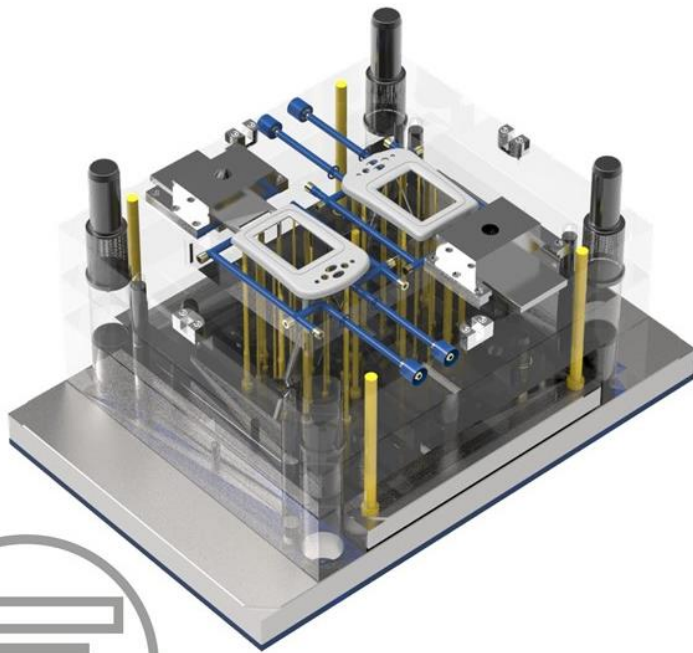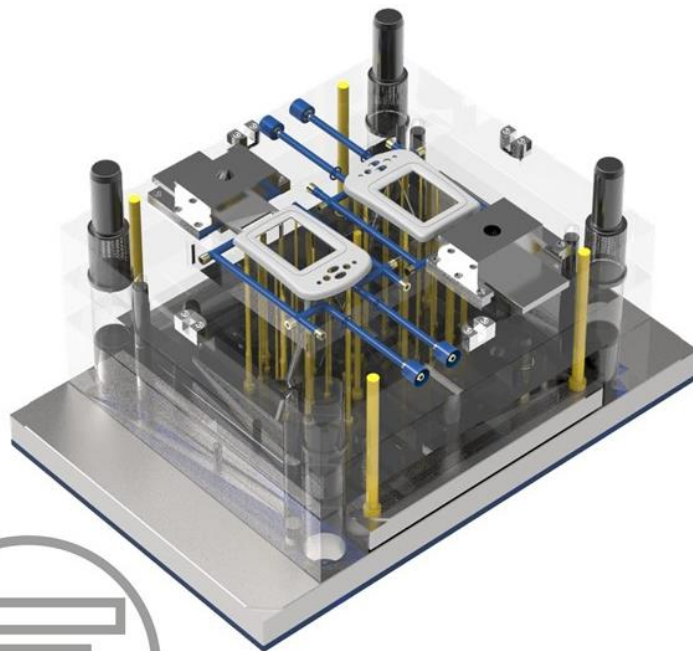# EMX 10 F000

What's New?

- New Features
- Components
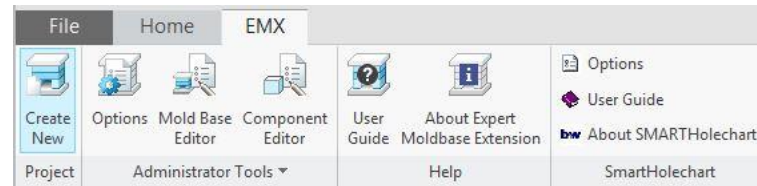- Improvements
- More Info

EMX 10 F000

What's New?

- New Features
- Components
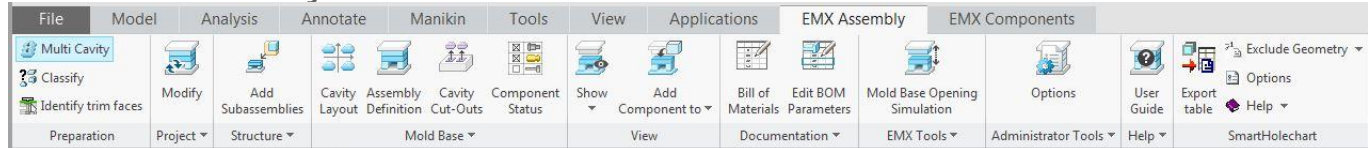- Improvements
- More Info

