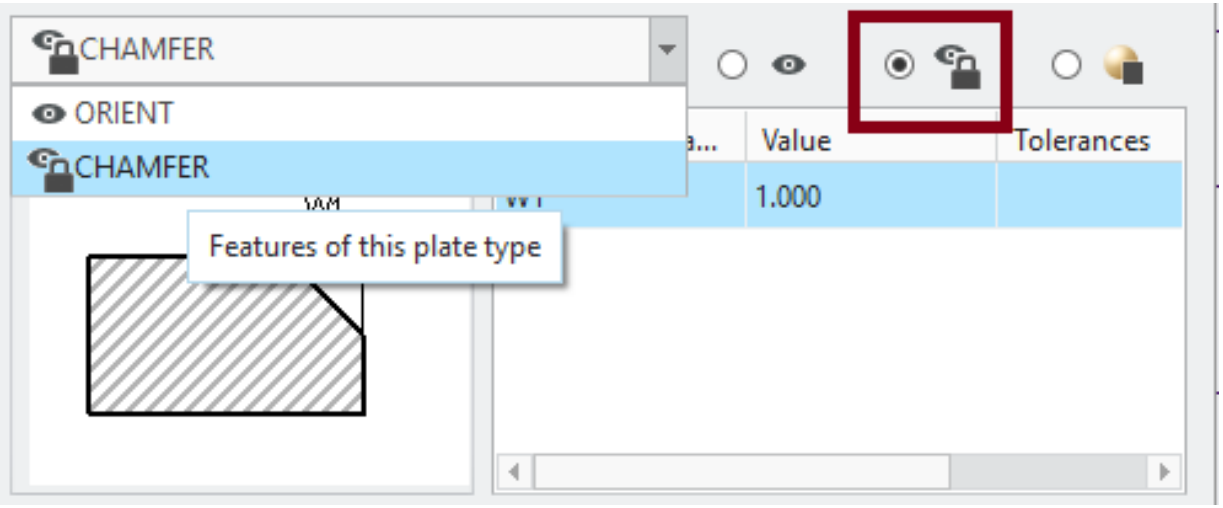




Enhancements

New Feature Visibility Status Type “Visible Locked” in Plate Dialog

- Feature can be resumed and locked.
- It will not be suppressed when changing the size of the plate



Components

STRACK

- Update of existing ejectors
- New Springs: SN2520, SN2540, SN3560, SN3580, SN2590, SN2600, SN2625
- New Side Interlocks: W44, Z38,Z46

EBERHARD

- Update of existing ejectors
- New Ejectors: 6116, 6118, 612R, 6143, 6178, 6261, 6271, 6281, 6331, 6335, 6341, 6351, 6361, 6371, 6381, 6441, 6622

MEUSBURGER

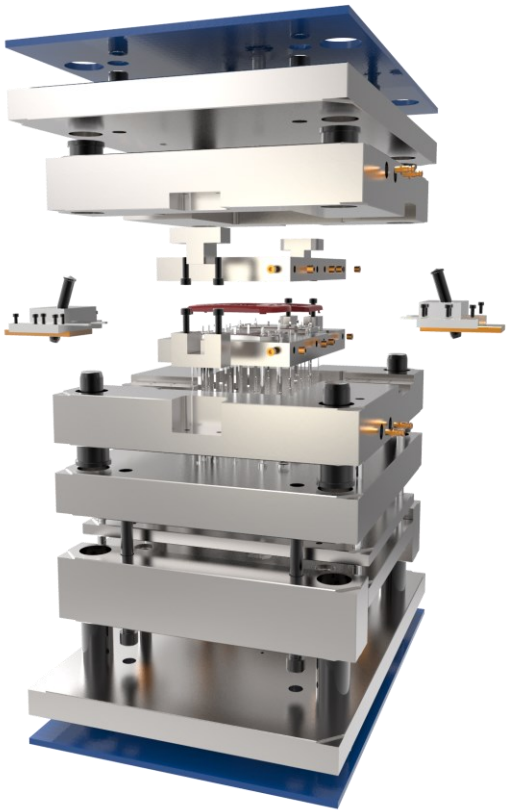
- Update component and plate data to latest state

LKM

- Clamping Slots available for side gate plates

KNARR

- Update component data to latest state



EMX 10 M013

What's New?

Components

Side Interlock

- Strack Z38, Z46, W44

Top Interlock

- Agathon 7992, 7993
- Meusburger E1311

Library

- Hasco Z67 (Circlip)

Screw

- Hasco Z715, Z725 (Hoistring)

Guide

- Hasco Z016, Z025

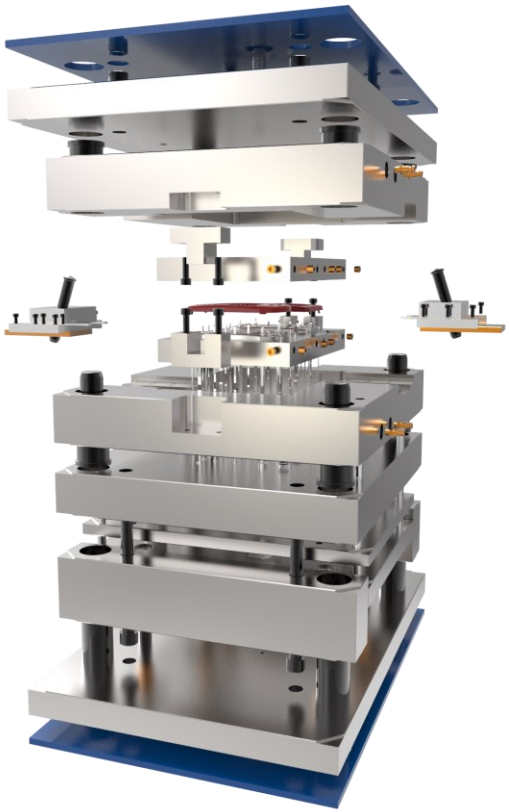
Ejector Pins

- Hasco Z400, Z410, Z492, Z4655, Z4656

Components

Updated Instances

- HASCO guide components Z011, Z012, Z013 and Z022.
- HASCO screw Z31 and Z32.
- HASCO ejectors Z40, Z41 and Z42.



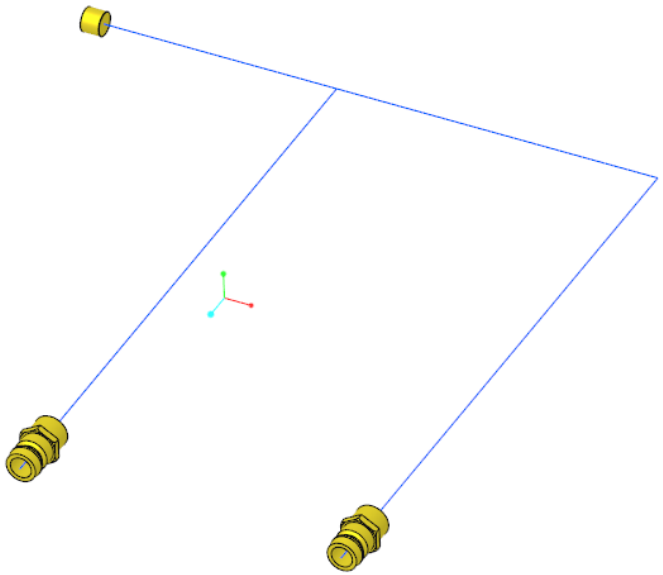
EMX 10 M012

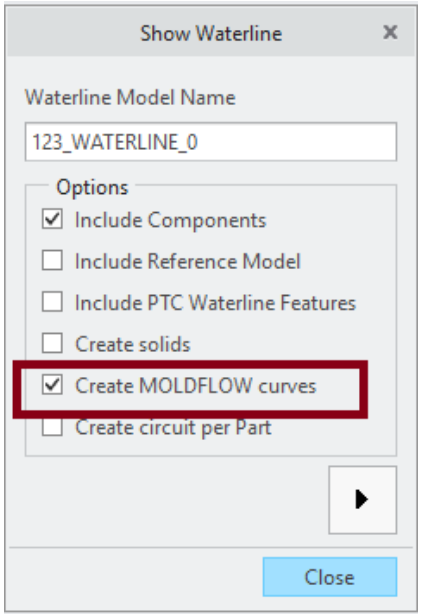
What's New?

Enhancements

Export waterline curves for Moldflow analysis

- New option in “Show Waterline” feature
- Curves of waterline circuits are created when option is enabled

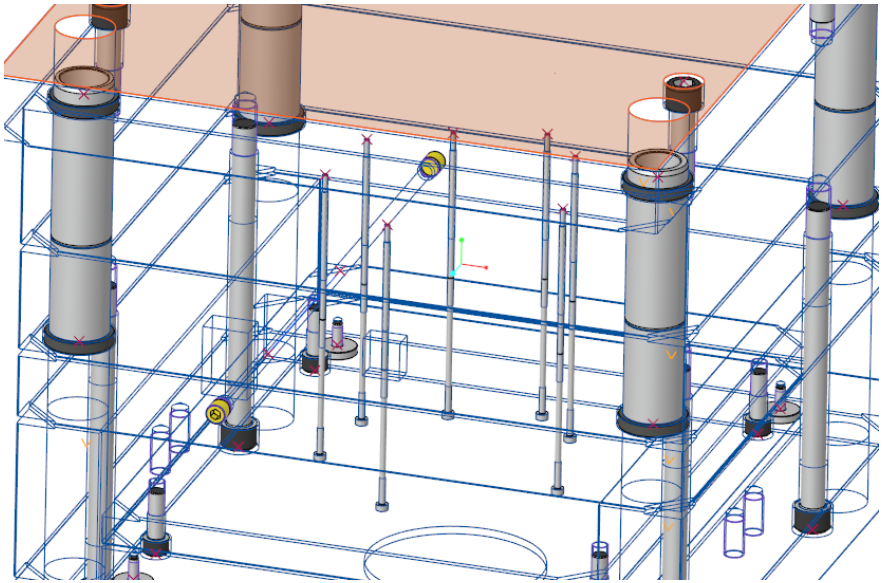


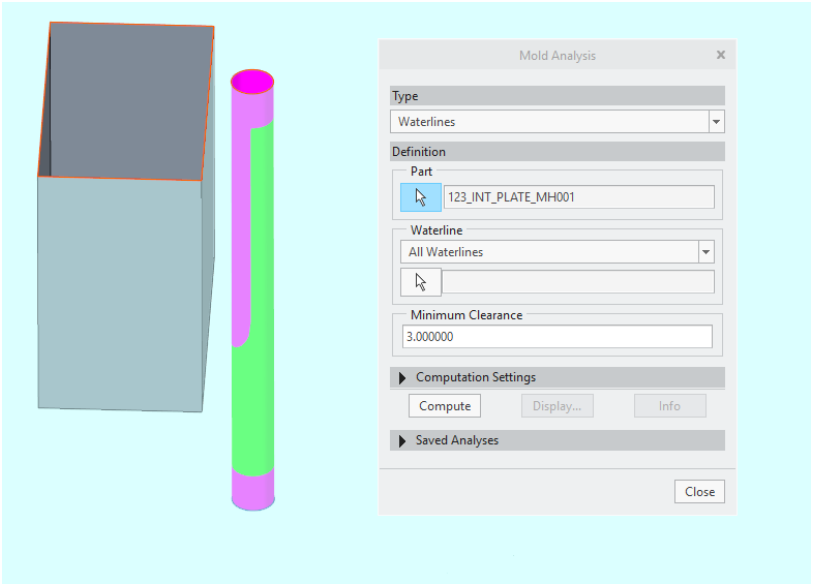


Enhancements

New Option: INCLUDE_EJECTOR_BORES_IN_MOLD_ANALYSIS

- All bores created by EMX ejectors are tagged with parameter
- When using wall thickness check in Tool Design, ejector bores are considered as well.



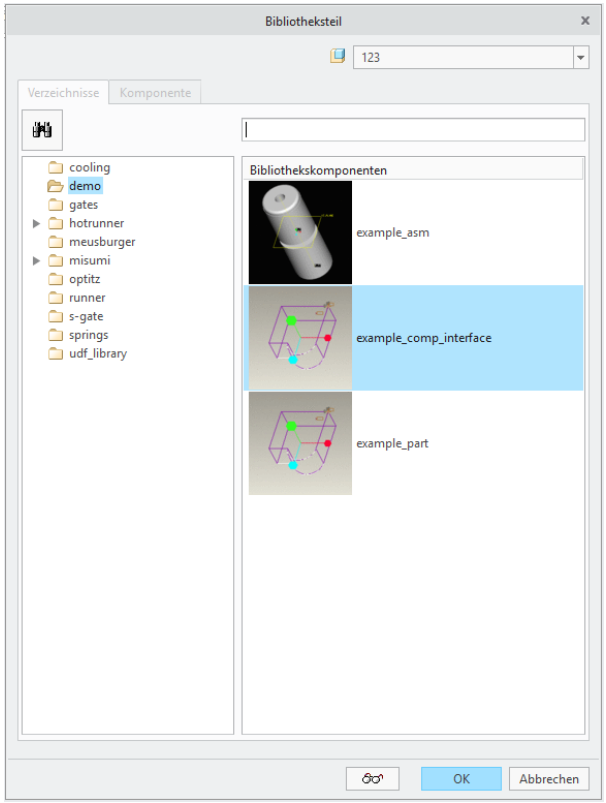


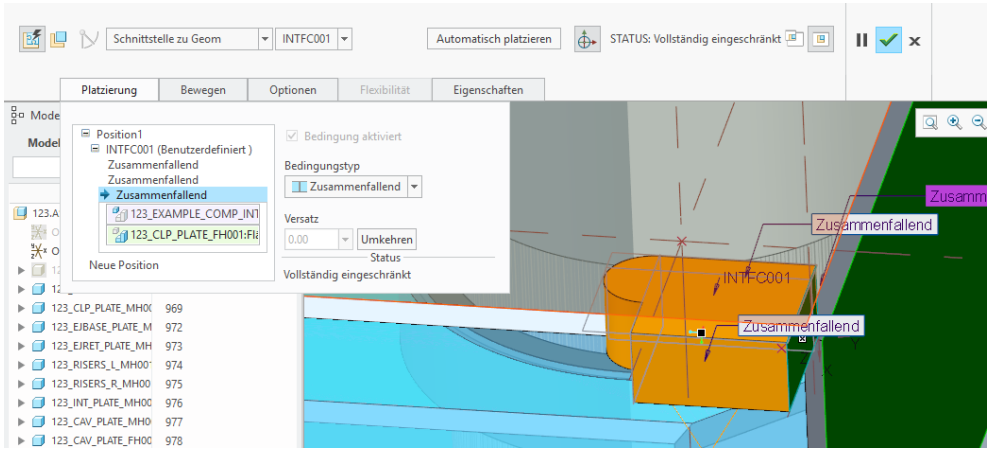
Enhancements

Library components can be placed with Component Interface

- Prepare library parts with Creo component interface
- Example can be found:

