

# Creo Intelligent Fastener 7.0.4.0

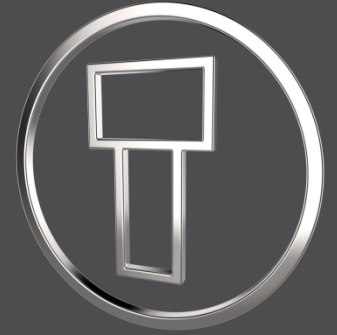
*What's New*



# Enhancements

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- Support Unicode characters in *param\_relation.txt*. SPR-11357093
- Disallow thread-surfaces as a position reference. SPR-11285257
- For more information see [changelog.html](#).



# Creo Intelligent Fastener 7.0.3.0

*What's New*



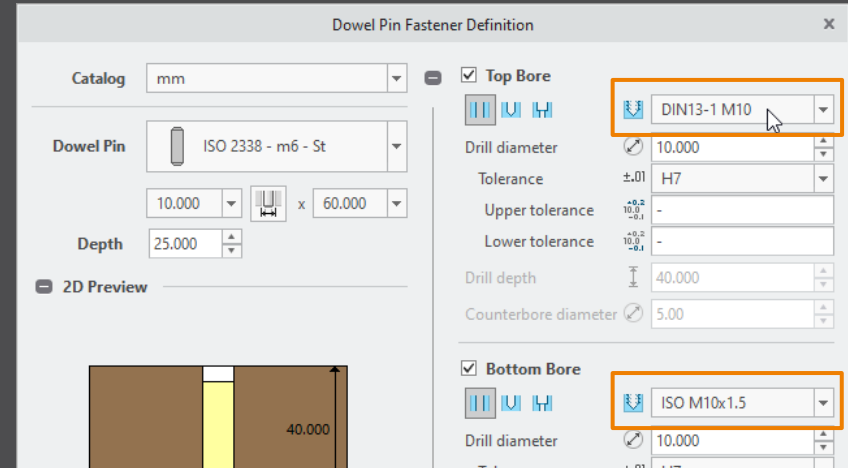
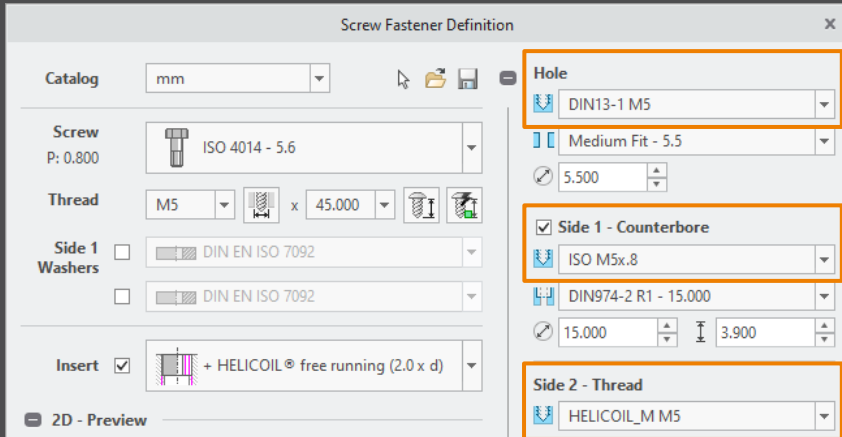
# Select hole chart for IFX holes

## Advantages

- Use different hole charts for different fastener types.
- Show different hole notes.
- Control the counterbore diameter with CBOREDIAM.

## Details/ Usage

- Select hole chart for IFX holes if more then one is found.
- Use the new keyword THREAD\_NAME in your fastener data file to preselect a hole chart.



