Creo Intelligent Fastener 7.0.12.0

What's New

Enhancements & Fixed Bugs

- Before retrieving, check if a fastener exists to avoid the message:
        'fastener-mdl' cannot be retrieved.
  If the fastener model does not yet exist, create it using the template.
- Ignore values (e.g. tabs and spaces) behind 'THREAD_DATA' in hole charts.
- Solved problem for screw-in fasteners. Offset (depth) was set to '-0.1'.
- Consider hole charts in working directory. *SPR-14386755*
- Use API 'ProElementHole*Set()' to set thread series and screw size by value.
- Only accept cylindrical surfaces as multi-reference.
- Add new screw option 'COUNTERSINK_HOLE_USE_LIMITS'.
  SPR-14504539, SPR-14536820
- Verify library files part 1. *SPR-14387616*
- Before changes are made, a check is done to see if a model is read-only.
  SPR-14624197, SPR-14592374
- If the library location is set to 'Windchill', the library directories will be created if they do not exist. *SPR-14683389*
- If the personal folder cannot be determined, the ifx.log will be written to the current working directory. If the working directory cannot be determined either, logging will be disabled. *SPR-14842569*

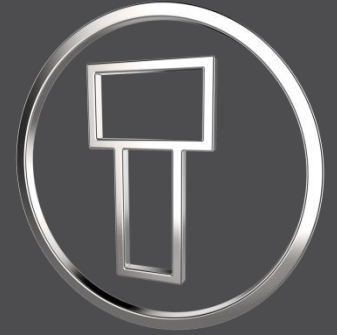For more information see changelog.html.

Creo Intelligent Fastener 7.0.11.0

What's New

Fixed Bugs

- The creation of holes was improved.
  If an edge was hit on the exit surface, the hole was not created.
  SPR-13818141, C-16381450

- For inserts, the pitch 'P' was used instead of 'P1' to determine the hole thread series.

- Fixed a problem related to redefining fasteners in subassemblies.

- An issue related to the placement of fasteners on assembly cut surfaces has been fixed. *SPR-14146142, C-16584416*

- Fixed an error when reading *.dat files. If there was a space in the first column, there were problems when placing fasteners.
  SPR-14131006, SPR-14130745, C-16573455

- Parameter values for the 'BUW_*_ID*' fastener component parameters were set to '0' during redefinition.

For more information see changelog.html.
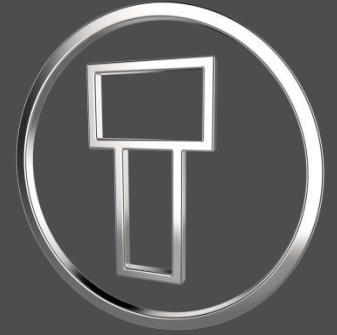
Creo Intelligent Fastener 7.0.10.0

What's New

Fixed Bugs

- Problem with resetting the hole note fixed.
  The 'RUN_MAPKEY_*' options have been removed.
  New API is used to reset the note. *SPR-13760849*

- Fixed problem with *.dat file having lines with the empty tabs.
  In this case the size was shown as 0 (zero). *SPR-13807791*

- Fixed an error when reading *.dat files with #FAMTAB.

- The problem with redefining a screw with an insert has been fixed. The 'BASIC_DIAM' and 'THREAD' diameters of the screw instead of the insert were used to get the hole diagram.

For more information see changelog.html.

Creo Intelligent Fastener 7.0.9.0

What's New

Fixed Bugs

- Remove blanks at the end of an instance name.

- Fixed reading of hole charts regarding 12 or 18 columns. *SPR-13804155*

- Fixed problem with the determination of the minimum and maximum diameter of the countersink.

- The values from 'ifx_start_mdl.cfg' are assigned before creating new parameters from the *.dat file. Otherwise, the designated status will be lost.

- Fixed problem with placement of nut or insert in subassembly.

- Fixed an error when reading *.dat files. If a line contained more than 256 characters, a crash occurred.

For more information see changelog.html.

Creo Intelligent Fastener 7.0.8.0

What's New

Fixed Bugs

- Problem with redefinition of countersunk screws fixed.