<emx_install> \mm\library\demo\example_comp_interface

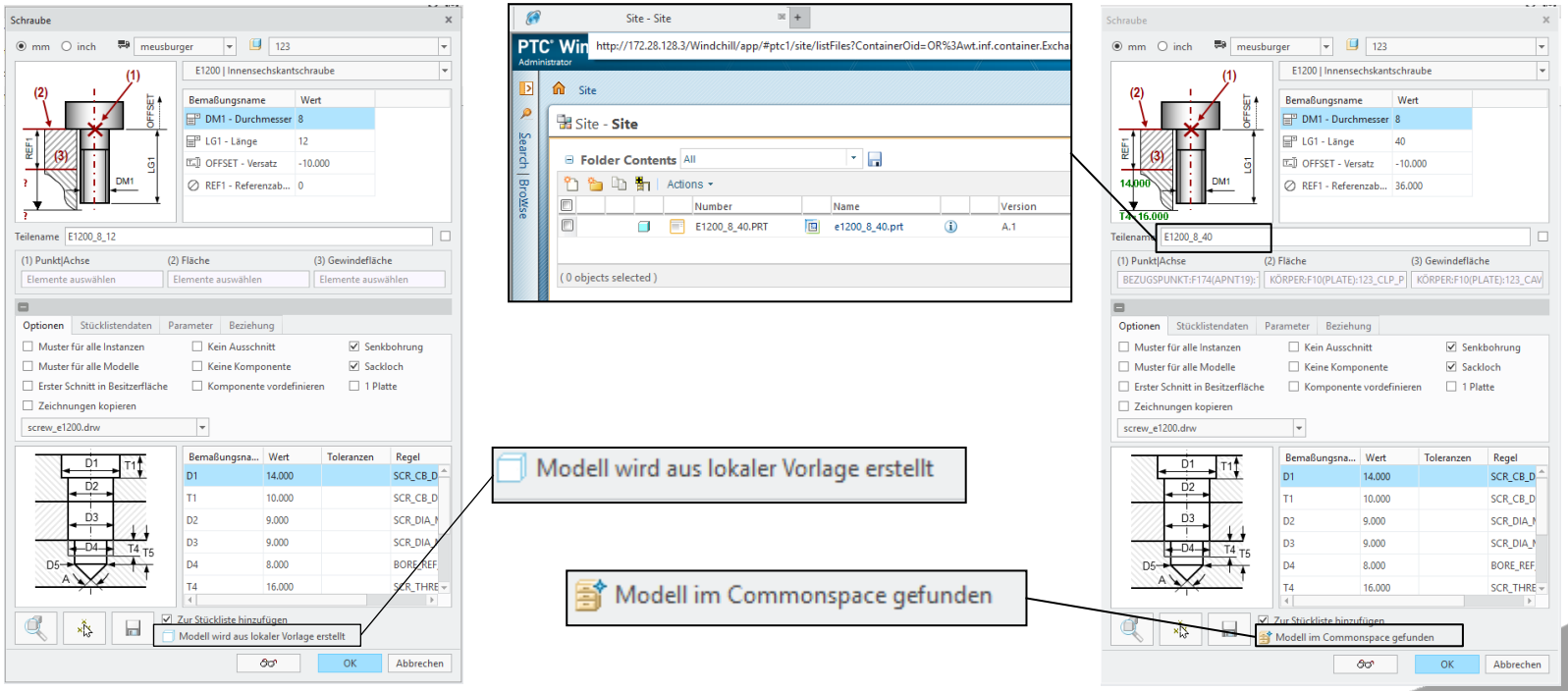




Enhancements

Improve behavior when standard parts are retrieved from Windchill or “search_path” folder.

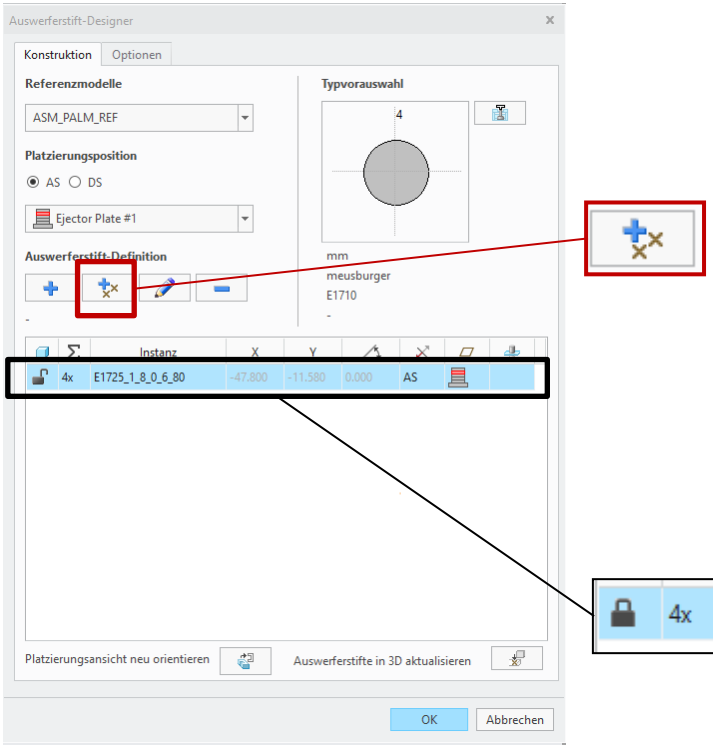
- When standard part is found in Windchill or search_path folder and active option PDM_SYSTEM is used source status is displayed in Component Dialog.

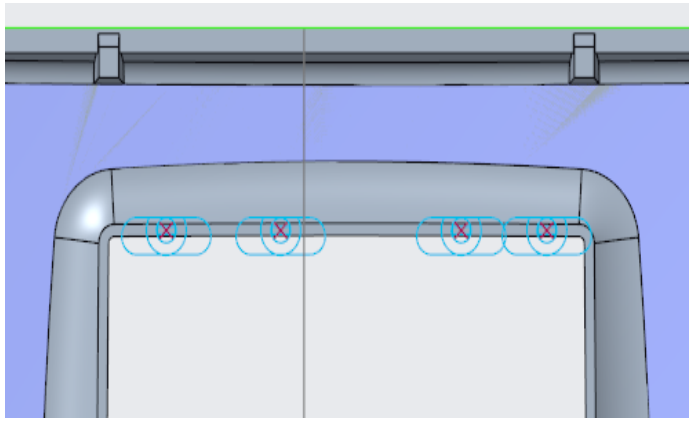


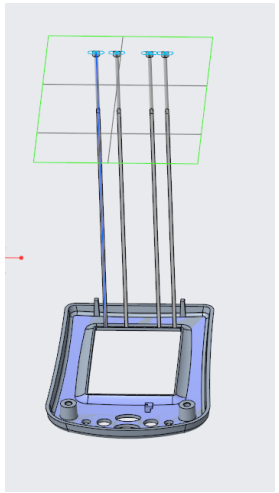
Enhancements

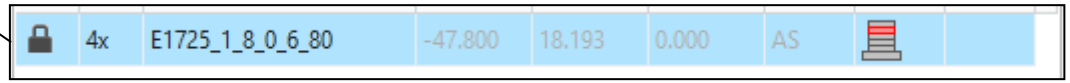
New Button in Ejector Pin Designer: Placement of ejector pins on existing points (Sketched points or multiple points features)

- Existing Points can be selected. Multi point features are supported.
- Ejector Pin Designer assembles multiple ejectors in one step
- All advantages of parametric sketches.





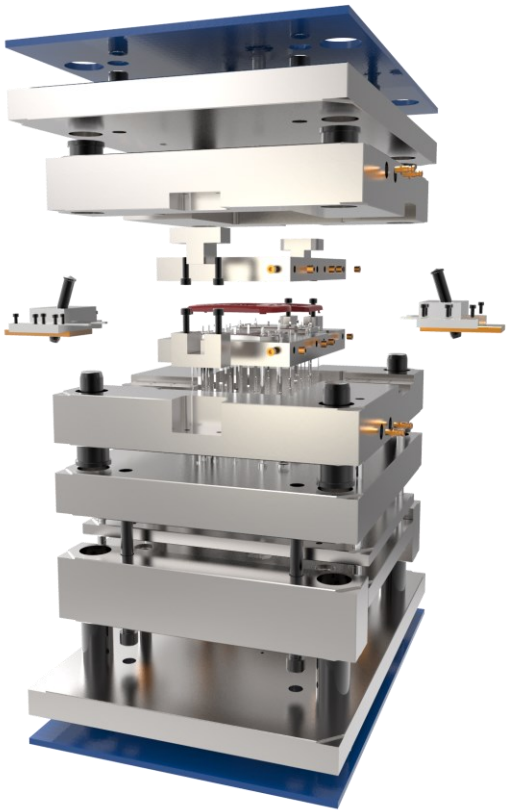




Components

Top Interlock

- AGATHON 7990



EMX 10 M011

What's New?

New Components

Compact slider sets

- Meusburger E3080 with E3082/E3084
- Meusburger E3072 with E3074/E3076/E3078
- Meusburger E3070 with E3074/E3076/E3078
- Meusburger E3360
- Meusburger E3330
- Meusburger E3300
- Meusburger E3045, E3047, E3048 and E3049 – locking for slider
- Meusburger E30110 - slider set

Library Components

- Meusburger E2730 - Cable box as library component
- Meusburger E2682 - Distance plate round
- Meusburger E2680 - Distance plate rectangular
- Optiz DATI1000, DATI2000, DATI2900 and DATI3000 - date stamps

New Components

Guides

- Meusburger E1064 - Guide unit for FW moldbases
- Meusburger E1115, E11202, E11206 and E1170
- Meusburger E1150 - Guide for knockouts with predefined screws

- Strack Z69, Z68, Z4315, Z4085, Z4078-R, Z4078, Z4077-R, W35, W35-R, W33, W33-R, W32, W31, W30, W25, W24, W23, W21 and W20

- Knarr 264180, 51001, 51003, 51011, 510110W, 51100, 51110, 511100W, 51112, 51113W, 51114, 51210, 51211, 51702, 51711, 51712, 51713, 51722, 51911, 51912, 51932, 51934 and 551110.

New Components

Support Pillars

- Meusburger E1512 and E1513
- Strack Z19

Ejectors

- Meusburger E1700DLC, E17103, E1710DLC, E17262, E17262DLC, E17264, E1727DLC, E1728DLC and E1742
- Strack - R1628, R1634, Z6015 and Z6017
- More Knarr ejectors

Dowel Pins

- Meusburger E1301
- Strack R523

New Components

Locating Rings

- Meusburger E1367, E1372, E1377 and E1382
- Strack Z10, Z11, Z16
- More Knarr Locating Rings

Springs

- Meusburger E1536, E15365, E1537, E15375, E1358, E15385 and E1539

Support Bush

- Meusburger E1662, E1663 and E1664

Cooling Components

- Meusburger E23.. - USA-type
- Strack Z7714, Z7720, Z7725, Z7748 and Z7771

New Components

Plates

- Meusburger FW and FB mold bases with plate features

Screws

- Meusburger E1225, E1226, E1251, E1252, E1274 and E1275

Top Interlock

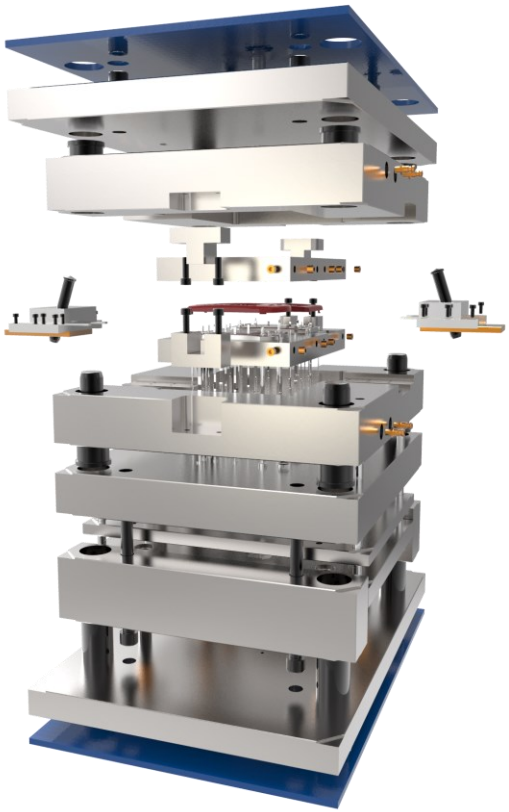
- Meusburger E1306

Side Interlock

- Meusburger E1308, E1315 and E1320

Knockout

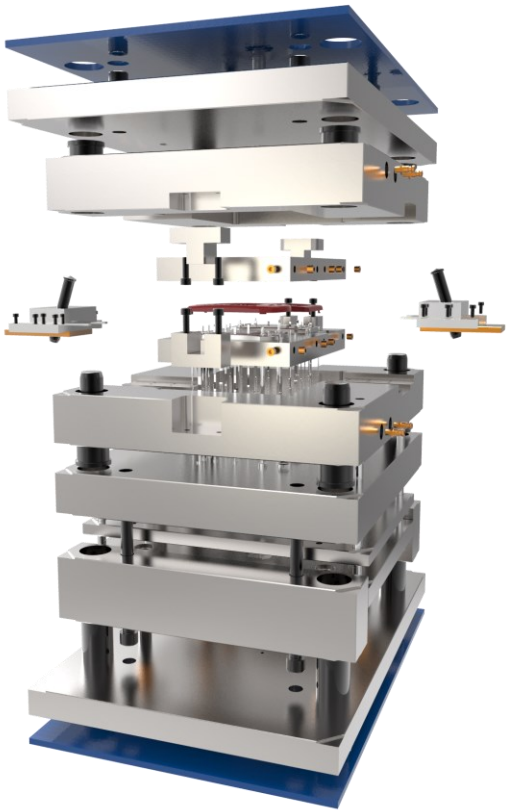
- Meusburger E1516 and E1517 for FW mold bases.



