

What's New in Impact 2016

Phil Spooner / 15 July 2016

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This document contains details on the new features in ImpactCAD. This document applies to only the specified version of ImpactCAD.



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Overview

This document covers the new features introduced in the 2016 Release of Impact. Many of these features can be utilised out-of-the-box; however, several may require configuration changes, i.e., where an existing installation is to be upgraded. Such features are identified throughout this document by an asterisk (*). Certain features were introduced towards the end of the Impact 2015 life-cycle. Such features are identified throughout this document by twin asterisks (**). Not all of the features described within this document are applicable to all Impact licenses. Please consult Arden Software for further details.

3D - Conversion & Folding

Curved Panels

Impact 2016 features several new tools & features to accommodate the creation of curved faces. The tool allows for the automatic and manual identification of both 2D & 3D geometry (from which to derive curvature information from) plus the ability to manually curve faces within a 3D folding model.

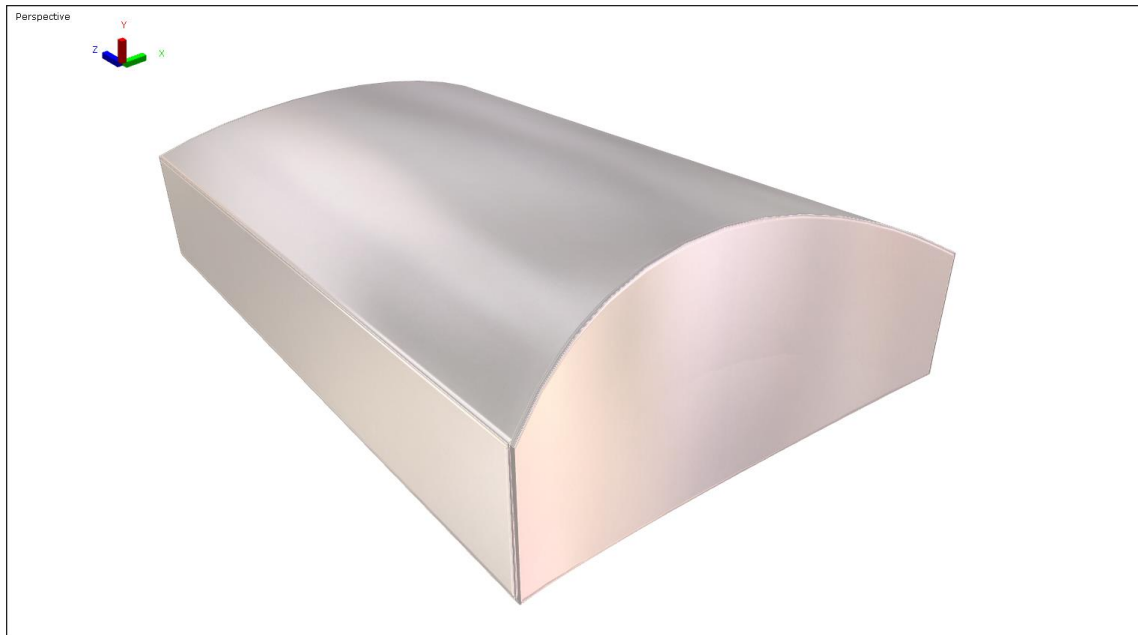


Fig 1 – Pill Pack Style Design

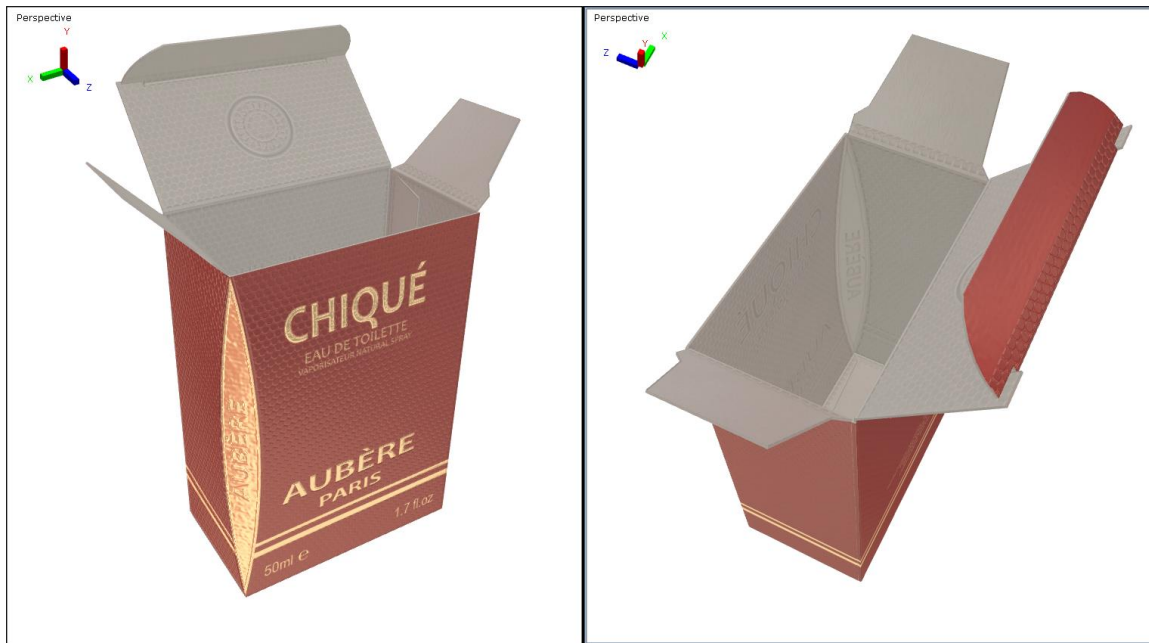


Fig 2 – Curved Face with Textured Foil 2D Geometry

From a 2D drawing layer, curvature information can be assigned to entities **Manually**, **Automatically** or not at all. It is anticipated that the **Automatic** method would be utilised by most users, for most cases – this derives curvature information automatically from the associated geometry and no manual user-intervention is necessary. A **Curvature Type** of **Manual** will allow a user-defined curve, whereas a **Curvature Type** of **Non** will prevent a face from being curved at all.

All lines, arcs & Beziers may be curved – their **Curvature Type** will be set to **Automatic by default**. The **3D Viewer** tool will then attempt to create curved faces for any faces containing *non-straight Crease* entities.

To facilitate this, a new **Face** tab has been added to the **Entity Inspector** (available for non-construction 2D *lines, arcs* and *Beziers*). The controls at the top of this tab have been moved from the **Line** tab of the **Entity Inspector** (Impact 2015 & earlier) and renamed - (**Fold Angle**>**Face Angle** and **Fold Angle Variable**>**Face Angle Variable**). New **Curvature** controls have been added at the bottom of the tab.

Using **Automatic Curvature Type**, the *only available controls* are for **Fixed Angle** and **Angle** (of Curve). If **Fixed Angle** is selected, open-ended faces (faces which are not attached to other faces on their opposite side) will use the specified angle value for the curvature on the opposite side.