- Fixed Creo crash when Redefine a screw fastener. SPR-13483120

- Fixed a problem in the screw dialog file. If the 'STRING' contains a space, the file is corrupted.

- Fix diameter error in 'Unhardened_Ground.dat'.
  Change wrong diameters to '0.6250'.
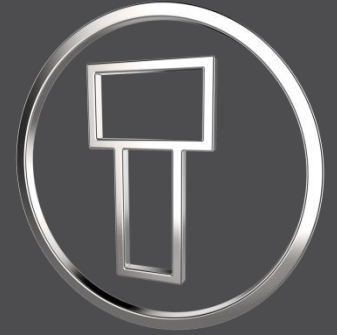

- For more information see changelog.html.

Creo Intelligent Fastener 7.0.6.1 & 7.0.7.0

What's New

Fixed Bugs

- Fixed problems while regenerating relations.
- A gap was created between the fastener and the placement surface while placing a fastener on very thin models. SPR-13085083

- For more information see changelog.html.
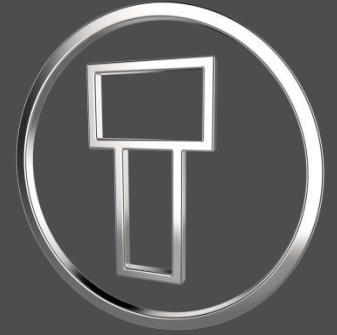
Creo Intelligent Fastener 7.0.6.0

What's New

Fixed Bugs

- Reading of *.hol files in IFX reworked.

- Add corruption check for IFX fastener groups. SPR-10503770

- Option 'GEN_DIGITS' removed. SPR-12778104

- Rework functionality if 'HOLE_VISIBILITY' is set to 'NO'. SPR-13074974

- For more information see changelog.html.

Creo Intelligent Fastener 7.0.5.0

What's New

Improvements

- Add Additional Tools information offered by B&W Software GmbH.
- Support body colors for 2D-preview.

- For more information see changelog.html.

Creo Intelligent Fastener 7.0.4.0

What's New

Enhancements

- Support Unicode characters in *param_relation.txt*. SPR-11357093
- Disallow thread-surfaces as a position reference. SPR-11285257

- For more information see changelog.html.

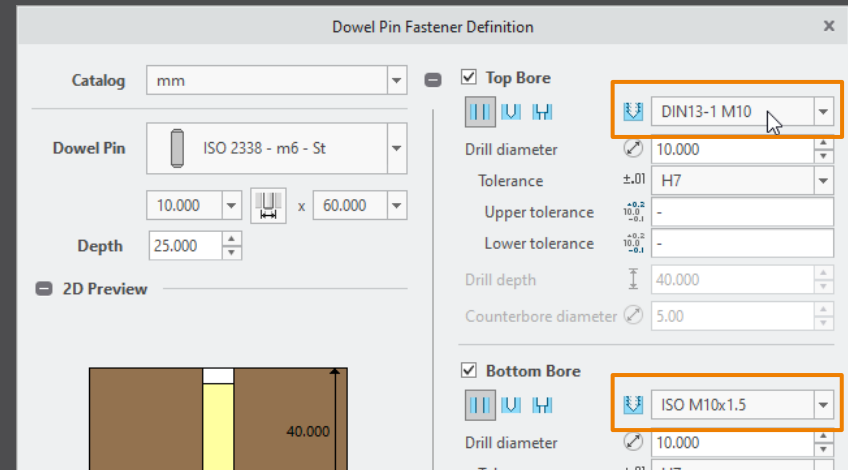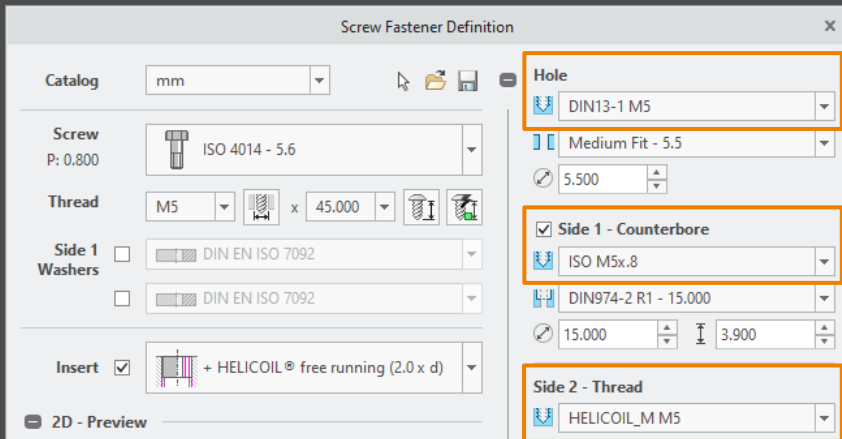**Creo Intelligent Fastener 7.0.3.0**