EMX 10 M010

What's New?

- New Features
- Components



EMX 10 M010

What's New?

- New Features
- Components

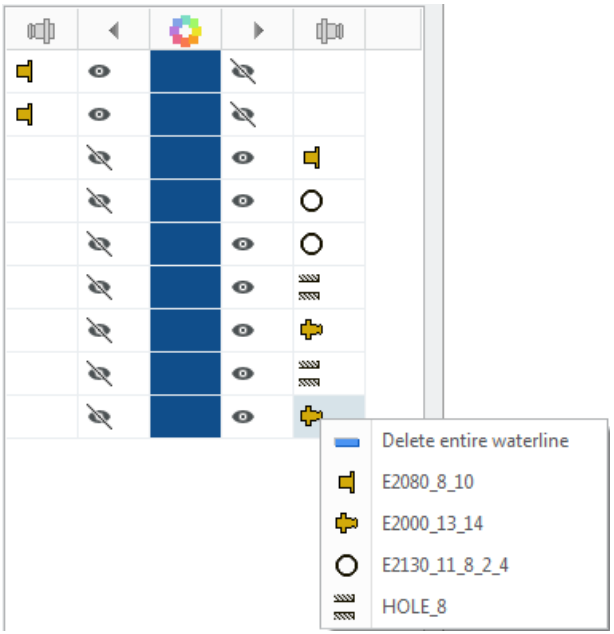
1. Enhanced Waterline Designer

Quick Selection of Components from Waterline List

- Predefine up to 4 default components in EMX Option

WATERLINE_DESIGNER_DEFAULT_COMPONENT	mm|meusburger|E2080_8_10&&mm|meusburger|E2000_13_14&&mm|meusburger|E2130_11_8_2_4&&mm|meusburger|HOLE_8

- Use Right Mouse Button in table and assign quickly



→ Design a complete cooling cooling circuit without opening the Component Dialog once!

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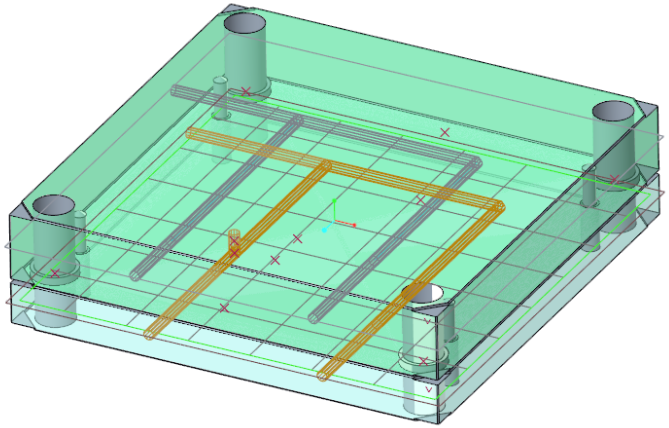
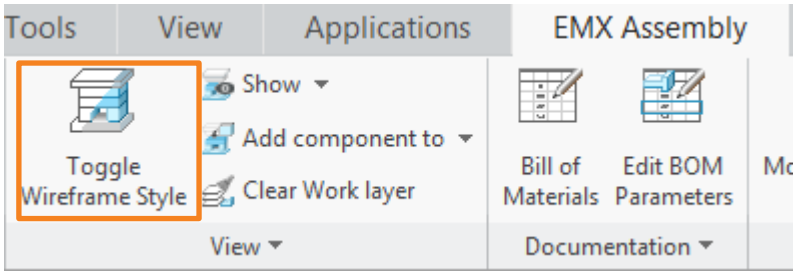


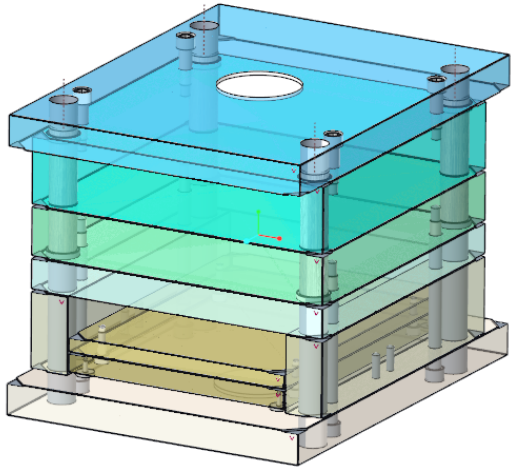
2. Toggle Wireframe Style

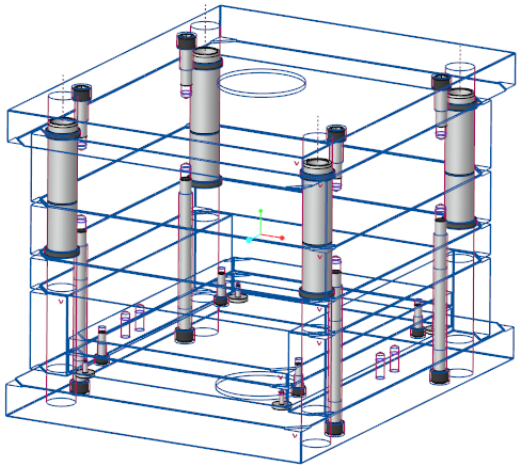
Fast Toggle of Wireframe Style from the Ribbon

(Only with B&W Direct License)



No need to open the View Manager anymore





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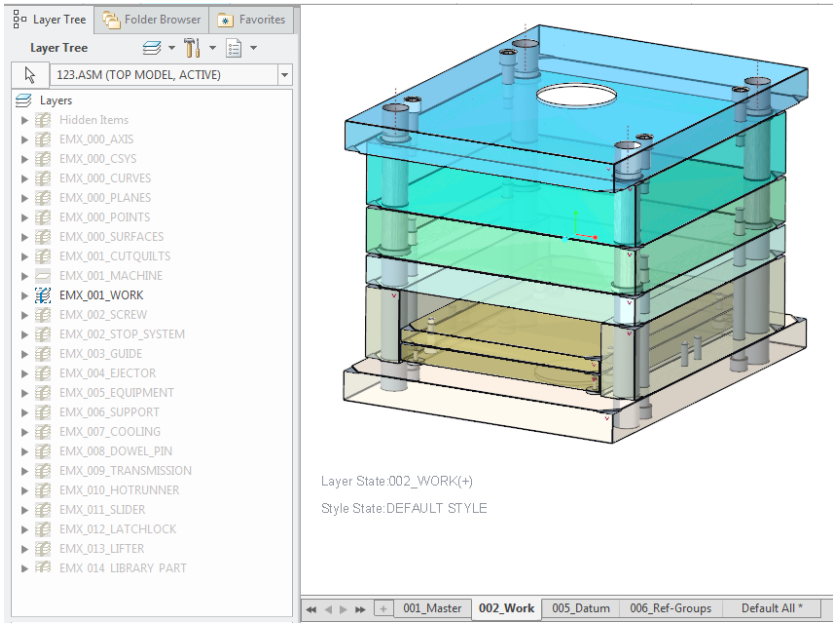

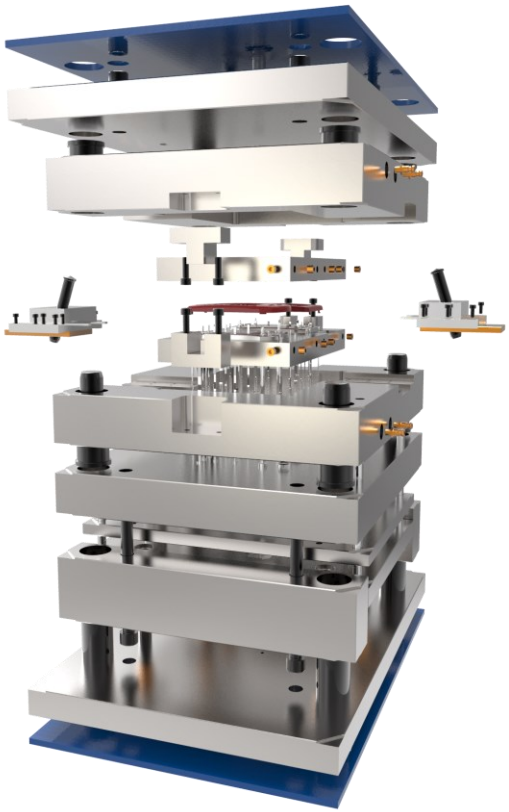

EMX 10 M010

What's New?

- New Features
- Components

Components

New Components

- Hasco – Z14W: Guide bush
- Hasco – Z09: Side interlock
- Rabourdin – 1071, 1005, 1061, 651, 671 and 601: Guide Components
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- Knarr – 38488, 38781, 38881: Ejector Sleeves
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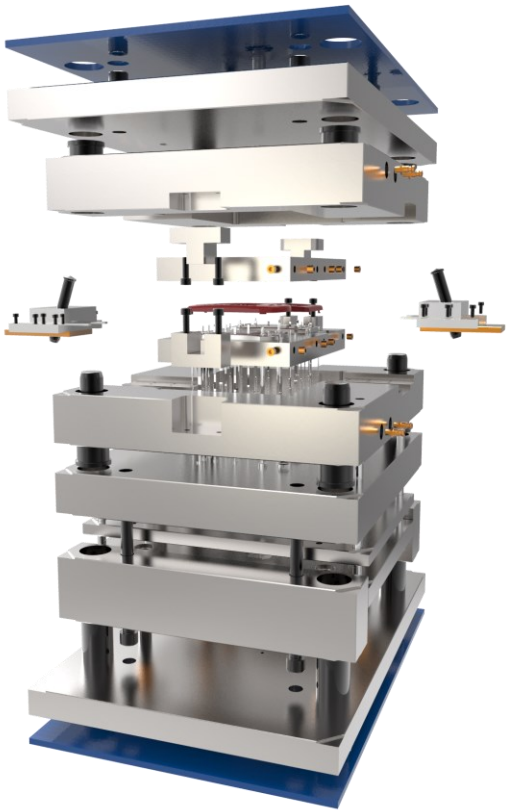
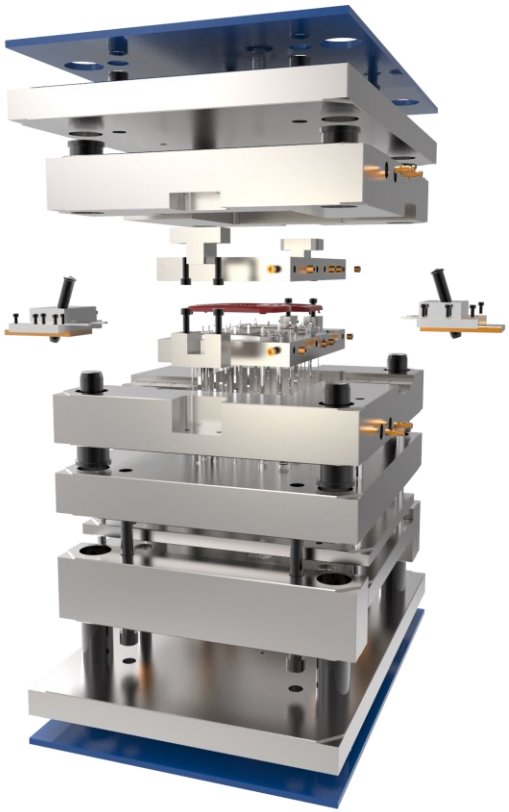


EMX 10 F001

What's New?