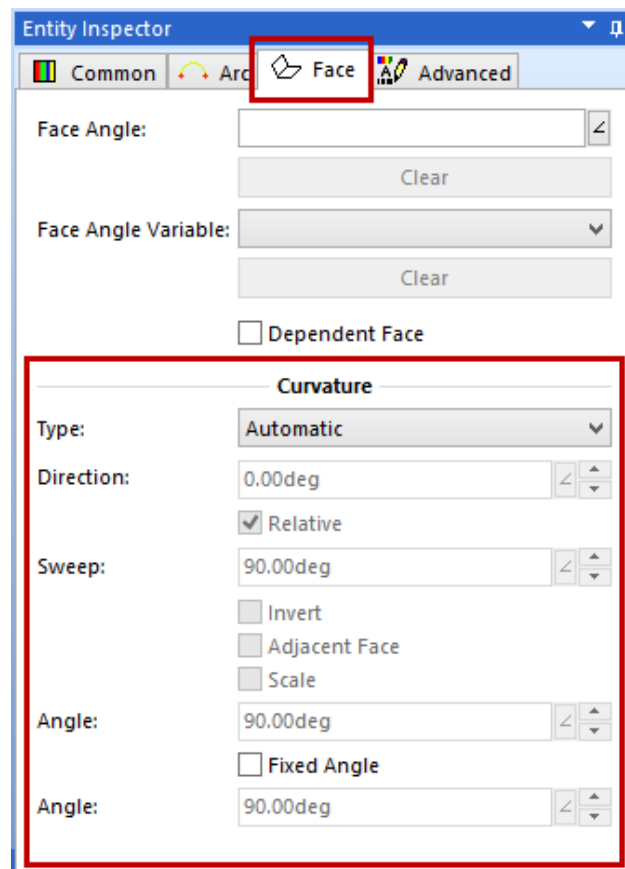


Fig 3 – Entity Inspector Face Tab – Automatic Curvature Mode

Using the **Manual Curvature Type**, the following concepts/definitions are applicable:

The **Fold Axis** is defined as *the axis about which a folding face pivots*. For any non-straight crease this will be a line between the two extreme points at each end of the crease. A **Curved Surface Modifier** is a curved surface defined by one or two curves which encloses a folding face and, is used to modify the face. The following controls become available, allowing you to manually define the curvature:

- **Direction** – the rotation of the bounds of the **Curved Surface Modifier** surrounding the face.
- **Relative** – if this is enabled then the Direction will be an angle relative to the Fold Axis of the face, otherwise, it will be an absolute direction.
- **Sweep** – the sweep angle of the curve stretched over the bounds of the Curve Surface Modifier at the given angle which determines how shallow the curve will be. In many cases the sweep can be inspected from an arc or Bezier entity in the layer and that value directly set here.
- **Invert** - if selected the curve will be inverted (the default is to curve outwards).
- **Adjacent Face** – if selected, the face leading to the face being curved will also be curved, but with the opposite inversion so that the two faces will match.
- **Scale** - this specifies if the curve is part of the face as opposed to being used simply to ‘drape’ the face over the curve. If selected then scaling will be applied to the face and the curve will be centred on the **Fold Axis**.
 - **Angle** - this specifies the angle of the curve effectively tilting the curve about the **Fold Axis**. A 90° angle would be the full height of the curve and 0° angle would result in no curvature. *Often* this angle can be set to be the same as the *Faces* angle.
 -

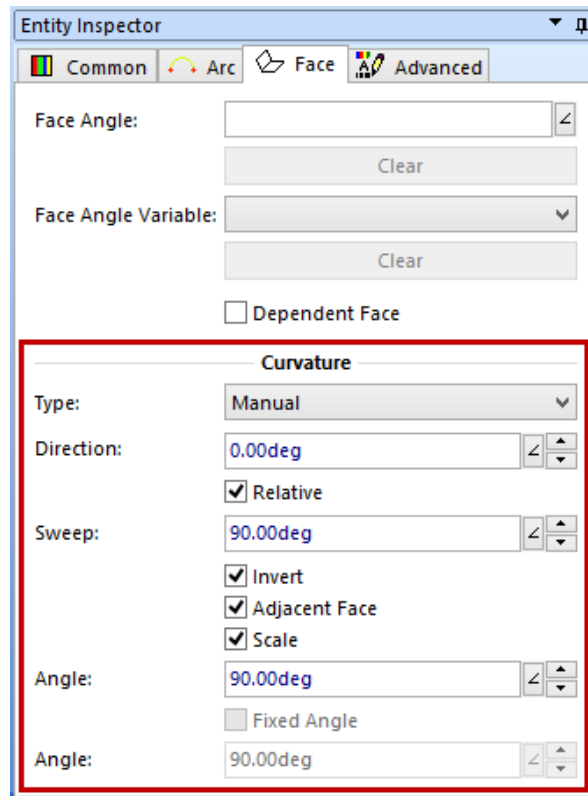


Fig 4 - Entity Inspector Face Tab – Manual Curvature Mode

When the **3D Viewer** tool is executed, the defined curve conditions are applied to the relevant faces.

3D Geometry

Faces can also be curved from *within* a 3D layer via the **Entity Inspector (3D Faces tab)** or via the new **3D>Folding Faces>Curve Faces** tool.

Using the former method, select the face to curve via the **Select Faces** tool and then set the **Curvature Type** to **Manual**. A **Curved Surface Modifier** is draped over a selected face and curvature options within the **Entity Inspector** will become available:

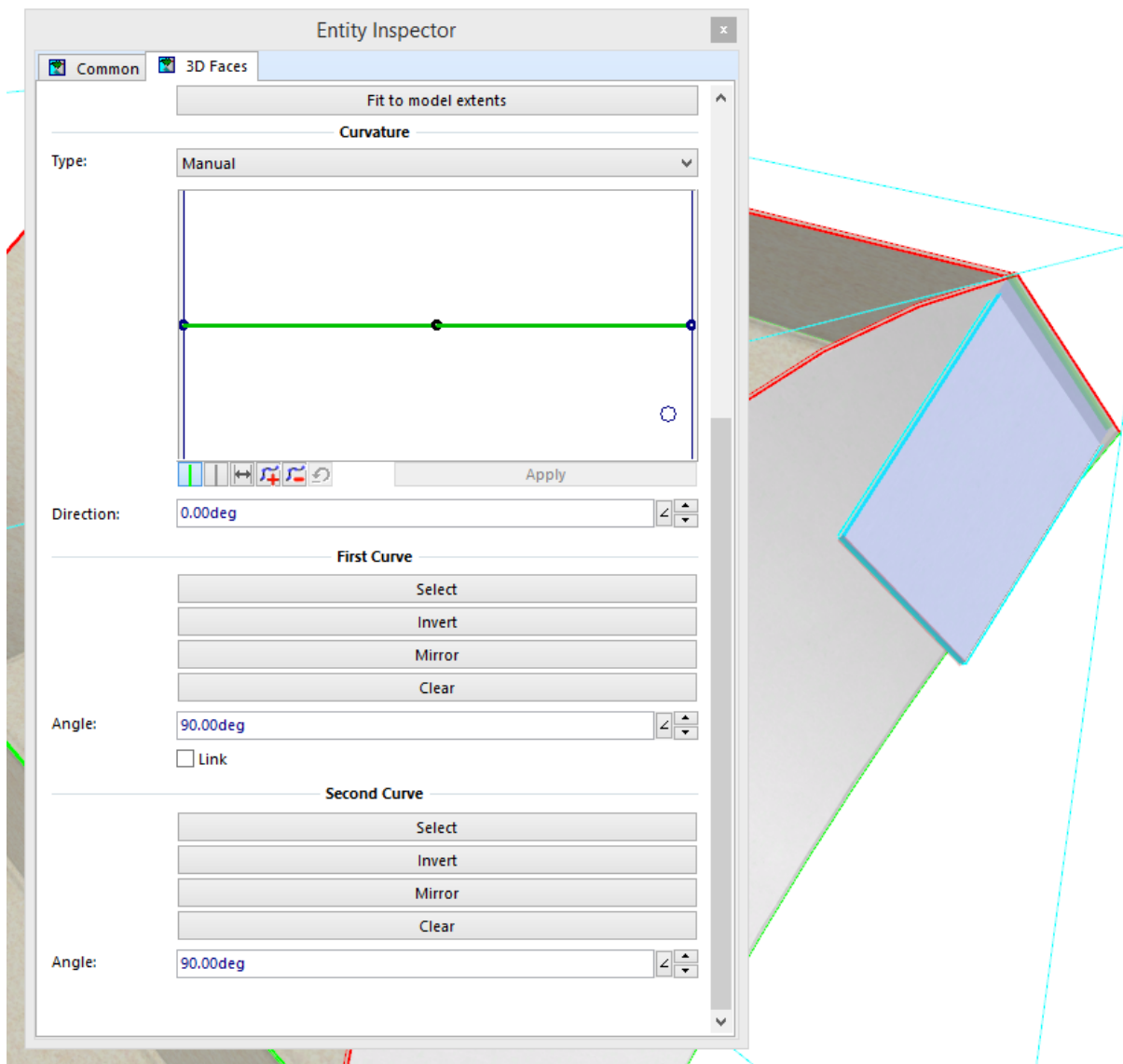


Fig 5 - Entity Inspector 3D Faces tab and Curved Surface Modifier

Note that the following concepts/definitions are applicable:

- **First Curve**
 - The First Curve is the primary curve for any curved surface and is always present. In the 3D layer the First Curve is highlighted green by default. The controls for the first curve are as follows:
 - **Select** – This will start the Select Curve tool and the user can then highlight entities on folding models to use to curve the selected faces. On the Edit Bar is a Group checkbox which either enables selection of individual entities or groups of entities (groups are defined as entities with the same palette, of the same palette type or associated with the same faces).
 - **Invert** – This will invert the curve from its current state.
 - **Mirror** – This will mirror the curve from left to right.
 - **Clear** – This will clear the curve resulting in a flat surface.
 - **Angle** – This is the angle of curve as though it has been tilted about its end points (90 degrees results in the full curve height being used and 0 degrees results in no curvature).
 - **Link** – If selected then the First Curve will be used over the entire surface.