Improved EMX Ribbon

- New Design
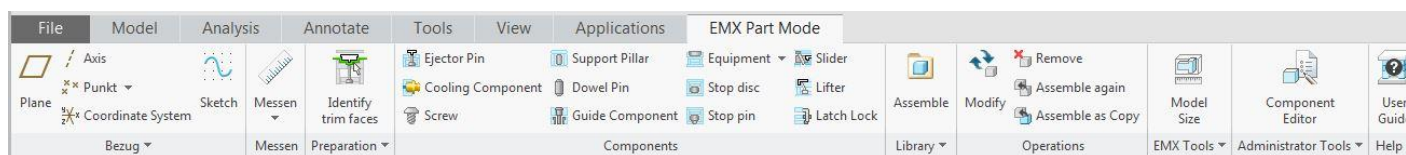- Improved Workflow

New Session

EMX Assembly

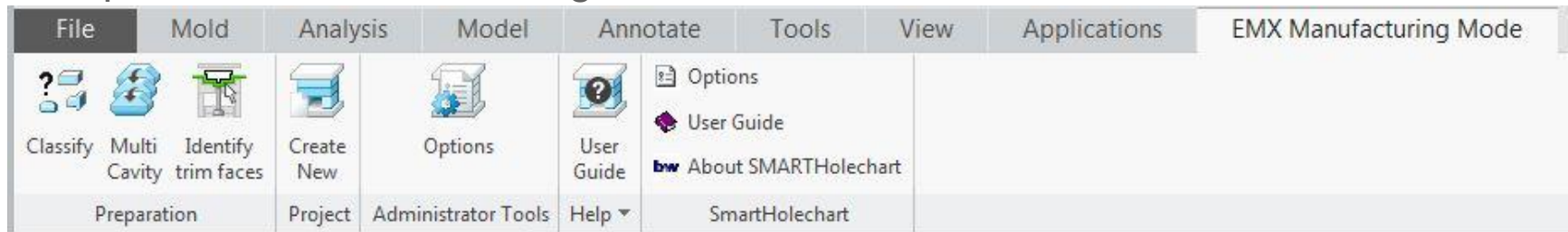EMX Components

EMX Manufacturing

EMX Part Mode

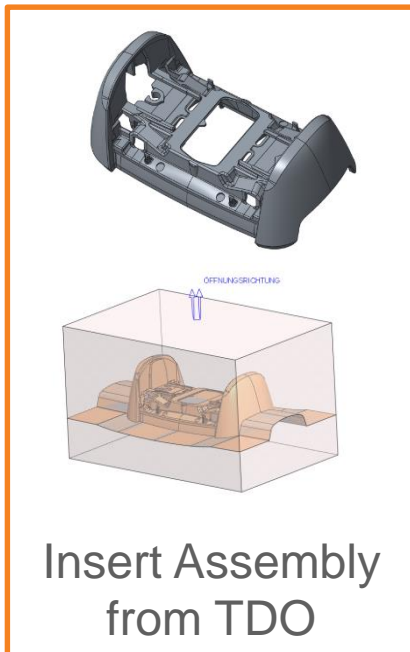# Improved Workflow

1. Preparation in Manufacturing Mode

1. Classify Assembly

2. Multi Cavity Assemblies

3. Identify Trim Faces (Enhanced)

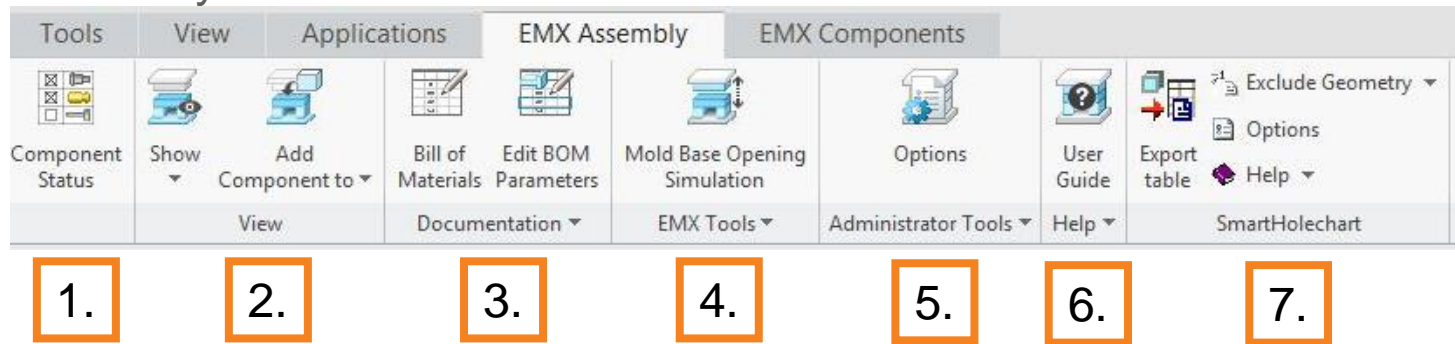4. Create new Project

Insert Assembly from TDO

Improved Workflow

Mold Base in Assembly Mode
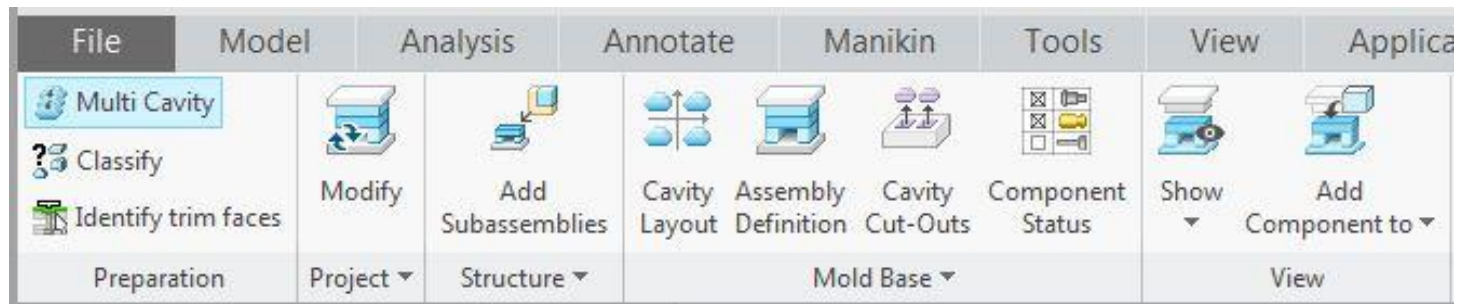
1. Change Project