- New Features
- Components



EMX 10 F001

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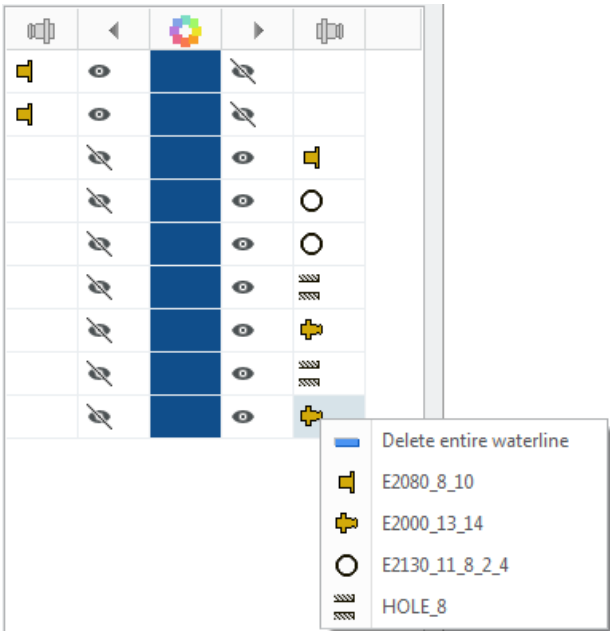

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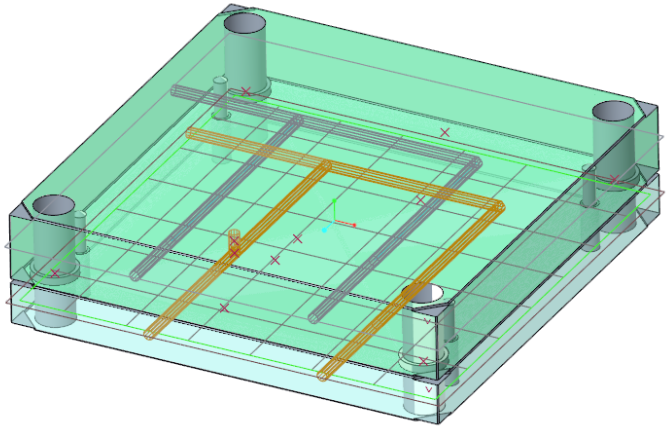

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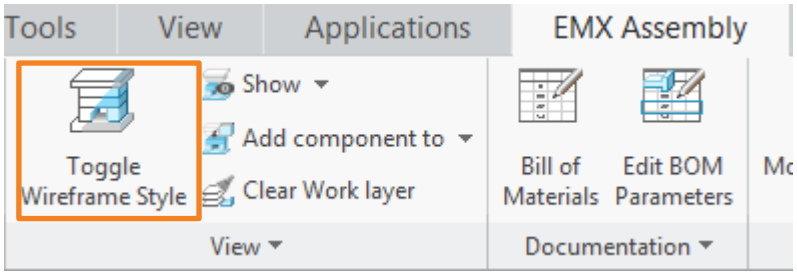

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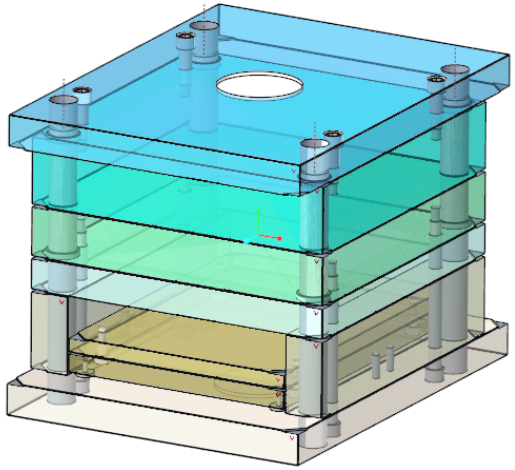

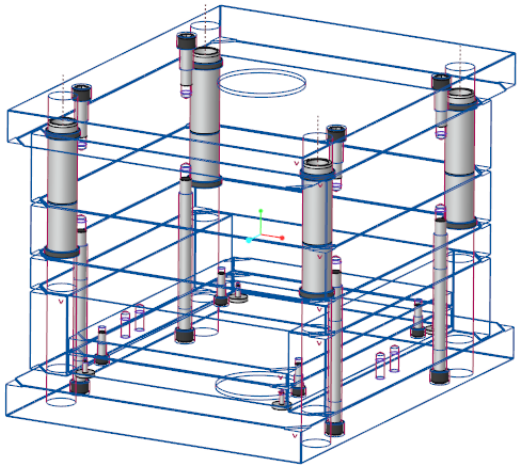

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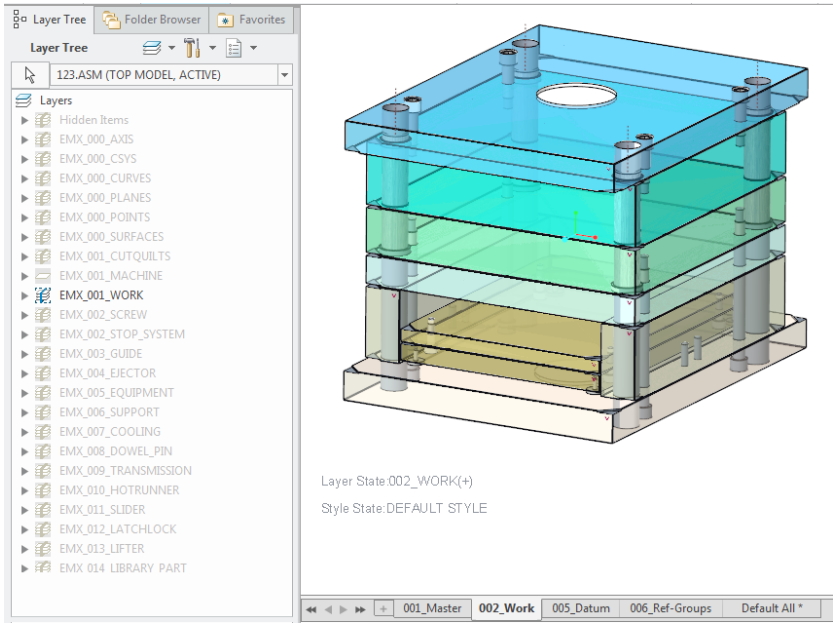

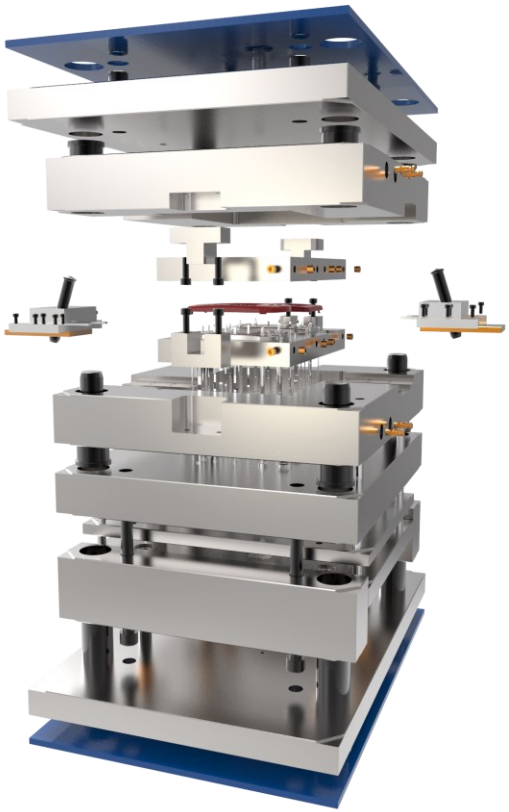

EMX 10 F001

What's New?

- New Features
- Components

2. Deutsch

- Neue Funktionalität
- Komponenten

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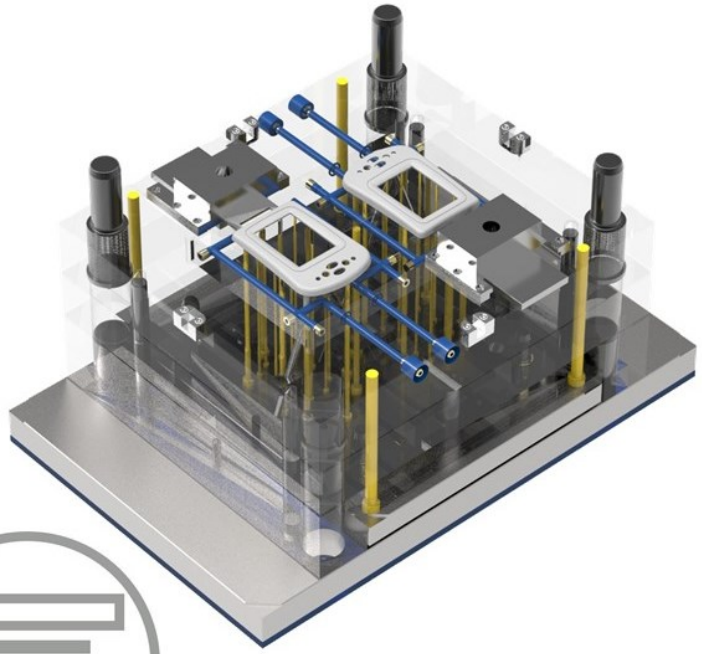
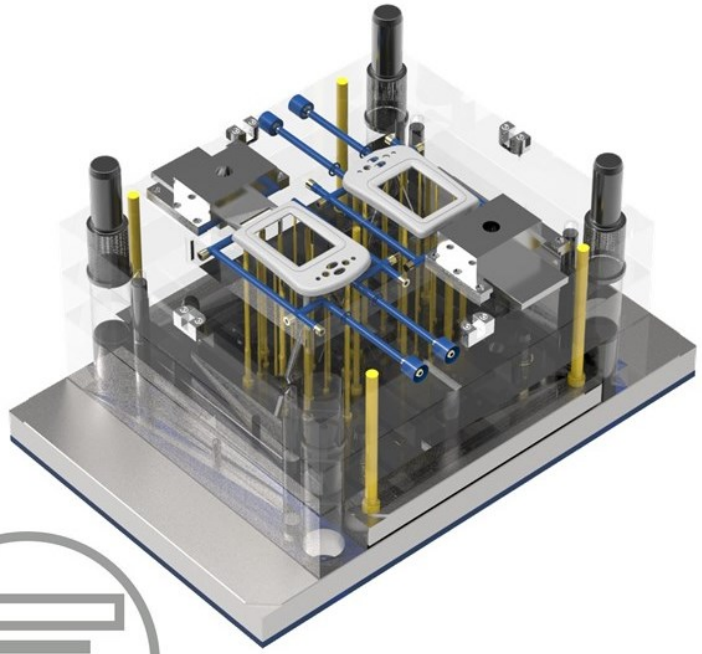
EMX 10 F000



What's New?

- New Features
- Components

EMX 10 F000



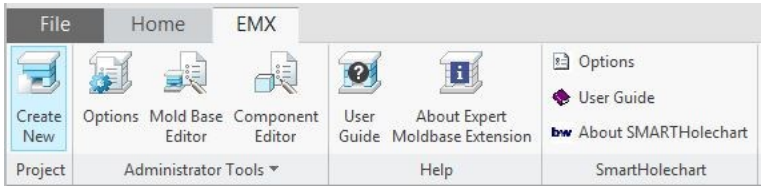
What's New?