- **Second Curve**
 - The Second Curve is optional and allows more complex curved surfaces to be created by blending between the two curves. To enable the second curve the Link checkbox must be deselected and then the same controls as above are enabled.

Using the latter method, run the **3D>Folding Faces>Curve Faces** tool and click the required face. The following **Edit Bar** options will be displayed (matching those available for the **Manual Curvature** mode within the **Entity Inspector**):

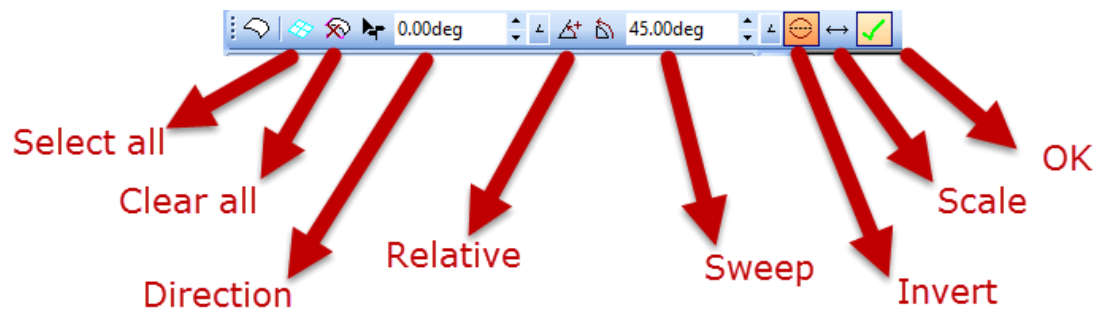


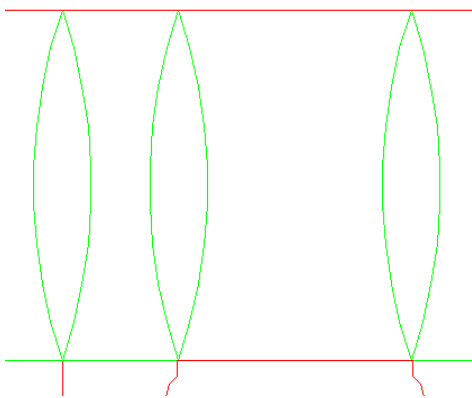
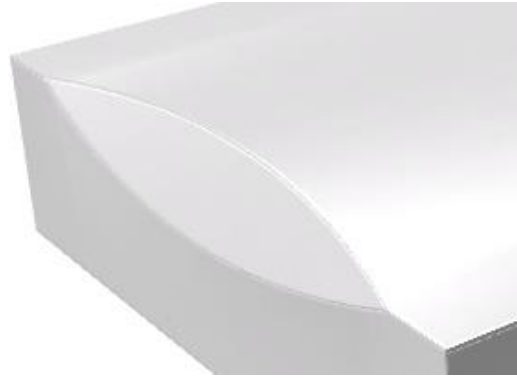
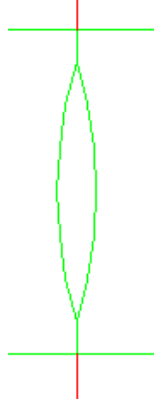
Fig 6 – Curve Faces Tool Edit Bar Options

The additional options perform the following functions:

- **Select All** – selects all faces.
- **Clear All** – remove all curvature properties from all faces.

Curved Face Examples

The following screenshots represent examples of curved face geometry and the resultant 3D visualisations:



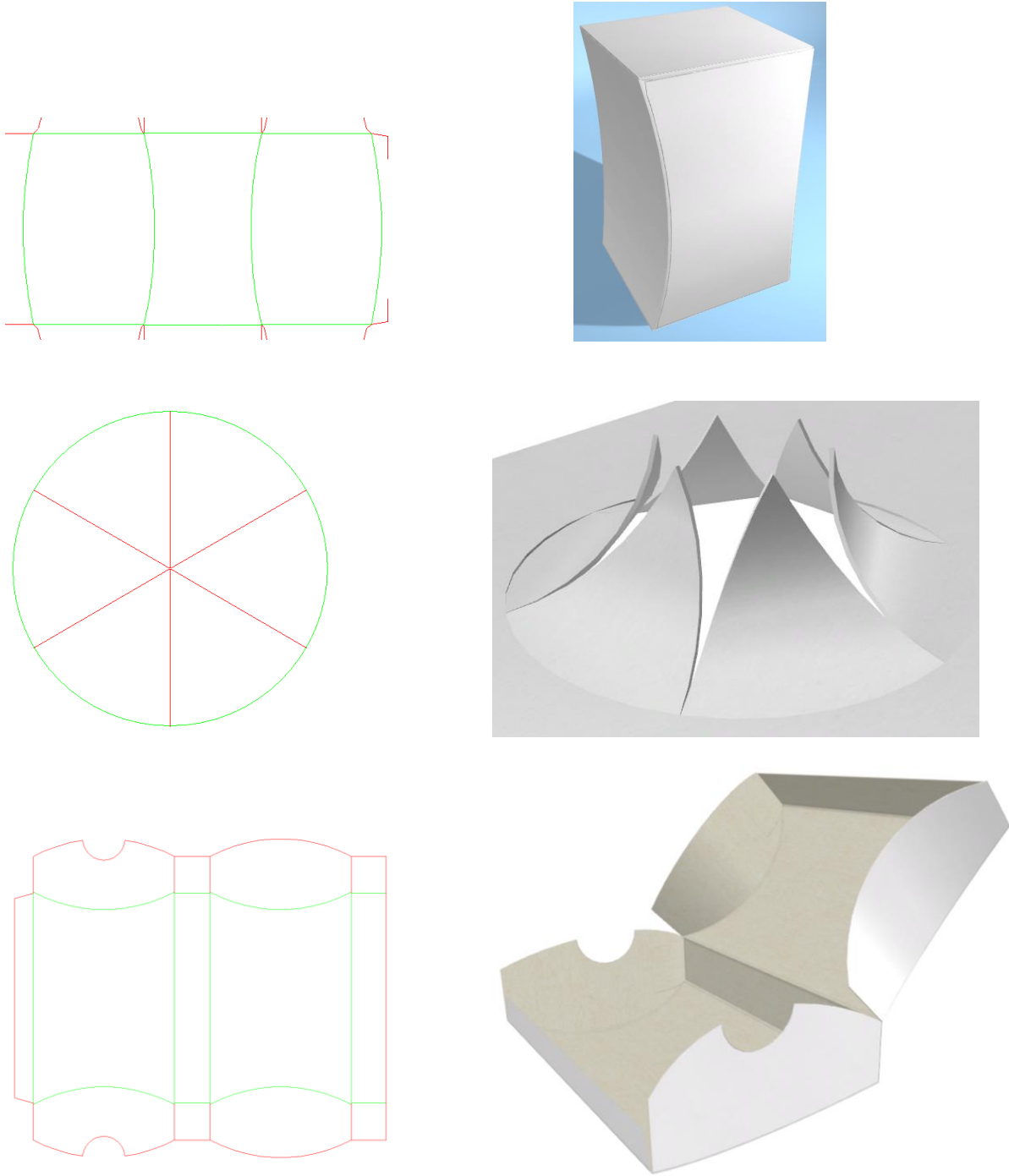


Fig 8 – Curved Face Examples

Curved Face Limitations

There are certain types of geometry that cannot be curved in **Automatic** mode including if a face has two non-parallel creases and they are not parallel with each other.