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.

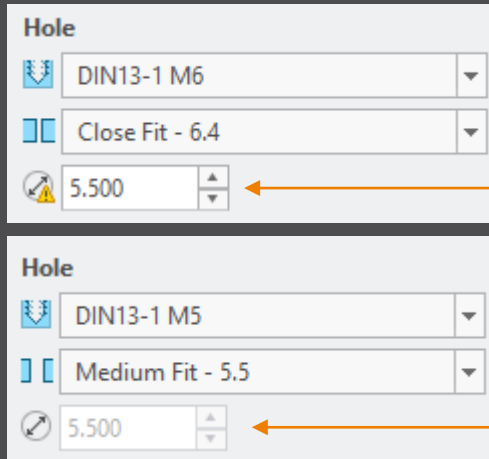| Details/ Usage | • Select hole chart for IFX holes if more then one is found. |
| | • Use the new keyword THREAD_NAME in your fastener data file to preselect a hole chart. |

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.

Hole
- DIN13-1 M6
- Close Fit - 6.4
- 5.500

Hole
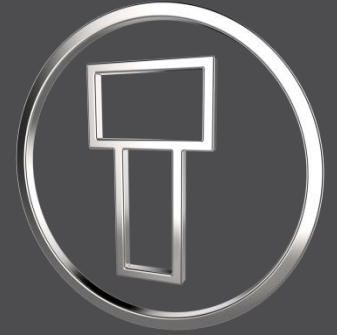- DIN13-1 M5
- Medium Fit - 5.5
- 5.500

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.

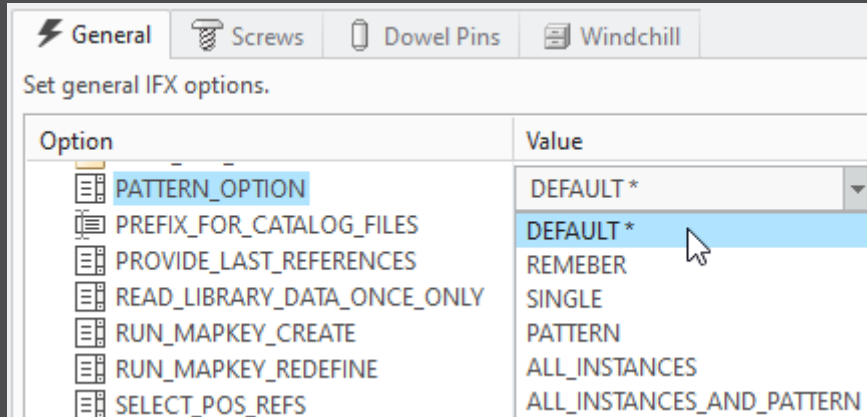**Creo Intelligent Fastener 7.0.2.0**

What's New

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'.
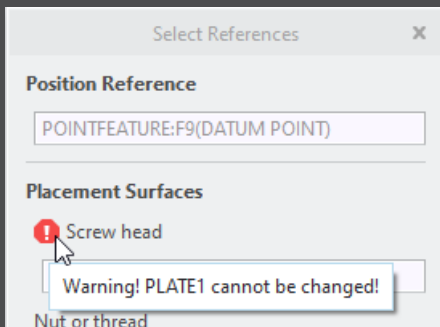
Show an alert if part cannot be changed

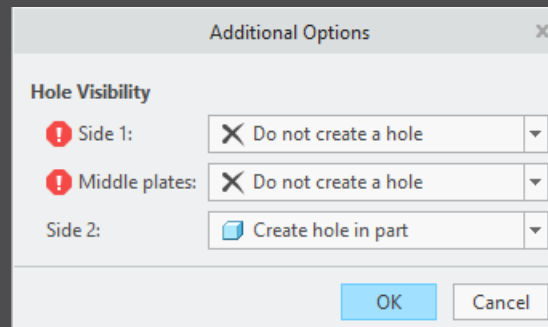|	
Advantages	• Only changeable parts are changed. • Prevents changes from getting lost.