- New Features
- Components

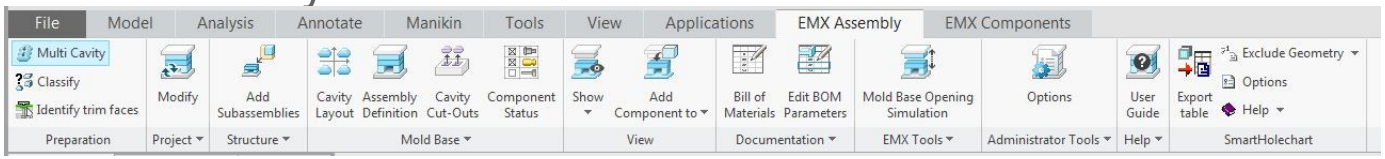
1. Improved EMX Ribbon

- New Design
- Improved Workflow

New Session

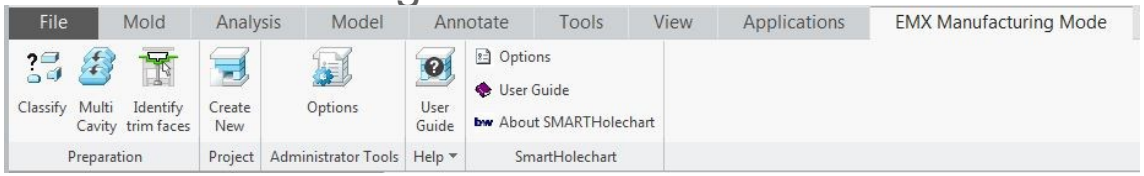


EMX Assembly

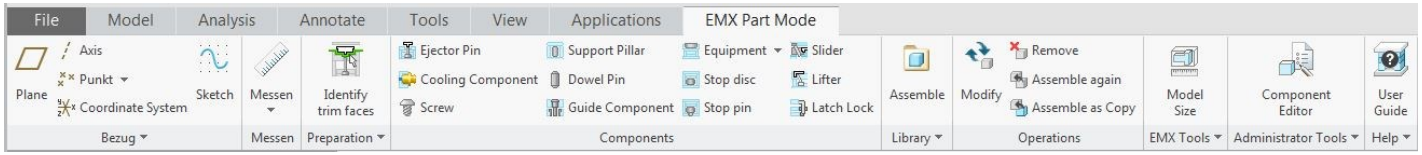


EMX Components

EMX Manufacturing

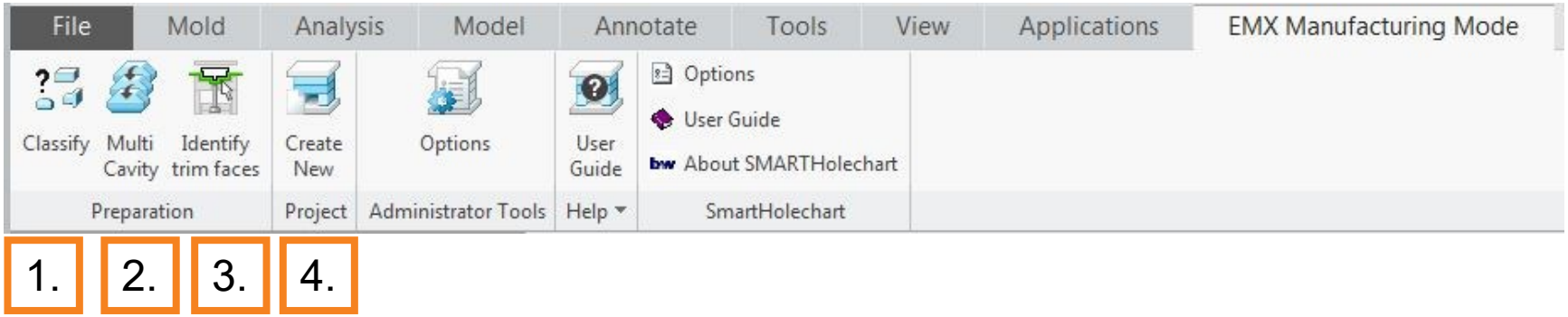


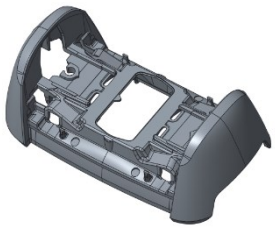
EMX Part Mode

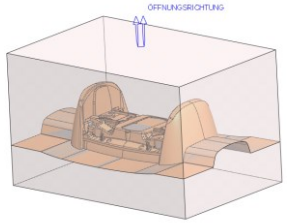


1. Improved Workflow

Preparation in Manufacturing Mode





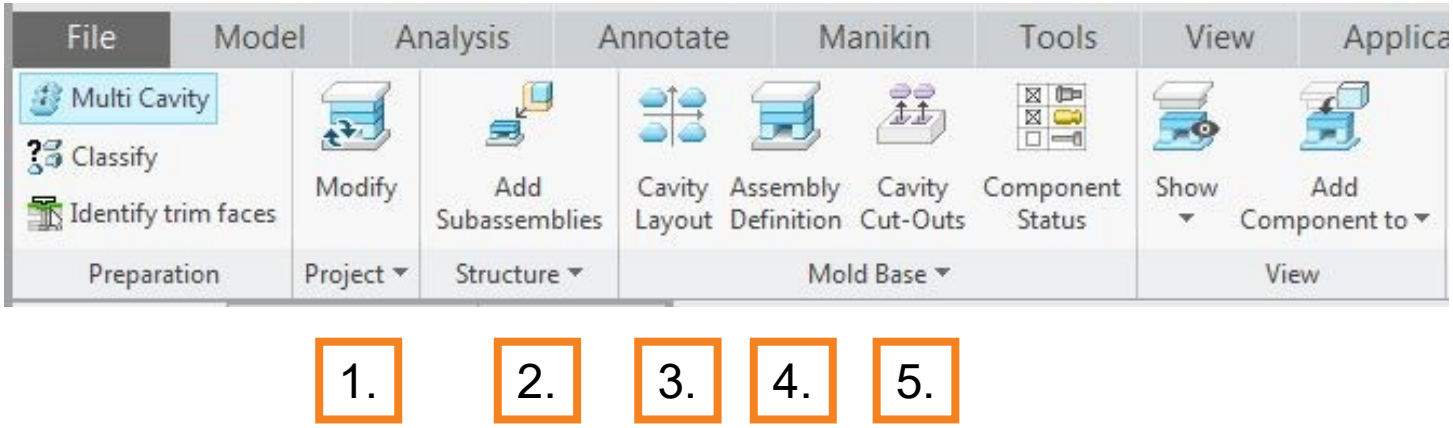


Insert Assembly from TDO

1. Classify Assembly
2. Multi Cavity Assemblies
3. Identify Trim Faces (Enhanced)
4. Create new Project

1. Improved Workflow

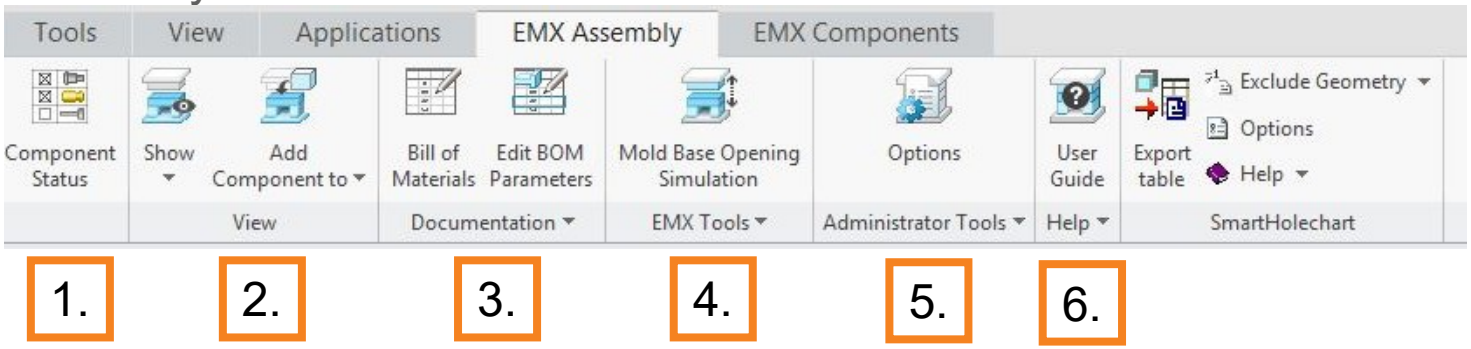
Mold Base in Assembly Mode



1. Change Project
2. Set up Structure, Sub Assemblies (Enhanced)
3. Define Cavity Layout (NEW)
4. Define Mold Base(Enhanced)
5. Create Cavity Cuts (NEW)

1. Improved Workflow

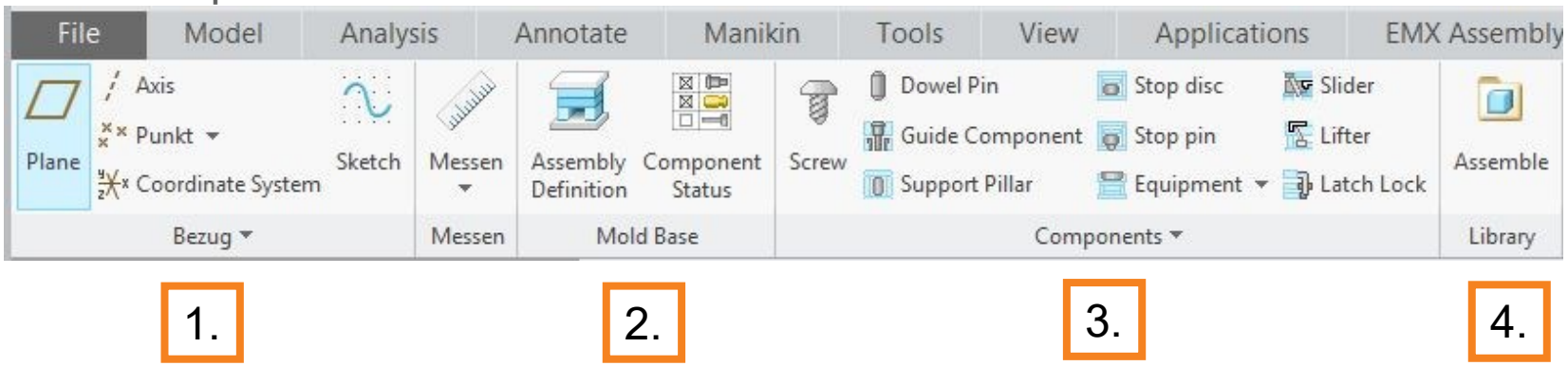
Assembly Mode Part 2



1. Components Status
2. View
3. BOM
4. EMX Tools
5. Admin Tools:
EMX Options, Component Editor (NEW),
Mold Base Editor
6. Help and Info About
7. Smart Holechart (New Version 10.0)

1. Improved Workflow

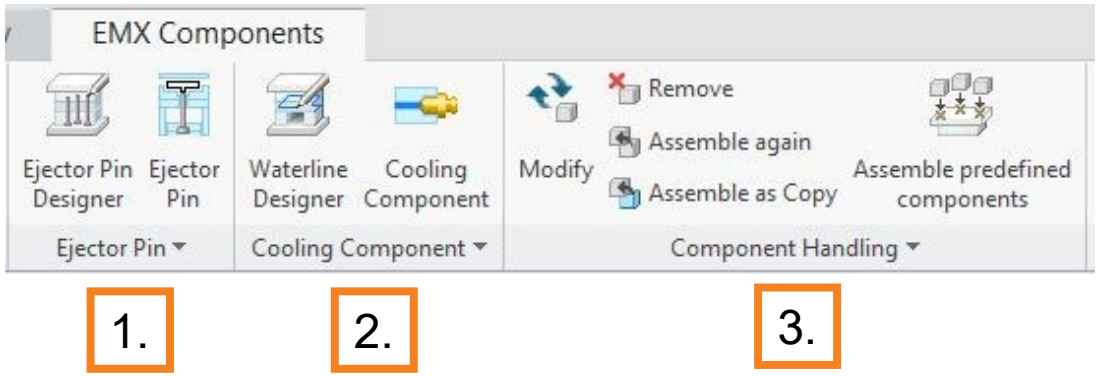
EMX Components Part 1



1. Datums und Measure (NEW)
2. Mold Base Definition und Component Status (NEW)
3. Assemble Components: All Types in 1 Group
4. Library Parts

1. Improved Workflow

EMX Components Part 2



1. Ejector Pins: Definition via Component Dialog or Ejector Pin Designer (NEW)
2. Cooling: Definition vis Component Dialog or Waterline Designer
3. Component Handling (NEW) , Predefined Components

2. Identify Trim Faces

In EMX 9:

Hidden in EMX Components → Ejector Pin

Now:

Ribbon Group EMX Assembly → Preparation

Function:

Mark Surface Quilt as Trim Surfaces for Ejector Pins and Lifters

Effect:

Don’t trim via TDO Feature

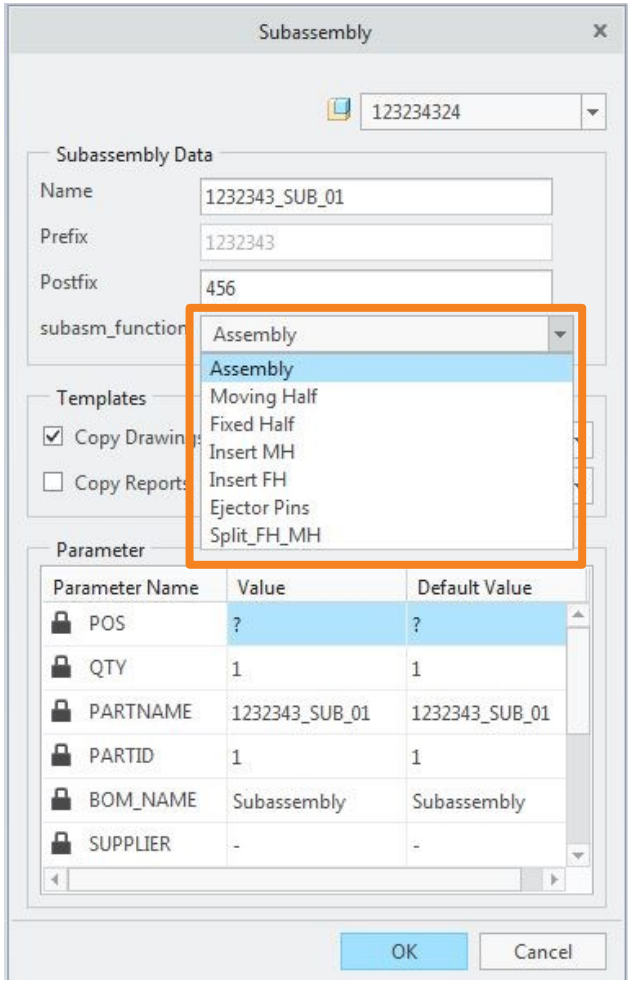
Use Solidify instead

→ More stable. Trimming is also possible when ejector cross-section exceeds the model volume

3. Enhanced Sub Assemblies

New in EMX 10:

Assign function to subassembly

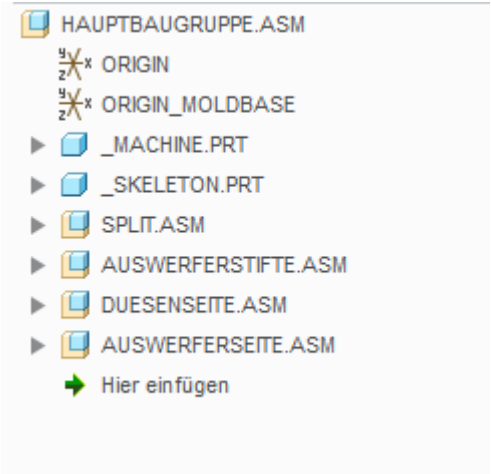


1. Moving Half
2. Fix Half
3. Ejector Pins

3. Enhanced Subassemblies

Main assembly with 3 subasms and assigned functions

1. Moving Half
2. Fix Half
3. Ejector Pin

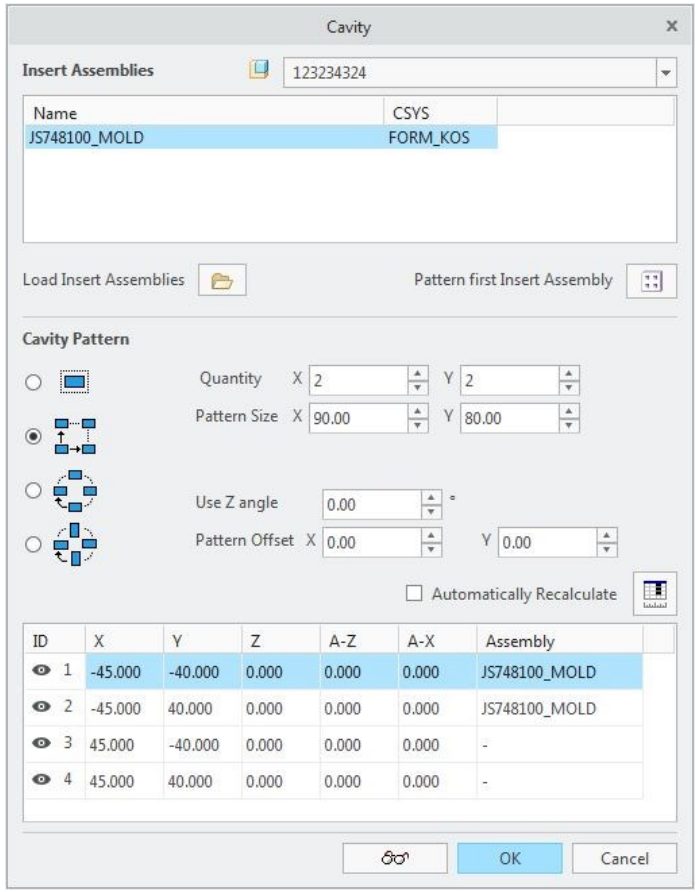


- Automatic pre-selection of MH/FH subasms when assembling from Mold Base Definition Dialog
- Automatic pre-selection for ejector pins

4. Cavity Layout Dialog

Simplified Placement of Insert Assemblies

- Define cavity pattern
- Load multiple insert assemblies
- Individual placement to cavity coordinate systems
- Assemble to main and sub assemblies
- Pattern insert assemblies
- 3D Preview