2. Set up Structure, Sub Assemblies (Enhanced)

3. Define Cavity Layout (NEW)

4. Define Mold Base(Enhanced)

5. Create Cavity Cuts (NEW)

Improved Workflow

Assembly Mode Part 2

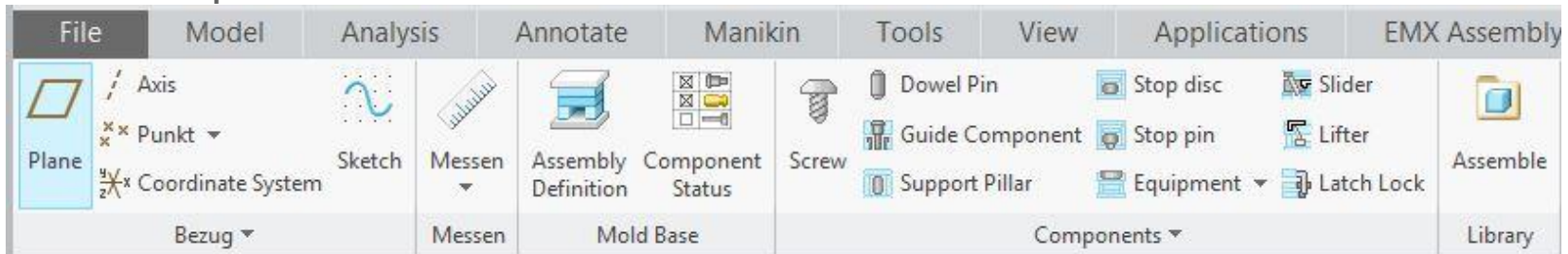1. Components Status
2. View
3. BOM
4. EMX Tools
5. Admin Tools
   (EMX Options, Component Editor (NEW), Mold Base Editor)
6. Help and Info About
7. Smart Holechart (New Version 9.0)
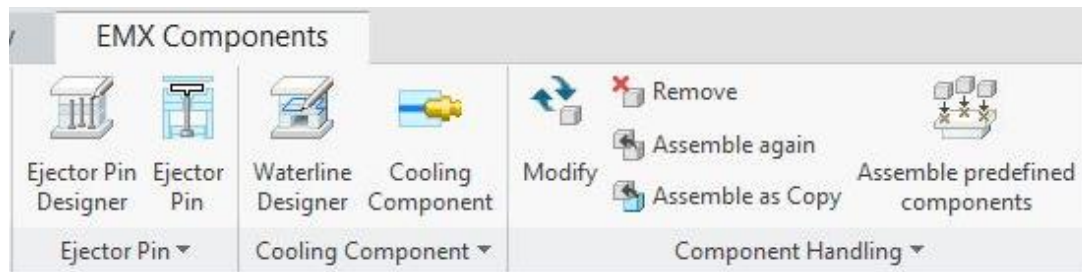
Improved Workflow

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

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

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

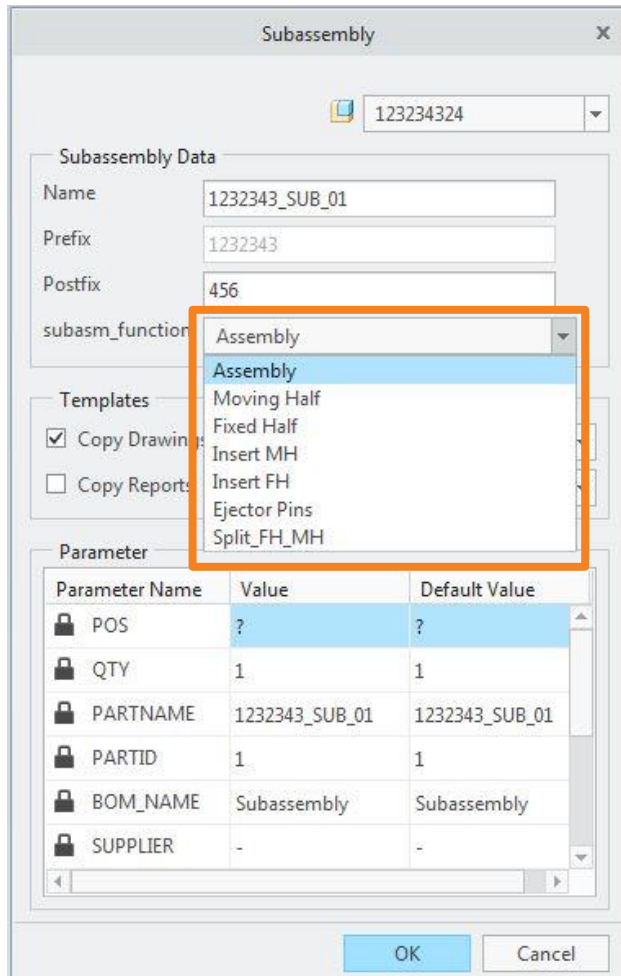Effect:
Don't trim via TDO Feature
Use Solidify instead