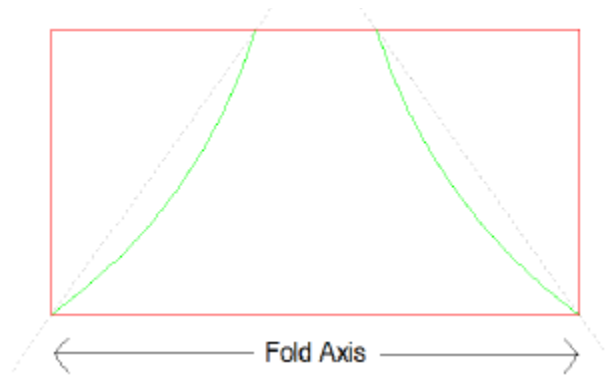


Fig 9 – Curved Faces Limitation

Additionally, if a face has more than two non-parallel creases (even if two of them are parallel) then **Automatic** curving cannot be done because the surface would be too complex.

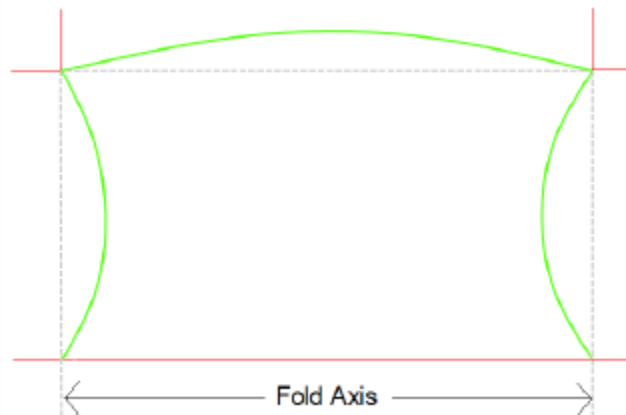


Fig 10 – Curved Faces Limitation

Curved Face Animation

It is possible to animate curvature in two ways. For **Manual Curvature** you can create key frames either in the **Animation Editor** or by making changes to curvature whilst in **Record Mode**. New **Curve Angle** key frame channels have been added to the **Animation Editor** to allow *manual* editing. Only the curve **Angle** is recorded. For **Automatic Curvature** animating the face angles will *automatically* change the curvature.

Note that the **curvature** of folding model faces will not be exported to the **3D PDF** format.

Improve Overlapping of Multiple Transparencies

A new workstation option (**Options>Environment>Workstation>3D**) has been added to aid the display overlapping transparencies. In previous Impact versions, overlapping transparent objects appear to flicker as the camera and/or objects rotate. This has the effect of objects (usually folding models or imported solid objects) seemingly disappearing behind transparent objects (acetate window patches, transparent models etc.), depending upon the viewing angle. As an interim fix, a new option **Transparency Depth Writes** has been introduced. With the option switched **Off**, the flickering effect is reduced significantly, albeit at the expense of the detail *behind* the transparency.



Fig 11 - Transparency Writes Enabled – Missing Model but Improved Transparency Detail/Quality

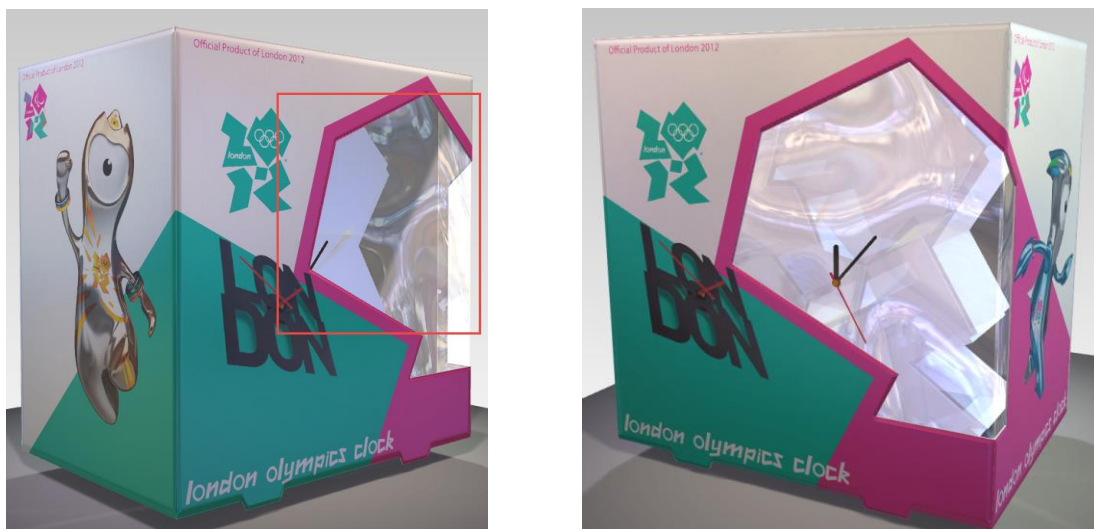


Fig 12 - Transparency Writes Disabled – Visible Model but Less Transparency Detail/Quality

3D - Import & Export

Allow Static 3D PDF Export from an Animated Scene

A new addition to the **Adobe PDF** branch of the **Export** Master Tool Settings allows the exporting of animation frames to be *optional*. This allows you to create a *static* 3D PDF from an *animated* scene.

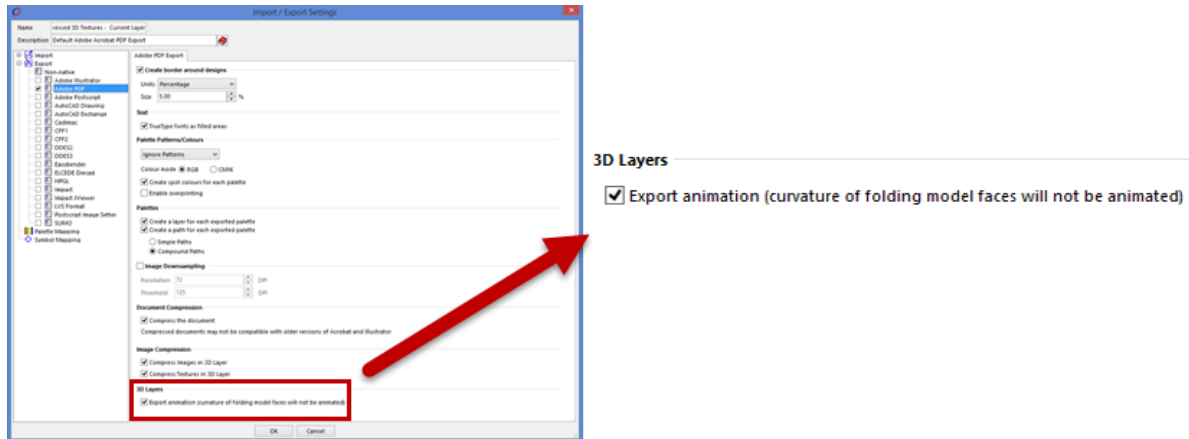


Fig 13 - PDF Format Export Animation Option

You no longer need to create a new static 3D scene (or delete animation frames) in order to generate a static 3D PDF model from an animated scene.

Note that the animated *curving* of faces will not be exported to the PDF format. This is a known limitation of the PDF format.