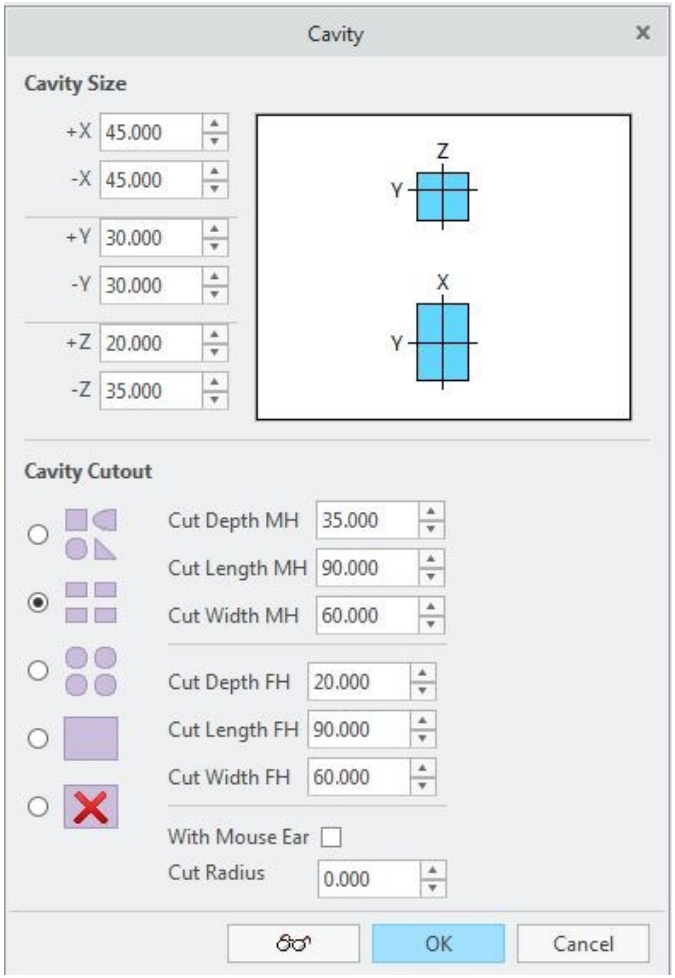


5. Cavity Cutout Dialog

Individual Dialog for Cavity Cutouts

- Functionality as known
- Cutout Types as known

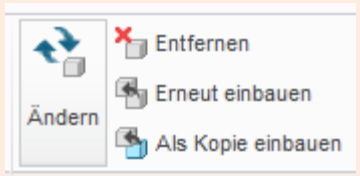
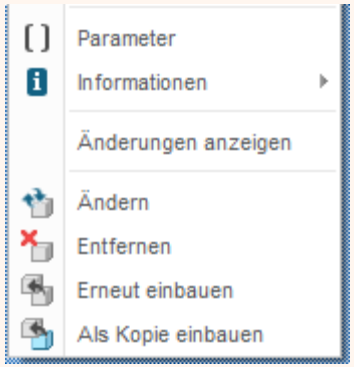
New: 3D Preview



6. New Component Handling

	EMX 9	EMX 10
Ribbon	Delete Modify As Copy Reassemble For each Component Type → Redundant	Delete Modify As Copy Reassemble 1x for all Component Type →Looks much better
RMB	Only Delete Modify	All Functions Delete Modify As Copy Reassemble

6. New Component Handling

	EMX 9	EMX 10
Ribbon		
Rechte Maus		

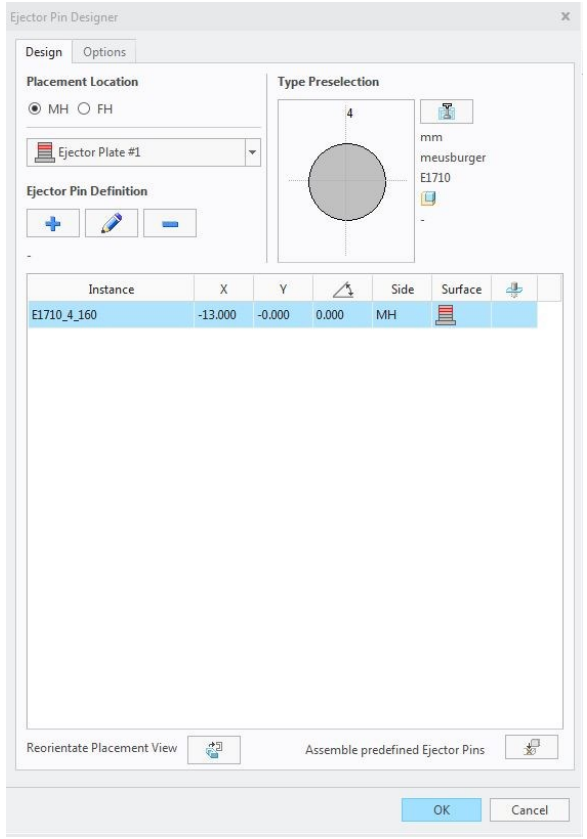
7. Ejector Pin Designer

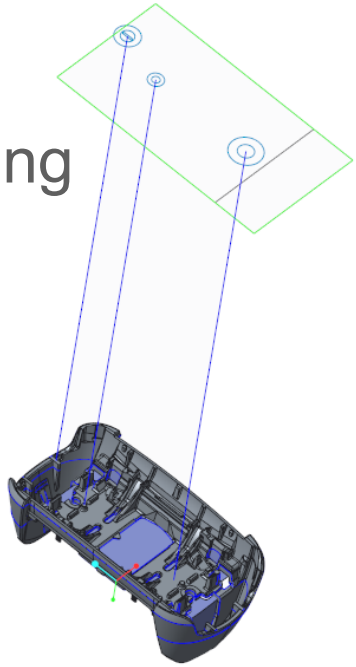
- Dynamic Definition of Ejector Pins

New Main Feature in EMX 10

1. Pale Ejectors with 2D Preview
2. Place to Fix Half and Moving Half

1. Supports 2nd ejector package
2. Assemble to all sub asms



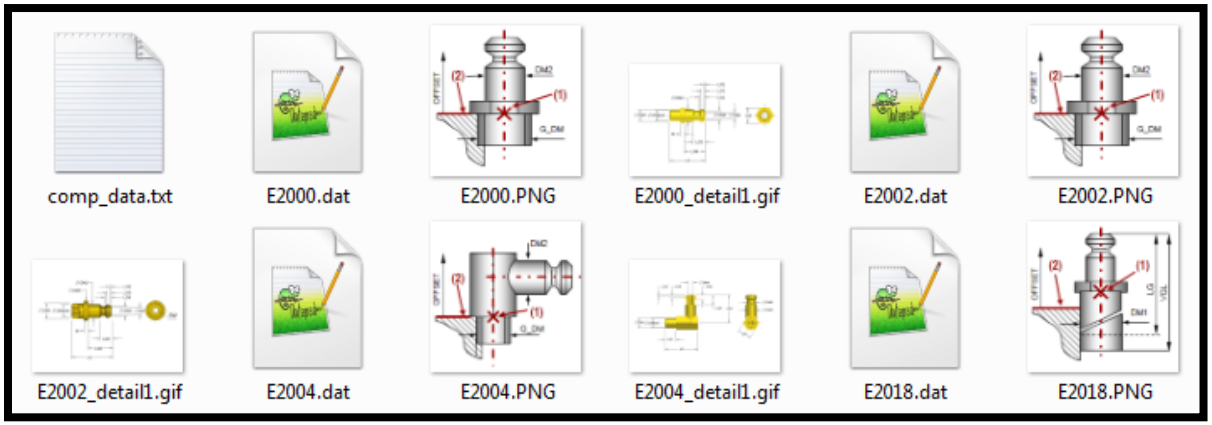


8. New Data Structure

Migration from comp_data.txt & udf_data.txt to *.dat Files

In EMX 10 each component an individual *.dat file will be shipped. This file contains all required information to handle:

a) The component data (assembly constraints, nominal values, instances, etc.)
b) The entire cut-information (UDFs , UDF options, etc.)

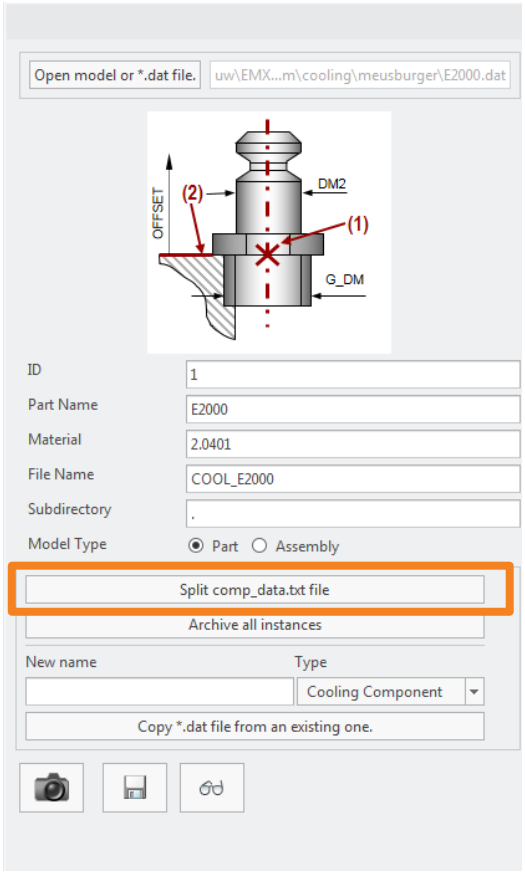


9. Convert to EMX 10 Data Structure

Conversion of old comp_data.txt files can be done step by step

- Open EMX → Administrator Tools → Component Editor

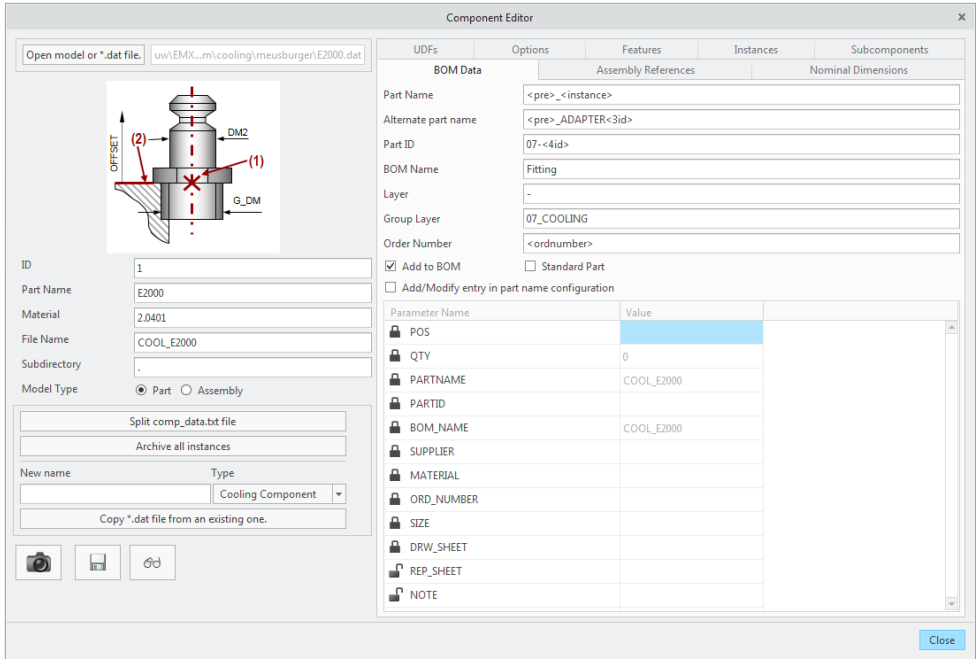
- Select Button Split comp_data.txt file
- Select a EMX 9 formatted comp_data.txt file in File Open Dialog



→ Splitting process is triggered

10. Facelift for new Component Editor

Conversion of old comp_data.txt files can be done step by step

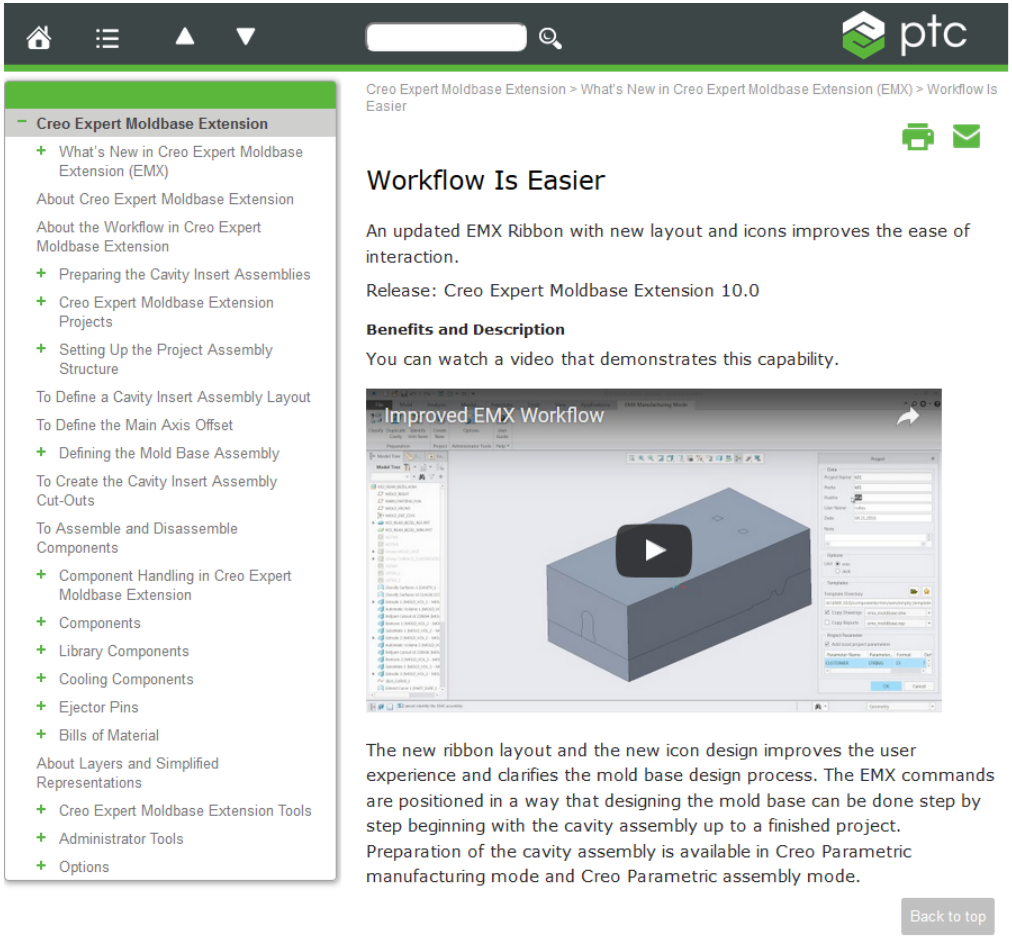


New Features:

- Copy Component from existing template
- Work on UDF cutout information
- Archive all instances from a component

10. New EMX Help Center

EMX 10 comes with the new EMX Help Center



- Handy Search functionality
- What's new Videos

11. Smart Holechart 10.0

Integrated new Version in EMX 10

- Collision Tables
- easy UDF Recognition
- Replace existing Tables
- Adapt Number of Table Columns during Refresh
- Direction-depended Bore Definition
- Automatic creation of Point/Axis in Bore Center
- Use Tolerances (e.g. H7) as criteria for bore types
- Man more Options

11. Smart Holechart 10.0

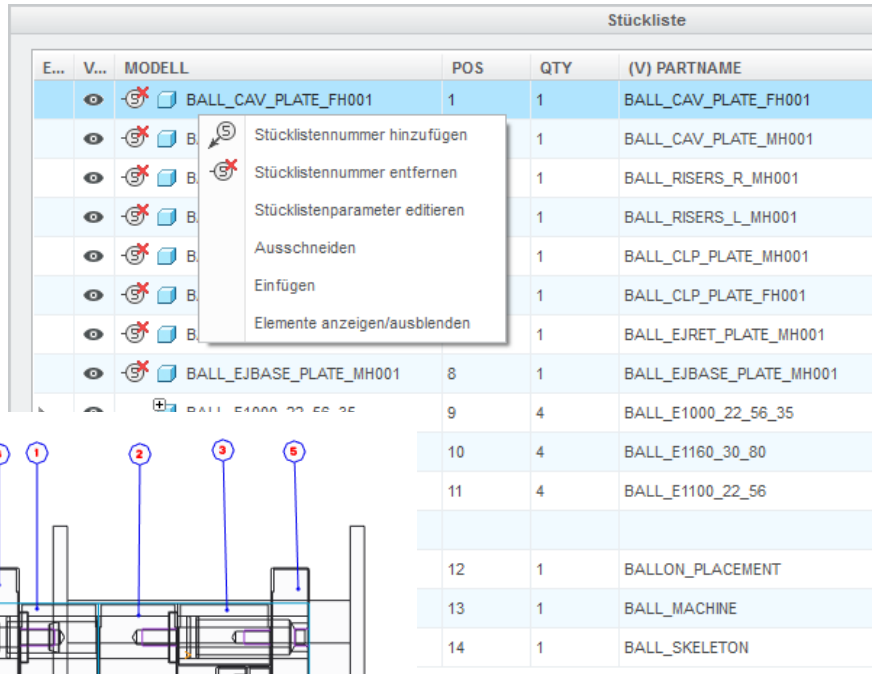
SHC – Default EMX Configuration

- Smart Holechart 10 comes with a default EMX - adapted configuration
- UDFs and Holes created by EMX can recognized easily

12. Placement of BOM Balloons

Improvements

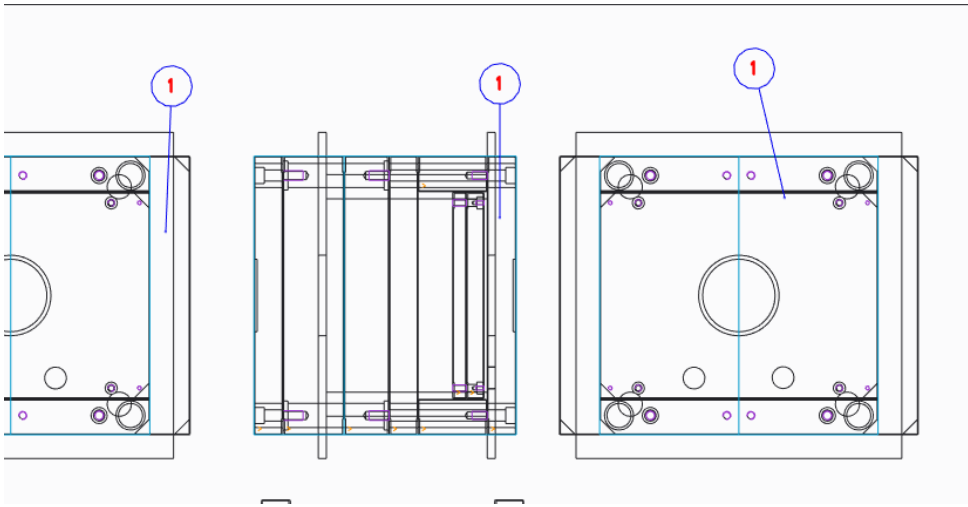
- Functions to RMB
- Multiple Selection and Placement in a Loop
- Place Balloon multiple times for summarized components
- New Design



12. Placement of BOM Balloons

Improvements

- Place same balloon of component multiple times in different views



Bill of Materials

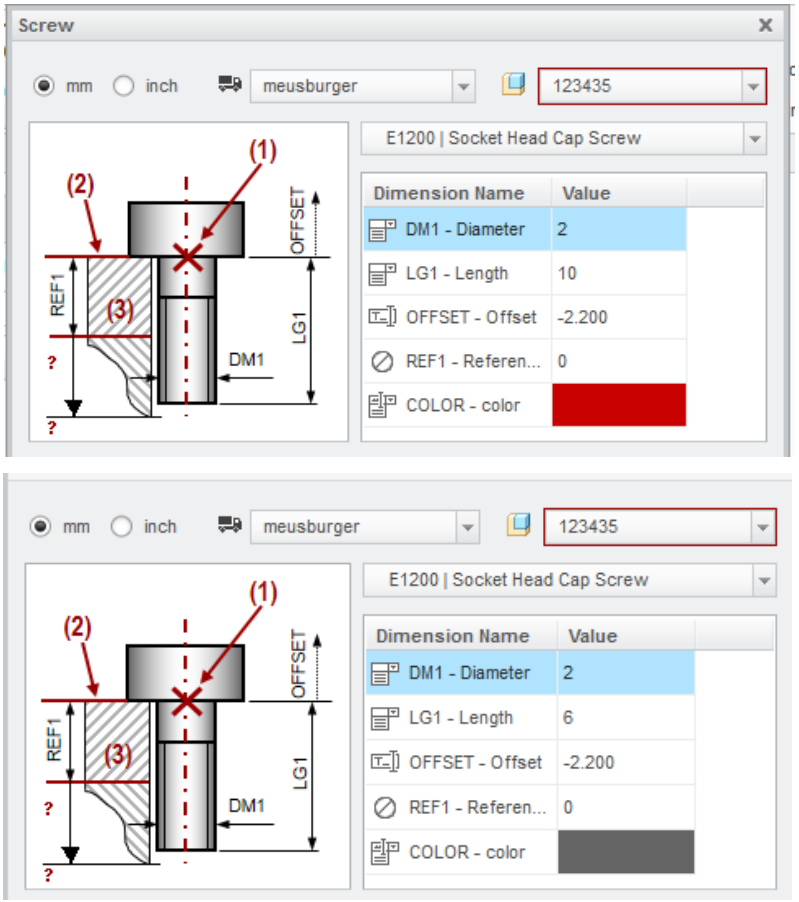
E...	V...	MODELL	POS	SIZE
		BALLON_CLP_PLATE_MH001	1	156.000x156.000x27.000
		BALLON_EJRET_PLATE_MH001	3	156.000x92.000x9.000
		BALLON_RISERS_R_MH001	4	156.000x40.000x34.866
		BALLON_RISERS_L_MH001	5	156.000x40.000x33.509
		BALLON_INT_PLATE_MH001	6	156.000x156.000x27.000
		BALLON_CAV_PLATE_MH001	7	156.000x156.000x46.000
		BALLON_CAV_PLATE_FH001	8	156.000x156.000x40.000
		BALLON_CLP_PLATE_FH001	9	156.000x156.000x34.925
		Hidden Parts List		
		BALLON	10	*
		BALLON_MACHINE	11	*
		BALLON_SKELETON	12	*

13. Enable Cell Colors in Comp Dialog

Improvements

```
!listing of nominal dimensions
!NAME           DISPLAY_NAME    DIM_NAME        TYPE
EMX_NOM_VALUES
E1200           diameter        DM1             PULLDOWN
E1200           length          LG1             PULLDOWN        >REF1
E1200           offset          OFFSET          EDIT
E1200           distance        REF1            DISABLED
E1200           color           COLOR           COLOR
EMX NOM VALUES END
```

INSTANCE	ORD_NUMBER	USER_NUMBER	PRICE	COLOR
E1200_2_6	E1200/2x6	-	0	100,100,100
E1200_2_8	E1200/2x8	-	0	GREEN
E1200_2_10	E1200/2x10	-	0	RED
E1200_2_12	E1200/2x12	-	0	YELLOW
E1200_2_16	E1200/2x16	-	0	BLUE
E1200_2_20	E1200/2x20	-	0	ORANGE
E1200_2_5_12	E1200/2,5x12	-	0	RED
E1200_3_6	E1200/3x6	-	0	RED
E1200_3_8	E1200/3x8	-	0	RED
E1200_3_10	E1200/3x10	-	0	RED
E1200_3_12	E1200/3x12	-	0	RED
E1200_3_14	E1200/3x14	-	0	RED
E1200_3_16	E1200/3x16	-	0	RED
E1200_3_20	E1200/3x20	-	0	RED
E1200_3_25	E1200/3x25	-	0	RED
E1200_3_30	E1200/3x30	-	0	RED
E1200_3_35	E1200/3x35	-	0	RED
E1200_3_40	E1200/3x40	-	0	RED
E1200_4_6	E1200/4x6	-	0	RED
E1200_4_8	E1200/4x8	-	0	RED
E1200_4_10	E1200/4x10	-	0	RED
E1200_4_12	E1200/4x12	-	0	RED

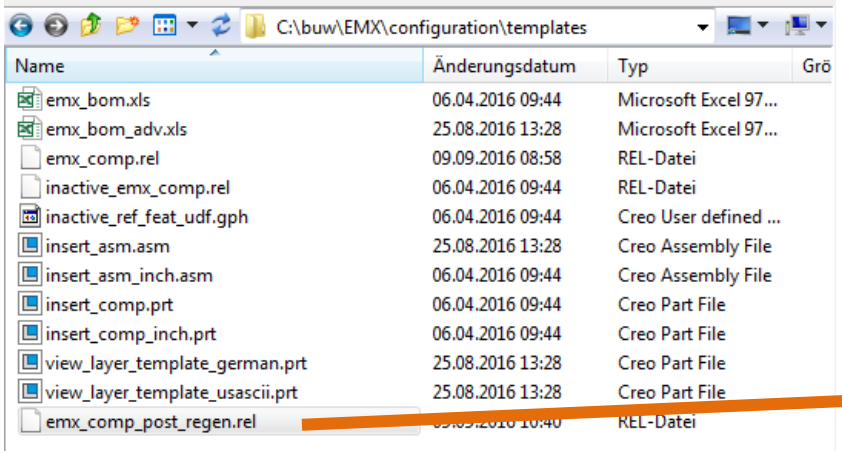


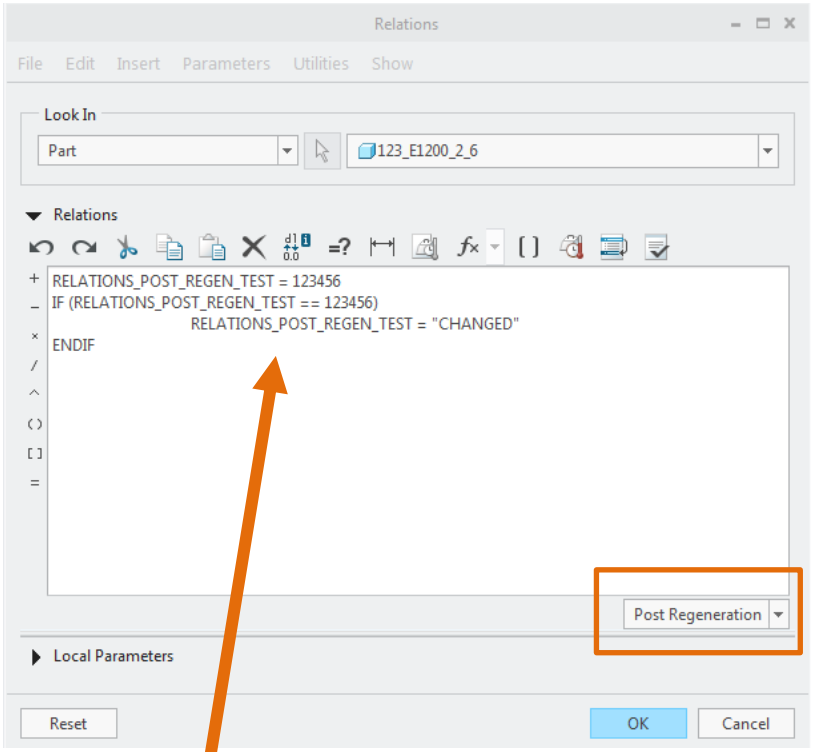
14. Add Relations to Post Regen Area

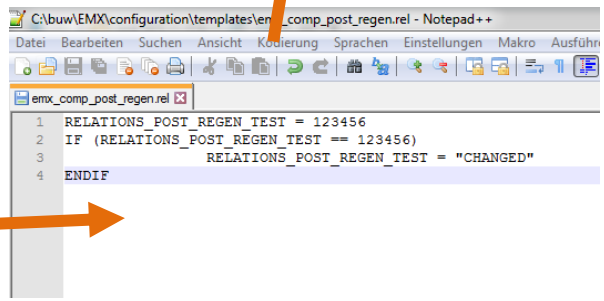
Improvements

- Add Relations to Post Regeneration Area with specified files

1. emx_comp_post_regen.rel
2. plate_post_regen.rel
3. etc.