➡️ More stable and trimming also possible when
ejector exceeds the model volume

Enhanced Sub Assemblies
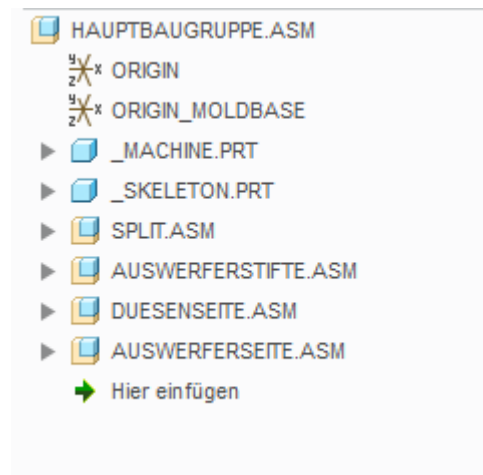
New in EMX 10:
Assign Function to Sub Assembly

1. Moving Half

2. Fix Half

3. Ejector Pins

Enhanced Sub Assemblies

Main Assembly with 3 Sub Asms and assigned Functions

1. Moving Half

2. Fix Half

3. Ejector Pin

- Automatic Pre Selection of MH/FH Sub Asms when assembling from Mold Base Definition Dialog

- Automatic Pre Selection for Ejector Pins

Cavity Layout Dialog

Simplified Placement of Insert Assemblies

- Define Pattern
- Load multiple Insert Assemblies
- Individual placement to cavity coordinate systems
- Assemble to main and sub assemblies
- Patternize insert assembly
- 3D Preview
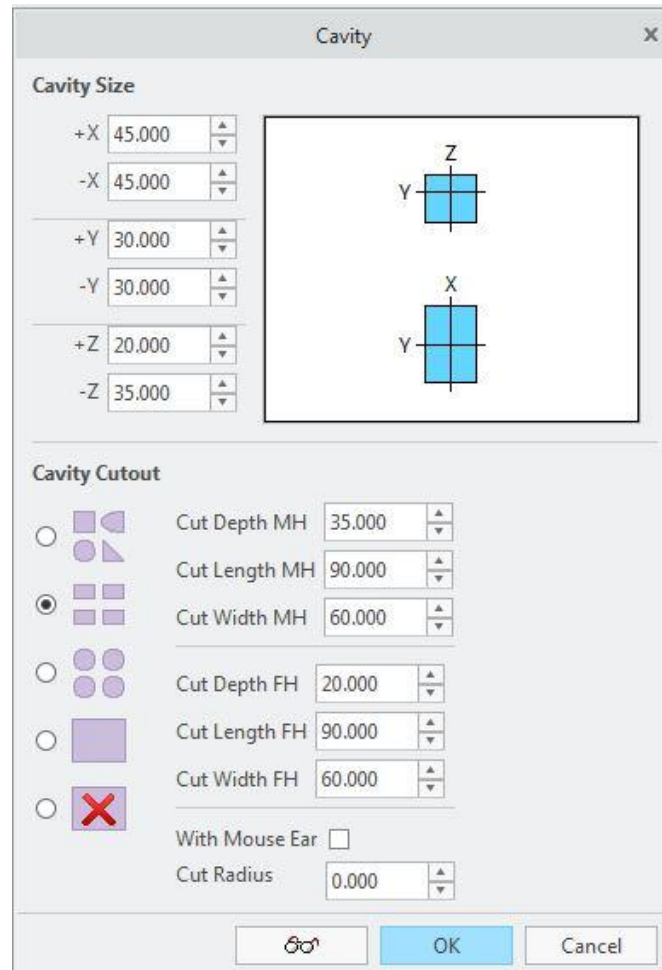
Cavity Cutout Dialog