Impact 3D Interchange Format

A new proprietary file format has been introduced – Impact 3D Interchange (*.i3d). This will replace the existing Impact 3D Interchange (*.3da format) and offers the following options – none of which were available for the *.3da export:

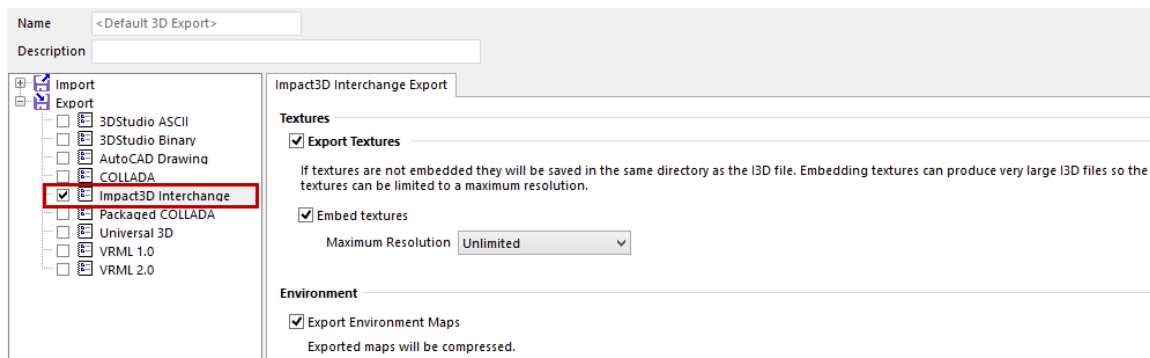


Fig 14 – i3D Format Export Options

The texture resolution options are: **Unlimited\Large\Medium\Small\Extra Small**. One of the interesting properties of the i3D format is the support of environmental maps – the TVE/Tru View Environments which are used to create lighting, reflection & background effects. The environment maps may be embedded into the *.i3d file (albeit compressed), so that the recipient will be able to view the same lighting/reflection effects as the original Impact project, regardless of whether they possess the relevant TVE file as the project originator. The *.i3d format supports *all* Impact 3D attributes (animation, textures, lighting, cameras etc.). There are currently no *.i3d-specific *import* options. Impact 2016 will still support the import of *.3da files from older Impact versions.

Export Dimensions to i3D Format

The new Impact 3D Interchange format (*.i3d) supports the exchange of 3D dimension entities. There are no new options required to configure to enable *dimension* export or import.

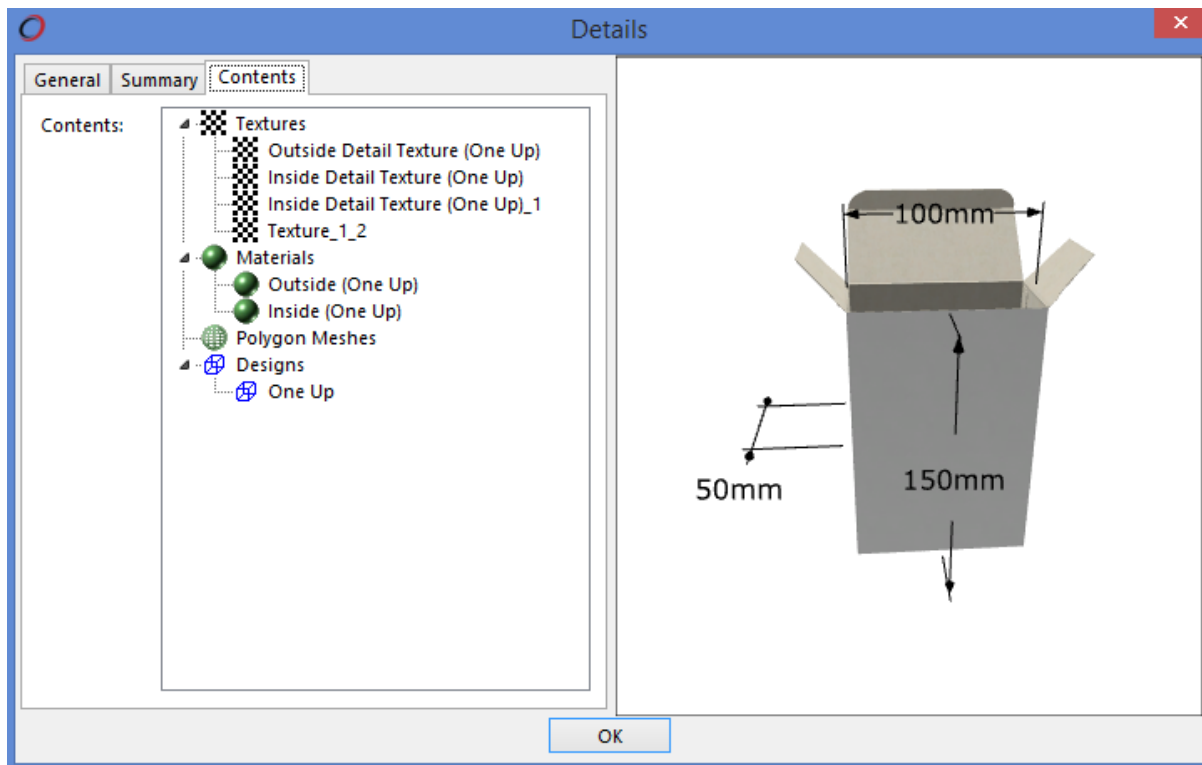


Fig 15 - i3D Import with Dimensions

Export Dimensions to 3D PDF

Visible 3D Dimensions are now exported to the **3D PDF** format. This is applicable to both static *and* animated scenes & reports. No new options need to be configured to enable dimension export. Provided the dimension entities are *visible*, they will be exported, using the defined **3D Dimension** colours (**Options>Environment>Environment>Colours>3D>3D Dimensions**).

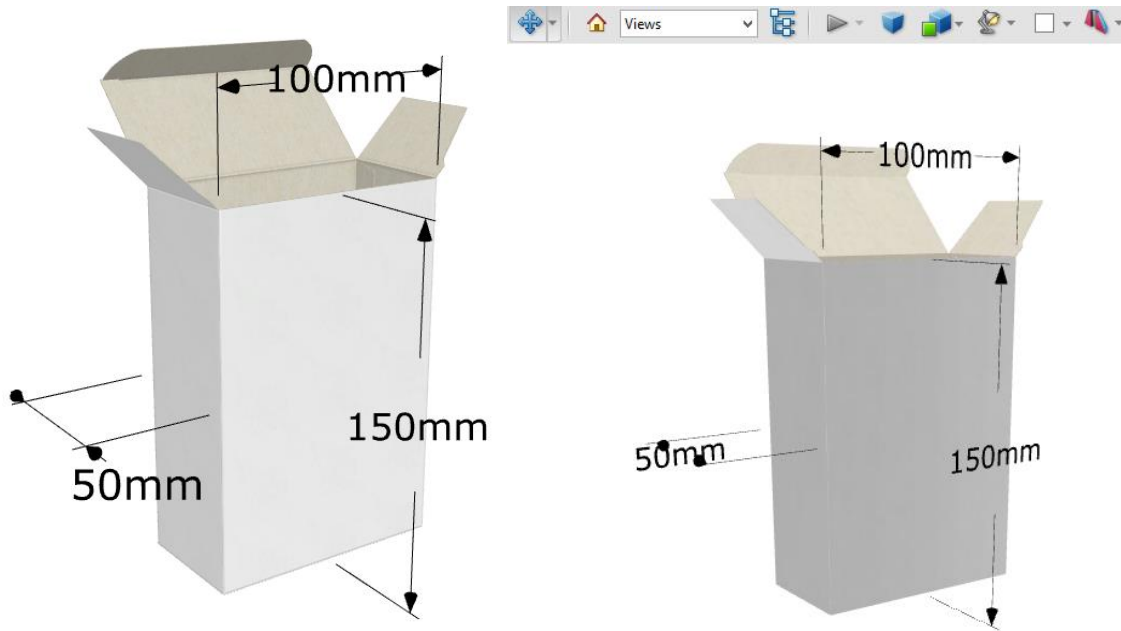


Fig 16 - Dimensioned Folding Model – in Impact (Left) & Adobe Reader (Right)

Appearance

Highlighter

A new concept for Impact 2016 is the **Highlighter**. This feature aims to improve entity selection & identification by highlighting entities which would be picked and/or selected whilst the cursor hovers over them or picks them. The feature is enabled via a new **Highlighters** option within **Options>Environment>Environment>Display**.