15. Windchill Autonumber Renaming

Improvements

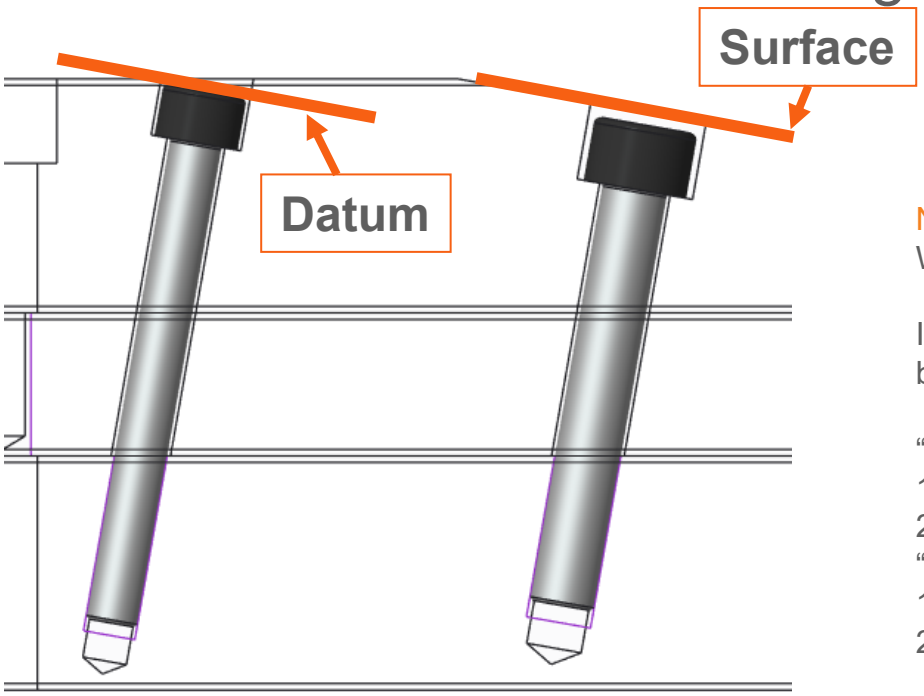
- New Option WINDCHILL_AUTONUMBER
- When working with Windchill and option is set to YES EMX uses next valid name in Windchill for renaming
- Windchill Common Name is set by standard naming mechanism defined in partnames.cfg
- Use keyword WINDCHILL_AUTONUMBER as rule in partnames.cfg to apply auto renaming for individual components

16. Angular Cutouts for Guides and Screws

Enhancement

Screws and Guides can now be placed on Axis/Points and Planes which are not orthogonal to each other.

→ Cutouts will be created with given angle.



Note

Works with EMX standard configuration.

If you use a custom configuration following UDFs need to be added to custom config:

"<emx_install>\components\mm\screw\udf
1. screw_straight_hole_coax.gph
2. screw_thread_bore_coax.gph

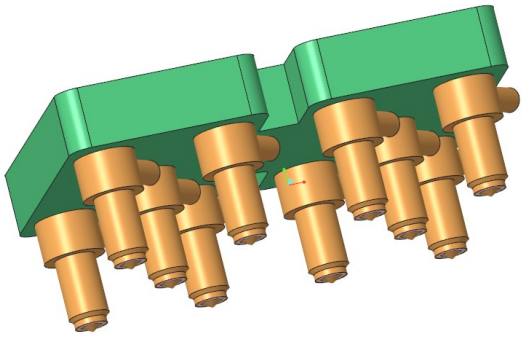
"<emx_install>\components\mm\guides\udf
1. guide_straight_hole_coax.gph
2. guide_blind_hole_coax.gph

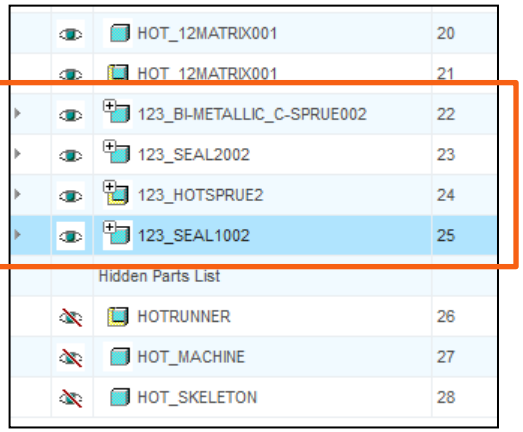
17. Ignore Subcomps of ASMs in BOM

Enhancement

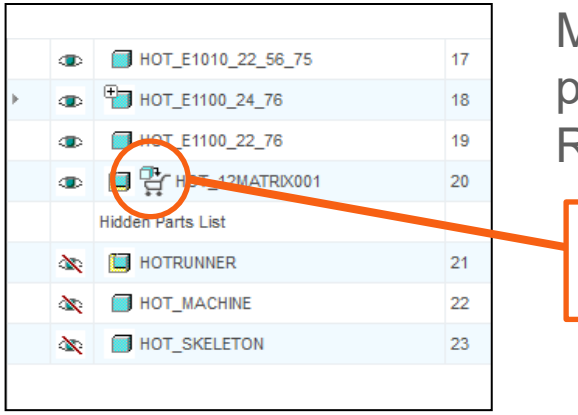
Purchased assemblies can be marked in BOM

→ All subassemblies and sub components will be ignored in BOM





Default: All parts and subassemblies are listed in BOM.



Mark assembly as purchased part with RMB functionality.

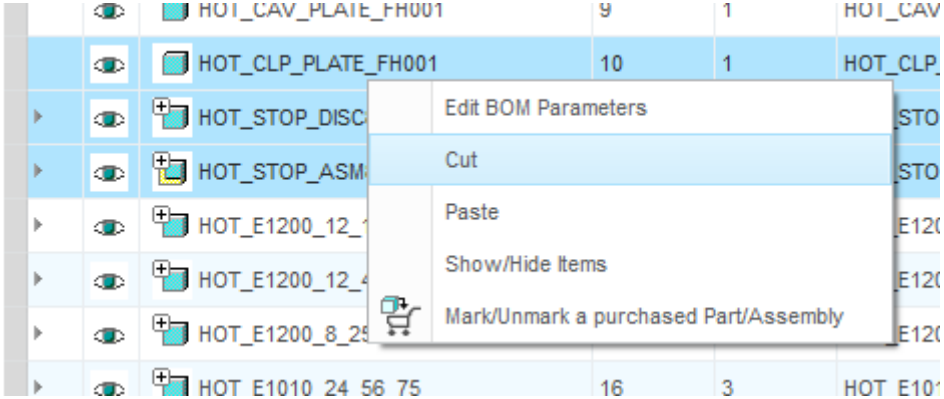
Status displayed with Icon.

18. Cut and Paste with Ctrl+X / Ctrl+V in BOM

Enhancement

Cut and Paste can now be done with keyboard shortcuts Ctrl+X and Ctrl+V.

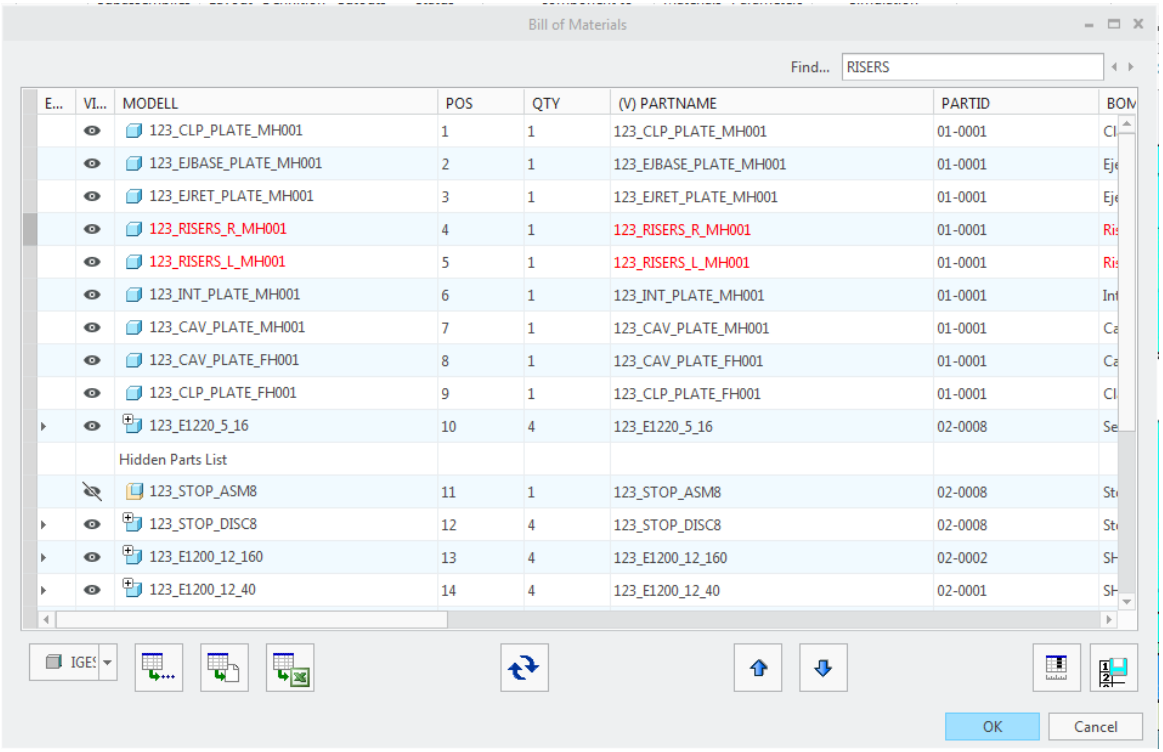
→ Quick repositioning of BOM entries.



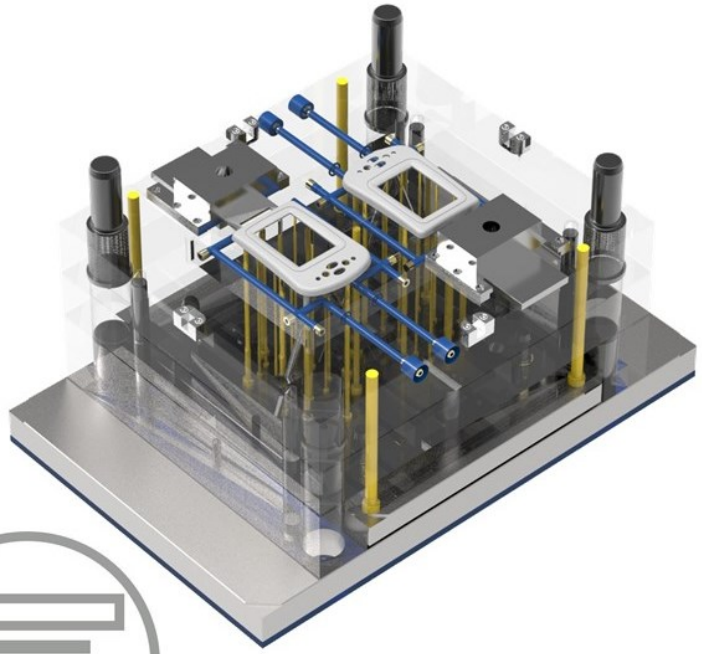
19. Search Feature in BOM Dialog

Enhancement

Search for Keywords in BOM to find entries.
Found entries are highlighted in list.



EMX 10 F000



What's New?

- New Features
- Components

Components

New Components

- Misumi – Cooling NPW and M-KOC
- Misumi – Top Lock TPN
- Misumi – Flat Ejector Pin ESHJ, ERZF and ERVB
- Meusburger – Guide E10025
- Meusburger – Ejector Pin E10125 (DLC Coated)
- Meusburger – Spring E1546
- Hasco – Guide Z040
- Hasco – Locating Ring K107, K501, K506, K1000
- Knarr – Ejector Pin 37999
- Strack - Z17, Z18 Locating Rings
- Strack - Z45 side interlock components

Components

New Components

- Meusburger – Guide E1032: Inclined Pin
- Meusburger – Locating Ring E1362
- Meusburger – Screw E1514: Threaded Bolt
- Meusburger – Cooling E2800: Stäubli Connector
- Knarr – Ejector Pin 36555
- Knarr – Ejector Pin 36599
- Knarr – Ejector Pin 37414
- Knarr – Ejector Pin 37555
- Knarr – Ejector Pin 37888
- WEMA – Cooling S3102: Sealing Plug
- WEMA – Cooling S3105: Diverting Plug
- WEMA – Cooling S3111: Core Cooling Element
- WEMA – Cooling S3113: Core Cooling Element
- WEMA – Cooling S3115: Baffle Cooling Element
- WEMA – Cooling S3117: Spiral Baffle Cooling Element

Components

Updated Components:

- Hasco – Locating Ring K100
- Hasco - Side Interlock Z18/19
- Hasco – Cooling O-Ring Z98
- LKM – Side interlocks
- Meusburger - Insulation Plates E1402 E1403 E1407 E1408
- Meusburger – Top Interlock E1310
- PCS – Ejector Pins: All Types Verify and Updated
- PCS – Support Pillars
- PCS – Locating Rings
- Hasco – Locating Ring K100
- Hasco - Side Interlock Z18/19
- Hasco – Cooling O-Ring Z98
- LKM – Side interlocks
- Meusburger - Insulation Plates E1402 E1403 E1407 E1408

Components

Updated Components:

- Misumi – Ejector Pins Type Verified
- Meusburger - Ejectors E1712 add Rotation Fixtures option
- Meusburger – Top Interlock E1310
- PCS – Ejector Pins: All Types Verify and Updated
- PCS – Support Pillars
- PCS – Locating Rings

Components

Updated Plates:

- Futaba - Catalog – All sizes checked and updated
- Meusburger - Plates updated
- Meusburger - E2071 Add option Counter/Second Bore