Individual Dialog for Cavity Cutouts

- Functionality as known
- Cutout Types as known

New: 3D Preview

⟹ Live Demo

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

New Component Handling

	EMX 9	EMX 10
Ribbon		
Rechte Maus		

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
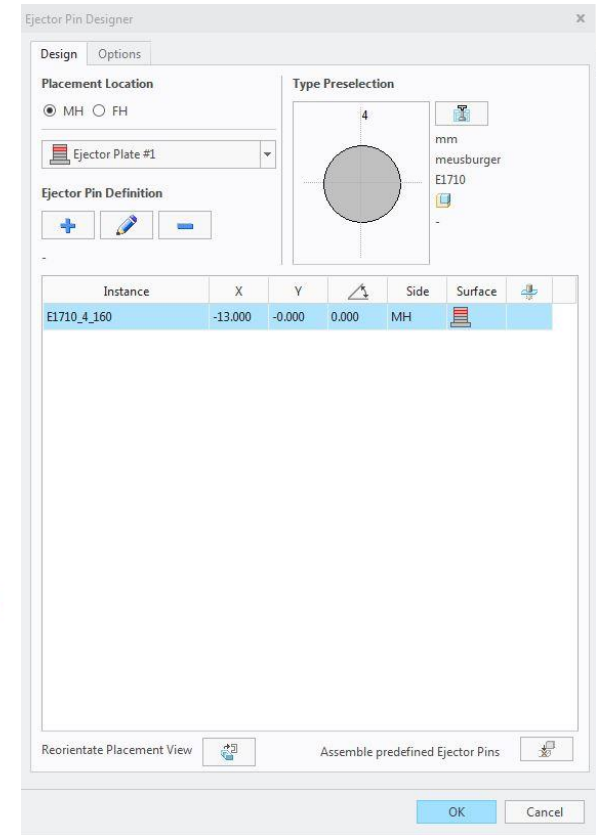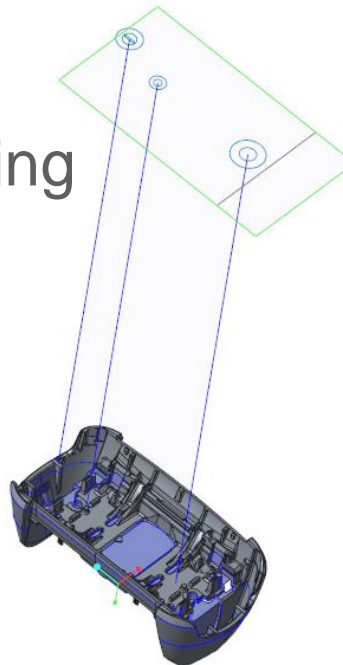
New data structure and new Component Editor

- Get rid of comp_data and udf_data and replace information in dat-files for each component type.

- Library format and other EMX comps format is unique

- Split costumized comp_data files into new dat format
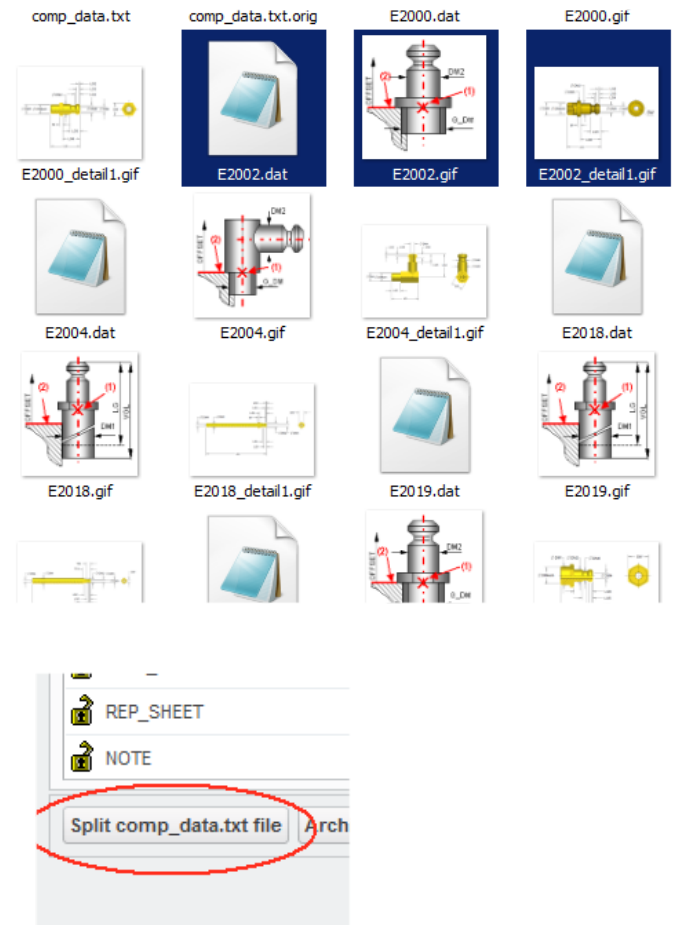
Facelift for new Component Editor

Most customers like to add new components that are similar to existing components from EMX.

With the new archive for all existing templates, the content of cutouts, instances, placement references can easily be copied from an existing comp.