Note that you need to have the **Advanced Environment** enabled, in order to access the **Display** options.

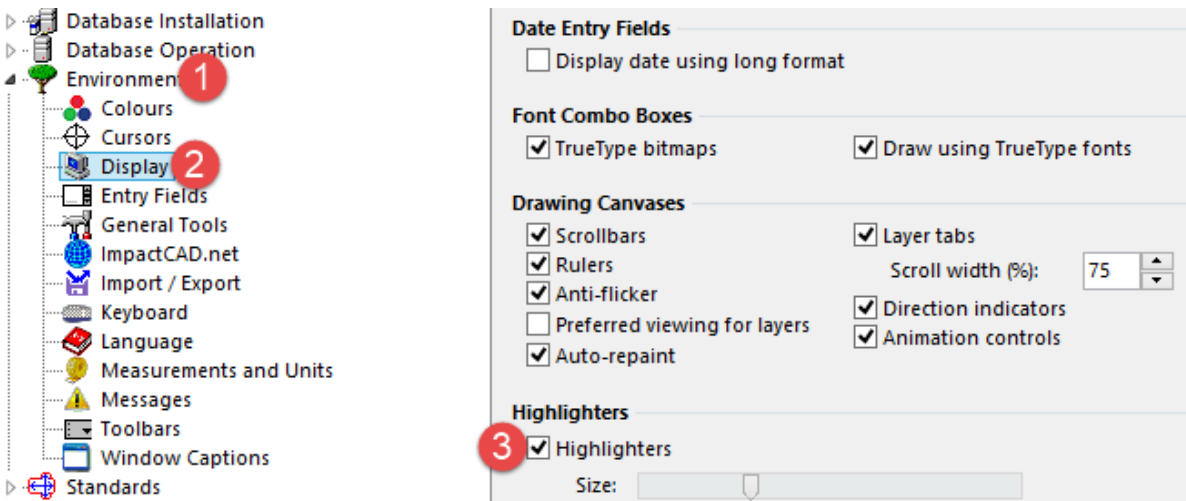


Fig 17 - Highlighter Options

The slider controls the size (in pixels) of the highlighting:



Fig 18 - Highlighter – 10 Pixels



Fig 19 - Highlighter – 5 Pixels



Fig 20 - Highlighter – 3 Pixels

As expected, the highlighter colour is also user-definable:

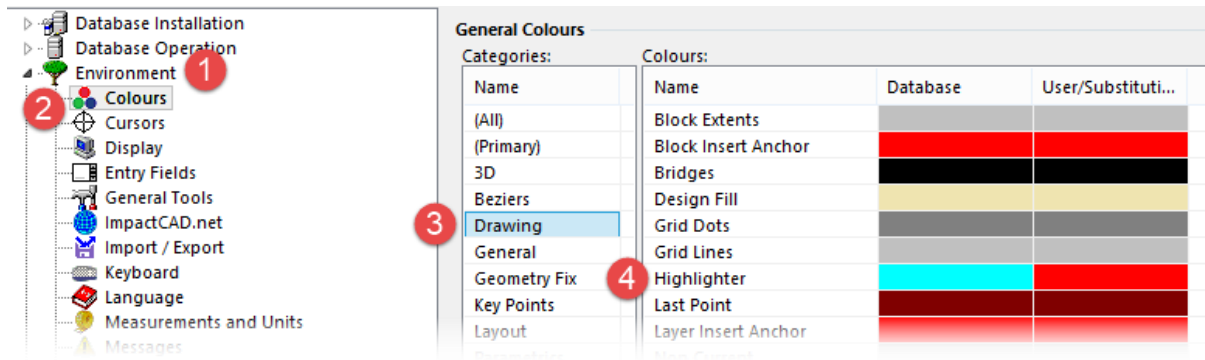


Fig 21 - Highlighter Colour Option

The **Highlighter** behaviour is also affected by the additional **Performance Options** – which enable *advanced Highlighter* functionality for specific tools (currently, certain **Dimension**, **Enquire** & **Trim** tools).

New Workstation Options Page for Display-Specific Options

A new **Options>Workstation>Performance** page has been added, offering the following controls:

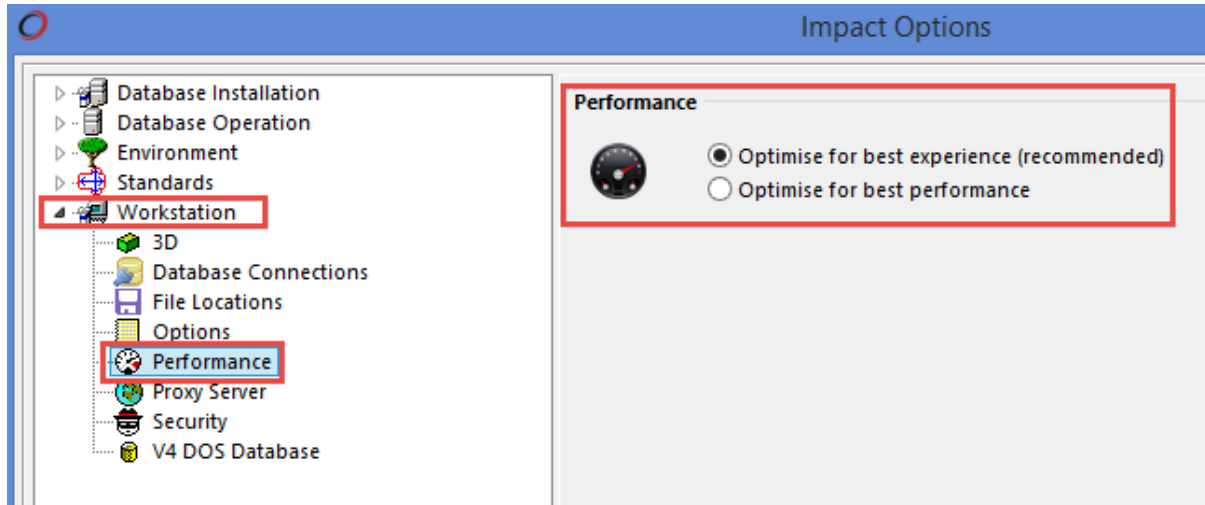


Fig 22 - Workstation Performance Options

These options **currently** affect only the **Highlighter** behaviour – and those changes are described below:

- **Enquire Distance Parallel**
 - **Best Experience** – after the initial click, only line entities *parallel to the initial entity* will receive highlighting as the cursor hovers over them.
 - **Best Performance** – after the initial click, *any entity* will receive highlighting as the cursor hovers over them.
- **Delete**
 - **Best Experience** – when creating a deletion marquee, the entities *to be deleted* will receive highlighting as the marquee encompasses them. When using the CTRL + click method to select multiple entities, entities will receive highlighting *as soon as the cursor hovers over them*.
 - **Best Performance** – when creating a deletion marquee, *no entities receive highlighting*. When using the CTRL + click method to delete multiple entities, only the *first entity will receive highlighting*.
- **Dimension Parallel Entities**
 - **Best Experience** – after the initial click, only line entities *parallel to the starting entity* will receive highlighting as the cursor hovers over them.
 - **Best Performance** – after the initial click, *any line entities* will receive highlighting as the cursor hovers over them.