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.
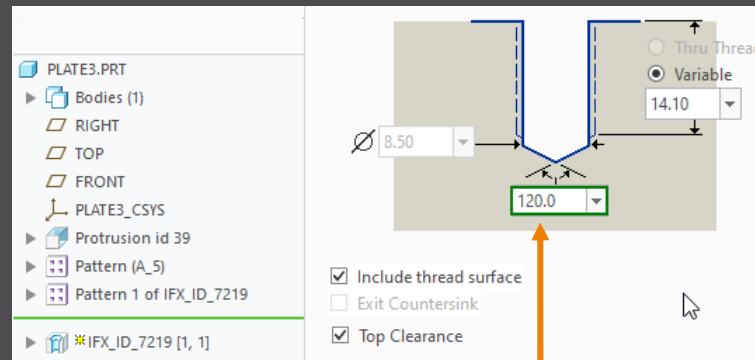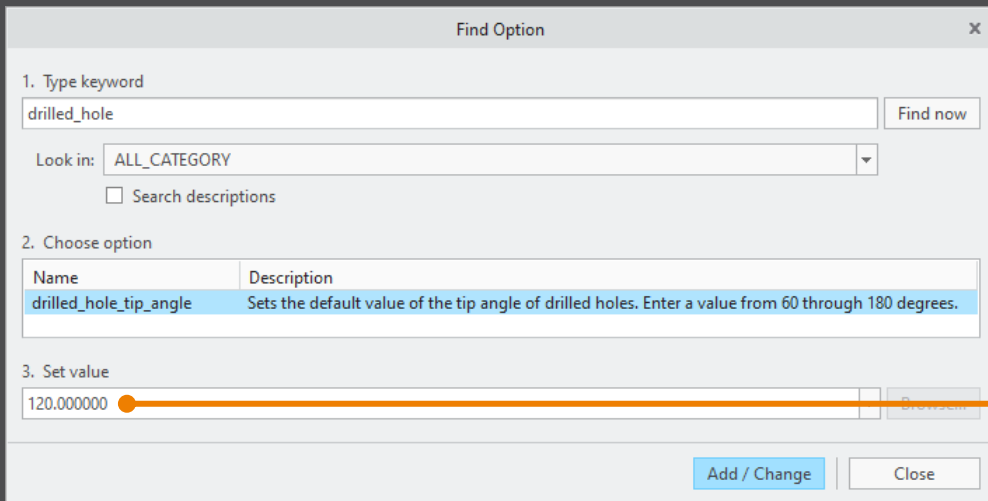
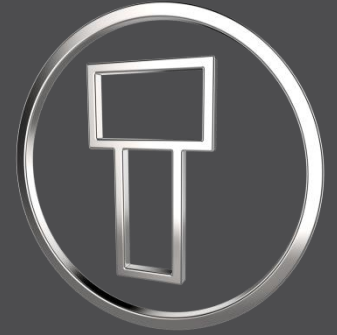# Use option *drilled_hole_tip_angle* in IFX

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.

example1.dat
```
…
ETSCR 1x
…
```

example3.dat
```
SYMBOL    DN …   #ETSCR
…
INST1     10      1x
INST2     10      2x
…
```

ifx_screw_data.cfg
```
#ETSCR#1x DN   MIN   MAX
MM        1    1.0   3.0
MM        1.1  1.1   3.3

…
#ETSCR#2x DN   MIN   MAX
MM        1    2.0   4.0
MM        1.1  2.2   4.4
```

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 #SURACE, #AXIS and #ORIENT to control item ids of each fastener instance.

Before

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

Before

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

After

```
SURFACE     PLACEMENT_SURFACE
AXIS        PLACEMENT_AXIS
```

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. |
| | • Recuse 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.