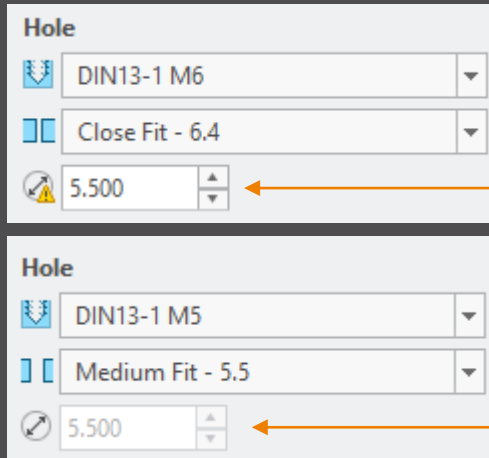
# Add option to control clearance hole behavior

## Advantages

- Use the same behavior than Creo Parametric.
- Allow to disable limits for the hole diameter.

## Details/ Usage

- Control hole diameter behavior in the Screw Fastener Definition dialog box inside the Hole layout.
- Control the limits for the hole and set the diameter to read only.

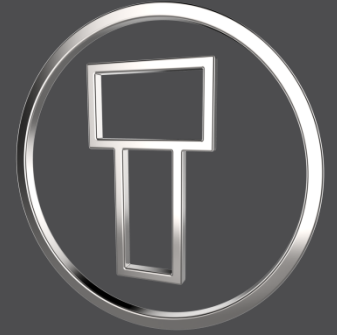


### *CLEARANCE\_HOLE\_USE\_LIMITS*

- YES – Set limits for min. and max. clearance hole diameter.
- NO – Do not set any limits for clearance hole diameter.

### *CLEARANCE\_HOLE\_DIAMETER\_OVERRIDE*

- CREO\_DEFAULT – Use the value of the *hole\_diameter\_override* configuration option.
- YES – Allow specifying the clearance hole value, instead of the standard value.
- NO – Use the standard clearance hole diameter value.



# Creo Intelligent Fastener 7.0.2.0

*What's New*

software  
**b&w**

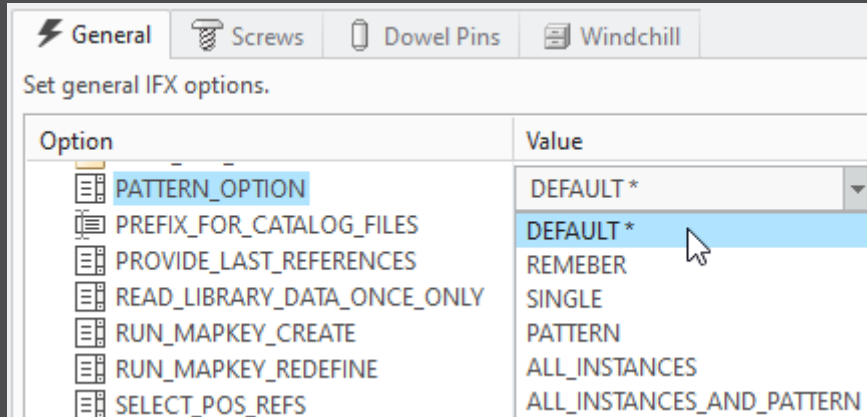
# Add new option – PATTERN\_OPTION

## Advantages

- Set a preferred pattern option.
- Use same default for all users.
- Save time while creating a fastener.

## Details/ Usage

- Set the new general *PATTERN\_OPTION* to your preferred value.
- Use *REMEMBER* to preselect the last option you used for your last fastener.



- *DEFAULT* – Use the IFX - default pattern option
- *REMEMBER* – Remember last selected pattern option.
- *SINGLE* – Select 'Assemble single instance'.
- *PATTERN* – Select 'Pattern fastener'.
- *ALL\_INSTANCES* – Select 'Assemble fastener on all instances'.
- *ALL\_INSTANCES\_AND\_PATTERN* – Select 'Assemble fastener on all instances and pattern it'.