- **Select by Example**
 - **Best Experience** – as the cursor hovers over any entity (prior to picking), *all entities matching the example* will also receive highlighting.
 - **Best Performance**- only the *initial entity* (prior to picking) will receive highlighting.
 -
- **Any Selection Tool using Windows\Box\Rubber Band modes**
 - **Best Experience** – *entities which are to be selected* will receive highlighting as the selection window\box\rubber band cursor hovers over them.
 - **Best Performance** - no entities receive highlighting.
 -
- **Select by Palette**
 - **Best Experience**- as the cursor hovers over an entity, *all entities matching that palette* will receive highlighting.
 - **Best Performance** – only the *initial entity* (prior to picking) will receive highlighting.
- **Trim Break**
 - **Best Experience** – when multiple lines are selected prior to running the tool, (in order to break an entity where it intersects the selected lines), only entities which actually intersect the selected lines will receive highlighting as the cursor hovers over them.
 - **Best Performance** - when multiple lines are selected prior to running the tool, (in order to break an entity where it intersects the selected lines), any entities will receive highlighting as the cursor hovers over them.
- **Trim Intersect**
 - **Best Experience** – after the initial entity selection, *only entities which can be trimmed against* will receive highlighting.
 - **Best Performance** – after the initial entity selection, *any entities* which are hovered over will receive highlighting.
- **Trim Reach**
 - **Best Experience** – after the initial entity has been picked, only entities which are **reachable** will receive highlighting as the cursor hovers over them
 - **Best Performance** – after the initial entity has been picked, **any** hovered entity will receive highlighting.
- **Trim Trim**
 - **Best Experience** - when using the tool to *trim* geometry, the section of geometry to be *removed* will receive highlighting. When using the tool to *keep* geometry, the actual geometry to be kept will receive highlighting.
 - **Best Performance** – when using the tool to *trim* geometry, the entire entity being hovered over will receive highlighting. When using the tool to *keep* geometry, no highlighting occurs.

Enquire Distance Tools & Highlighter

The new **Highlighter** functionality has expanded into the following **Enquire Distance** tools:

- Parallel** - for the first click, *only lines and arcs will be highlighted*. For the second click, an entity will *only be highlighted if it's a valid parallel entity*. Note that the behaviour for this specific tool is only valid when the **Workstation>Performance>Best Experience** option is enabled.

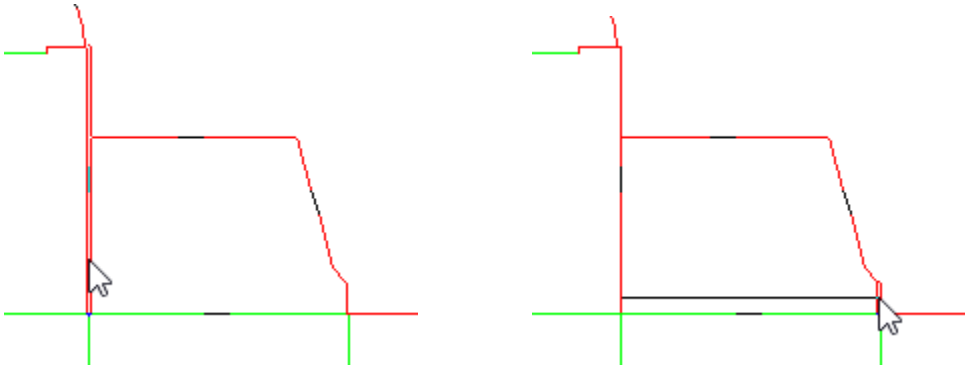


Fig 23 - Highlighter & Enquire Distance Parallel

- Point to Entity** - *nothing highlights for the first click, and then any accepted entity will highlight for the second click*.

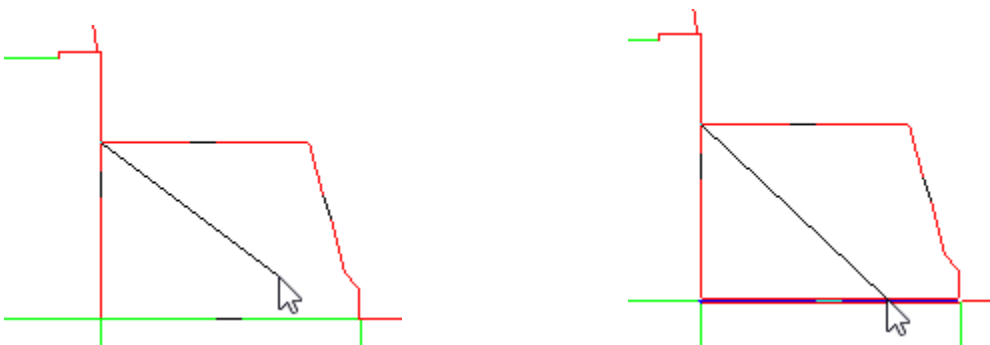


Fig 24 - Highlighter & Enquire Distance Point to Entity

- **Radius** - *only* highlights arcs.

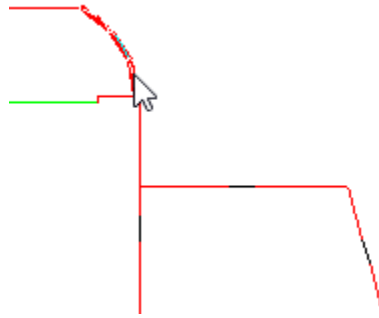


Fig 25 - Highlighter & Enquire Distance Radius

- **Bridge** - highlights the entity when *hovering over the bridge in question*. Entities will not highlight *if they don't have a bridge*.

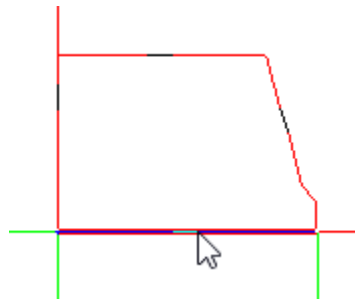


Fig 26 - Highlighter & Enquire Distance Bridge

- **All Bridges** - highlights *any* accepted entity.

These changes will be beneficial as they will offer a clear visual hint as to the *starting* entity (where applicable) and will only highlight valid entities for the second click (again, where applicable).

Trim>Trim Tool and Highlighter

Another tool which benefits from **Workstation>Performance>Best Experience** functionality. With this mode enabled, **Trim>Trim** highlights the entity to be removed when using the **Trim>Trim** tool to *trim* and highlights the geometry to *keep* when using the ctrl + click method:

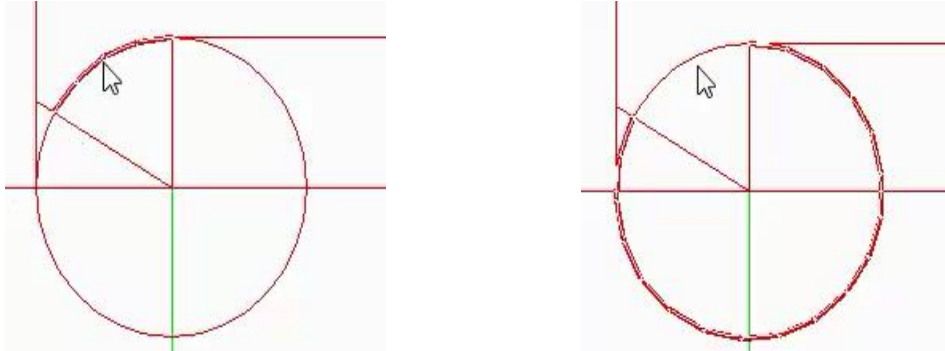


Fig 27 - Highlighter & Trim Trim

Automation

Additional COM Dimensioning Methods

Several new methods have been implemented, increasing the flexibility of dimensioning via the COM interface (*DimensionAligned2*, *DimensionAngle2*, *DimensionAutomatic2*, *DimensionsBetweenPoints2*, *DimensionHorizontal2*, *DimensionRadius2* and *DimensionVertical2*).

These methods take an additional argument (*IDimensionOptions*) which provides controls for properties such as Number Formatting, Units, Terminator Style, Terminator Size, Leader Length, Text Style etc.

COM Pathfinder to use Recursed Entities

Two additional properties have been added to the *PathFinder* object - *StartRecursedEntity* and *EndRecursedEntity* to allow the creation of paths starting and finishing at entities within block, layer or symbol insertions.

All the Impact COM interfaces are described in the Impact COM Documentation, available on request.

Insert Master Layers via COM

It is now possible to insert Master Layers via the COM interface. The method *InsertMasterLayerMethod* accepts *ProjectName* (As String) and *LayerName* (As String) arguments, and inserts the relevant Master Layer into the *current* project.