When copy from archive, show for each template its usage in the supplier folders
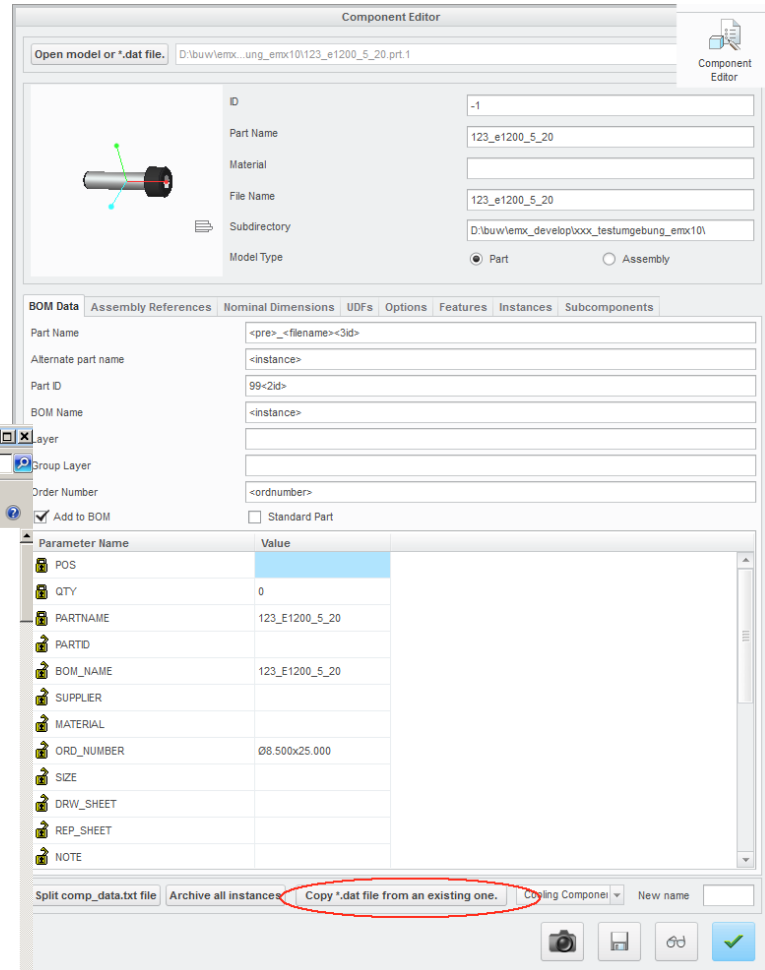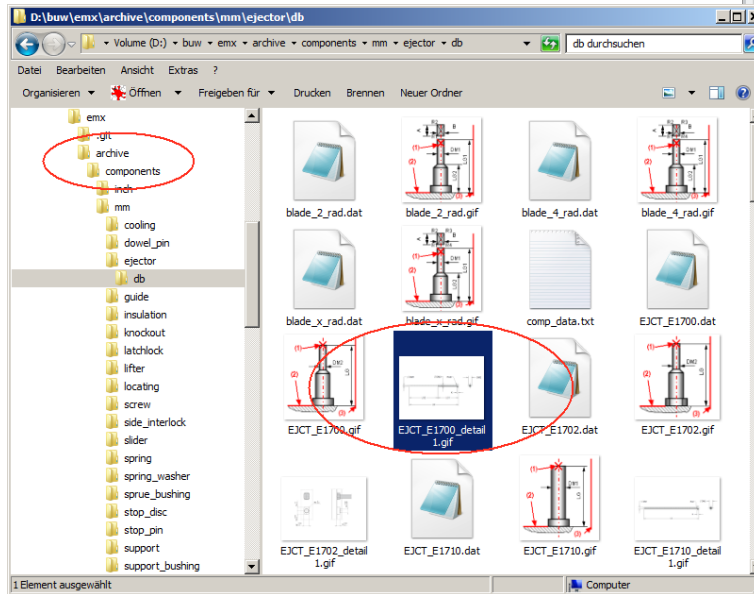
Smart Holechart 9.0

Integrated new Version in EMX 10

→ Contact Oli Gräbner

- 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

Placement of BOM Ballons

Improvements

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

E...	V...	MODELL	POS	QTY	(V) PARTNAME
	👁	BALL_CAV_PLATE_FH001	1	1	BALL_CAV_PLATE_FH001
	👁	B...		1	BALL_CAV_PLATE_MH001
	👁	B...		1	BALL_RISERS_R_MH001
	👁	B...		1	BALL_RISERS_L_MH001
	👁	B...		1	BALL_CLP_PLATE_MH001
	👁	B...		1	BALL_CLP_PLATE_FH001
	👁	B...		1	BALL_EJRET_PLATE_MH001
	👁	BALL_EJBASE_PLATE_MH001	8	1	BALL_EJBASE_PLATE_MH001
	👁	BALL_E1000_22_56_35	9	4	BALL_E1000_22_56_35
			10	4	BALL_E1160_30_80
			11	4	BALL_E1100_22_56
			12	1	BALLON_PLACEMENT
			13	1	BALL_MACHINE
			14	1	BALL_SKELETON

Stückliste

Context menu:
- Stücklistennummer hinzufügen
- Stücklistennummer entfernen
- Stücklistenparameter editieren
- Ausschneiden
- Einfügen
- Elemente anzeigen/ausblenden

Place Multiple Balloons for 1 Comp.