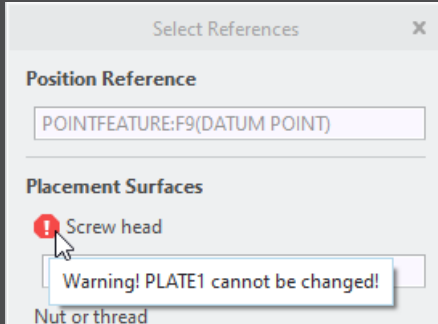
# Show an alert if part cannot be changed

## Advantages

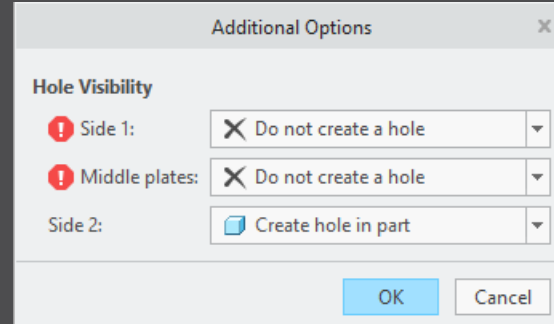
- Only changeable parts are changed.
- Prevents changes from getting lost.

## Details/ Usage

- If a part is not changeable, a red alert is shown.
- The hole creation is disabled by default.
- In this case, the user must allow the hole to be created.



Already get an alert while selecting the placement references in the 'Select Reference' dialog.



If at least one part is found that must not be changed, the user must enable the creation of the hole in the 'Additional Options' dialog.



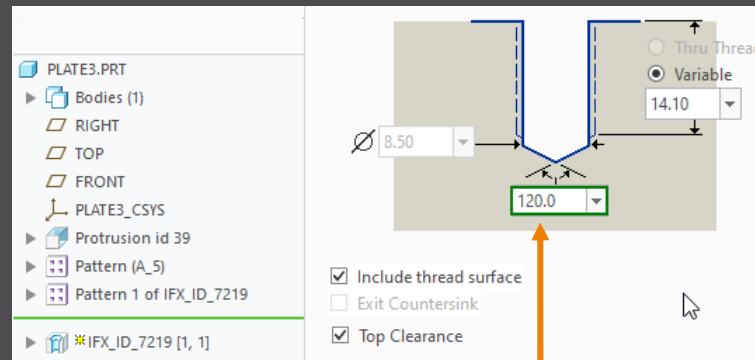
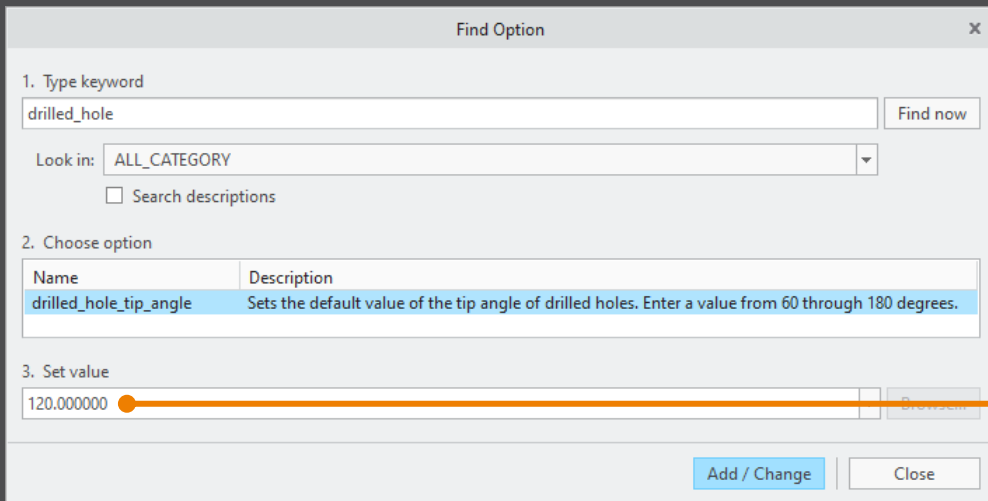
# Use option *drilled\_hole\_tip\_angle* in IFX