Improvements

- Place same balloon of component multiple times in different views

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
```

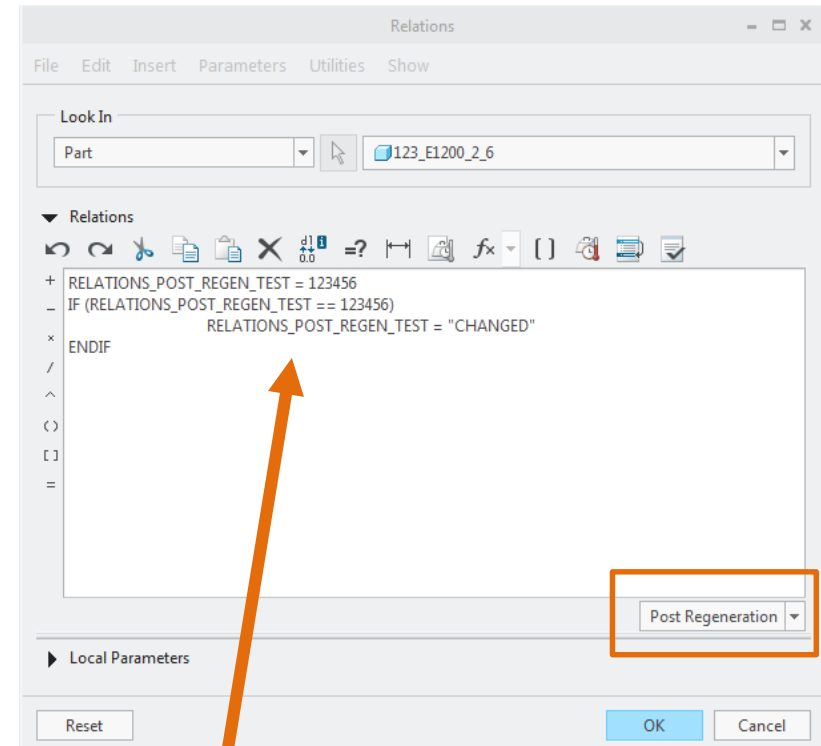| INSTANCE	ORD_NUMBER	USER_NUMBER	PRICE	COLOR
E1200_2_6	E1200/2x6	–	0	100,100,100
E1200_2_8	E1200/2x8	–	0	GREEN
E1200_2_10	E1200/2x10	–	0	RED
E1200_2_12	E1200/2x12	–	0	YELLOW
E1200_2_16	E1200/2x16	–	0	BLUE
E1200_2_20	E1200/2x20	–	0	ORANGE
E1200_2_5_12	E1200/2,5x12	–	0	RED
E1200_3_6	E1200/3x6	–	0	RED
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
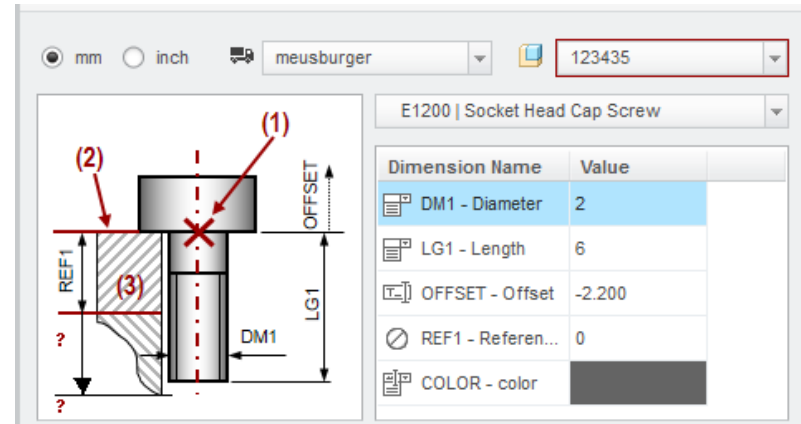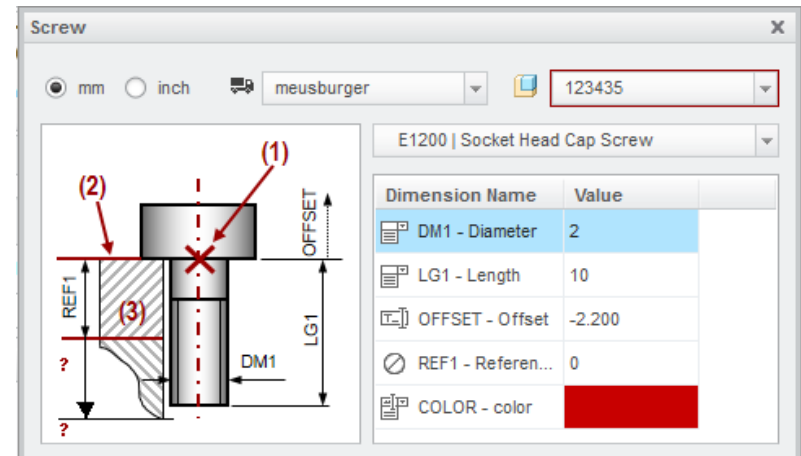
Add Relations to Post Regen Area

Improvements

- Add Relations to Post Regeneration Area with specified files
1. emx_comp_post_regen.rel
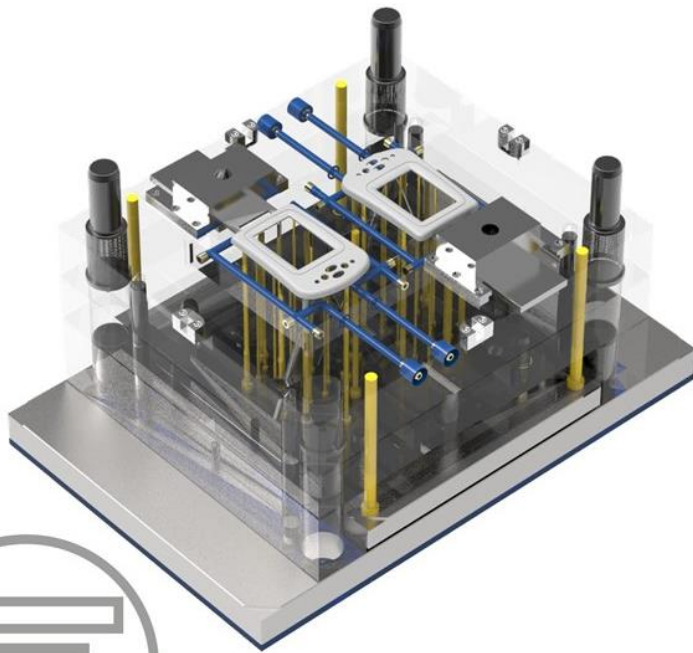2. plate_post_regen.rel
3. etc.

EMX 10 F000

What's New?

- New Features
- **Components**
- Improvements
- More Info

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

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

- Misumi – Ejector Pins Type Verified

Components

Updated Plates:

- Futaba - Catalog – All sizes checked and updated

EMX 10 F000
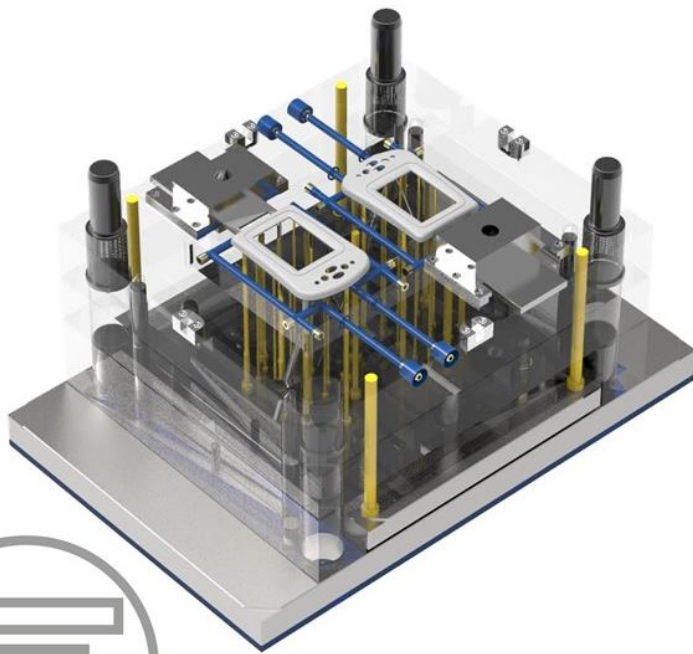
What's New?

- New Features
- Components
- **Improvements**
- More Info

Improvements

- EMX 10 B000 Compatibility with Windows 10

- Calculate Clamping Force: Improved Accuracy

- BOM: Ballon Placement Functionality improved
  - → RMB, Places Ballons Multiple times etc.

- BOM: Increase Speed

- BOM: PTC Diameter Symbol supported

- BOM: Display Windchill &common_name in BOM

- Project Dialog: Length of Postfix and Prefix is checked
  - → Avoid Model names longer 32 characters

- Waterline Designer: Delete Waterlines in list via RMB

- Improved Pattern Dialog: Redesigned with Spinboxes

Improvements

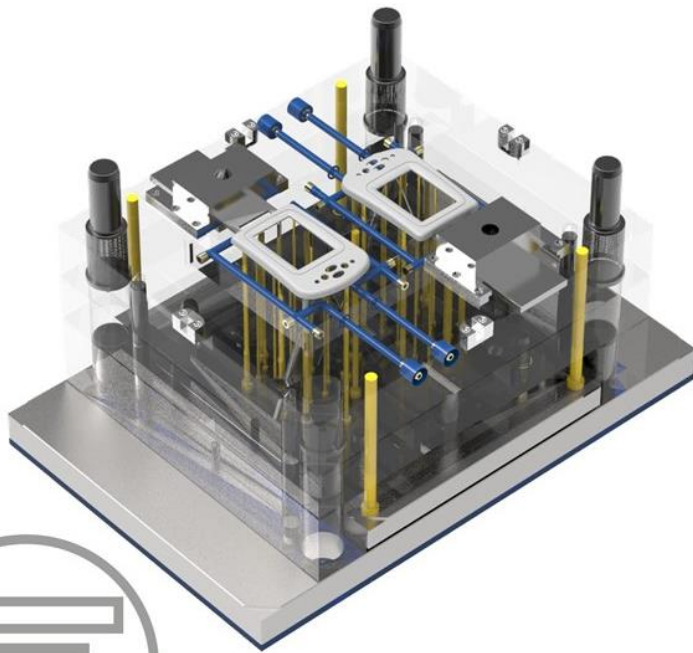Calculate Model Size: Save Volume as Parameter

Component Dialog: Highlight subassembly pull-down in case of multiple Subassemblies

Component Dialog: New mm Images

Plate Dialog: New mm Images

Option Dialog: Non Default Values are highlighted

EMX 10 F000

What's New?

- New Features
- Components
- Improvements
- More Info

More Info

PTC EMX Community

- PTC Internal Discussions Platform for EMX
- Questions and Answers
- Videos und Presentations

More Info

Large Document:

- 300 Pages PDF
- Collected Knowledge for EMX 9
- Walk Troughs
- Background Information
- EMX 10 Tutorial after Release (January 2017) planed
- 100 € per PDF und Data
- Contact: thomas@buw-soft.de

Expert Moldbase Extension 9
Tutorial
11.01.2016