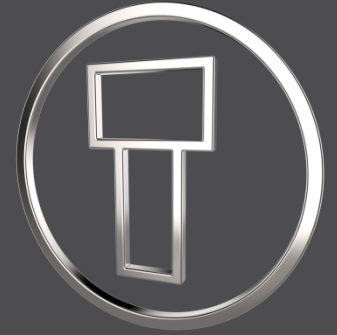
## Advantages

- Intelligent fastener use same settings as Creo Parametric.
- No need to change the tip angle afterwards.

## Details/ Usage

- If the Creo Parametric option *drilled\_hole\_tip\_angle* is set, IFX uses this value.
- If the option is not set, the default angle 118° is used.





# Creo Intelligent Fastener 7.0.0.0

*What's New*



# Enhance Usage of ifx\_data.cfg Files

## Advantages

- Use different configuration values for different fastener types or sizes.
- More flexibility and better customization possibilities.

## Details/ Usage

- Add #KEYWORD#NAME to your ifx\_screw\_data.cfg or ifx\_pin\_data.cfg.
- Add KEYWORD and NAME to your fastener data file (\*.dat) or optionally add a column with #KEYWORD and with NAME for each instance.

### ifx\_screw\_data.cfg

#ETSCR# <b>1x</b>	DN	MIN	MAX
MM	1	1.0	3.0
MM	1.1	1.1	3.3
...			
#ETSCR# <b>2x</b>	DN	MIN	MAX
MM	1	2.0	4.0
MM	1.1	2.2	4.4

### example1.dat

```
...  
ETSCR 1x  
...
```

### example3.dat

SYMBOL	DN	...	#ETSCR
...			
INST1	10		<b>1x</b>
INST2	10		<b>2x</b>
...			

### example2.dat

```
...  
ETSCR 2x  
...
```

# Enhance Placement References

## Advantages

- Use one name instead of different item ids.
- Easier to customize, more intuitive and clearer.
- More flexibility – different ids for each instance in your Fastener Data File.

## Details/ Usage

- Add a name to SURFACE, AXIS and ORIENT instead of item ids.
- Add columns #SURFACE, #AXIS and #ORIENT to control item ids of each fastener instance.

Before

```
SURFACE 29 12 128 296
AXIS    10  8 117  24
```

After

```
SURFACE  PLACEMENT_SURFACE
AXIS     PLACEMENT_AXIS
```

Before

```
SURFACE 29 12 128 296 75 61 ...
AXIS    10  8 117  24 12  5 ...
```

After

```
SYMBOL  DN ... #SURFACE #AXIS
...
INST1   10      29      12
INST2   10      12       8
INST3   10     128     117
...
```

# Enhance usage of relations

## Advantages

- Better control of relation creation for your fastener.
- Easy parameter/relation customization of different fasteners.
- More flexibility in using relations.

## Details/ Usage

- Add the name of the catalog to your param\_relations.txt file name.
- Add the type of your fastener to your param\_relations.txt file name.

## Examples

param\_relations\_mm\_screws.txt

→ For all screws from the mm catalog

param\_relations\_inch.txt

→ For all fasteners from the inch catalog

param\_relations\_nuts.txt

→ For all nuts from all catalogs

# Minitoolbar Support

## Advantages

- Fast access to the most important IFX commands.
- Reduce the mouse movement.

## Details/ Usage

- Click on a fastener to see the possible interaction.
- Redefine, Reassemble or Delete the selected fastener easily.

## Screws



## Dowel Pins



# Multibody Support

## Advantages

- Use the new PTC Creo multibody possibilities in IFX too.
- IFX holes are created in all bodies.

## Details/ Usage

- Simply assemble a new fastener.
- IFX create the holes for you in all necessary bodies.