Improved Performance of IShape Boolean Operations

A new *IShapes* (a *collection* of *IShape* objects) method has been added to the *IShapeCreator* object. This new object provides a way of performing operations on several shapes at once. For example, when joining many shapes together it is many times faster to use a single call to *IShapes.Union* than multiple calls to *IShape.Union*.

Digital Signatures for Scripts

Impact installers, executables & components are now 'signed' as a guarantee against alteration or corruption. As additional protection against script-based viruses, Impact 2016 features new security options for VB Scripts & IML Macros.

A new **Security** branch within **Workstation Options** allows *unsigned scripts* and/or IML Macros to be disabled, enabled or to prompt the user to allow them *prior to execution*.

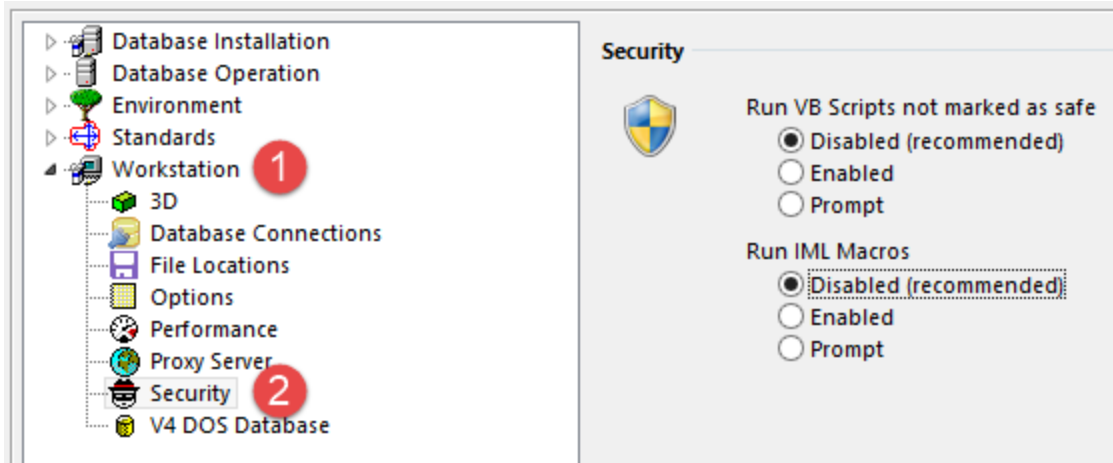


Fig 28 - Workstation Security Options

Any scripts distributed by Arden Software will be signed using our 'Arden Software Ltd' certificate, whilst scripts developed by end-users or partners may be signed via a certificate obtained from a trusted Certification Authority (such as Verisign).

Digital Signatures for Scripts - IML

All IML (Impact Macro Language) Macros will be blocked by the new Workstation Security Settings. It is not, and *will not* be possible to digitally sign IML Macros. Therefore *anyone* wishing to use *IML macros* will need to set the Workstation Security options accordingly.

nServer Administrator and Script Security

This is the **nServer** equivalent of the **Impact** workstation security options for Scripts. The **COM Admin** application has a new **Allow unsigned VB sripts** option (under the **General** tab).

Blocks

Close the *Block>Quick Change* Tool Automatically After Use

In Impact 2015 and earlier, when editing blocks via the **Block>Quick Change** tool, you needed to *close* the **Block>Quick Change** tool *once* a block had been identified, *before* you could make any changes to the block. In Impact 2016, the tool *automatically* closes, once a block has been identified – saving time and adding consistency.

Database

Copy of Project Number/Form Data

A long-standing request has been the ability to copy the **Project Number** for re-use elsewhere. A new mechanism has been added to allow copying of data (not *just* **Project Number**) from *all* forms to the Windows Clipboard. The mechanism affects the **Project Browser** and **Database Windows** (as well as **Database Error Properties**):

Information	Layers	Project Revisions	Documents
Code:	P000471		
Reference:	AP-40081-B Copy to Clipboard		
Description:			
Customer:	(Default Customer)		
Created on:	19/04/2016 12:00:51 SUPPORT		
Last modified:	21/04/2016 13:38:14 SUPPORT		
Locked by:			
Location:	<Geometry BLOB> (2.86 MB)		
Revisions:	4, 5 project updates, 4 with saved geometry		

Fig 29 - Copy to Clipboard from the Projects Browser

The screenshot shows a window titled "Project Database" with a close button in the top right corner. The window contains several fields: "Customer" (set to "(Default Customer)"), "Information" (set to "Project Information"), "Reference" (set to "AP-40081-BP-01"), "Description", and "Customer Reference". A context menu is open over the "Reference" field, displaying a "Copy to Clipboard" option. At the bottom of the window are "OK" and "Cancel" buttons.

Fig 30 - Copy to Clipboard from a Database Window

The **Copy to Clipboard** function is available from the context menu, when right-clicking within the entry field.

Diemaking – Stripping

Stripper Machine Size Variables

Within the **Stripper Machine Master Tool Setting** some of the field values can now be defined via **Project (or Layer) Variables**.

The following variables can be used:

Mater Tool setting Field	Variable Name	Variable Type
Male Width	StripMaleWidth	Distance
Male Height	StripMaleHeight	Distance
Male X Offset	StripMaleXOffset	Distance
Male Grip Edge	StripMaleGripEdge	Distance
Female Width	StripFemWidth	Distance
Female Height	StripFemHeight	Distance
Female X Offset	StripFemXOffset	Distance
Female Grip Edge	StripFemGripEdge	Distance



Variable Name	Value
StripFemGripEdge	14mm
StripFemHeight	1006mm
StripFemWidth	1005mm
StripFemXOffset	15mm
StripMaleGripEdge	12mm
StripMaleHeight	1004mm
StripMaleWidth	1003mm
StripMaleXOffset	13mm

To enable the use of these project variables inside a **Stripper Machine Master Tool Setting** click on the toggle button next to the relevant field. The button will be toggled on and the field that is normally used to input the required value will be replaced with the name of the variable that will be looked for in the active project.



Fig 31 - Variable disabled (left) and enabled (right) for Width value

Please read the Help Guide for information regarding **Project Variables**.

Trim Waste

The **Trim Waste** tool now features the *smarter* snapping of **Trim Waste** components, especially when angled offset strip knives are used. A new **Auto Sense** option (which defaults to **On**) has been added to the **Edit Bar**. When enabled, the **Trim Waste** component will infer *along* the strip knife that the user has clicked, to the point it *intersects* with the perimeter of the stripper.

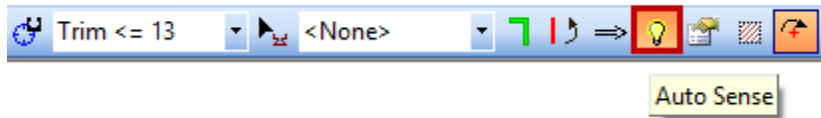


Figure 32 - *Auto Sense* Edit Bar option disabled (left) and enabled (right)

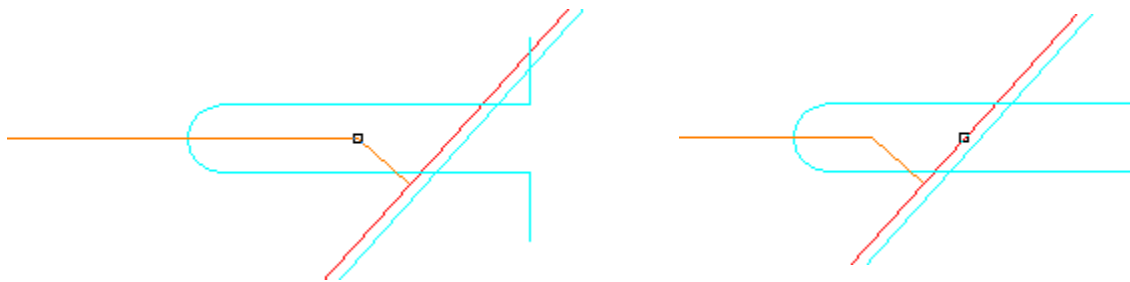


Figure 33 - *Auto Sense* option disabled (left) and enabled (right)

Additionally, **Trim Waste** components can now also be added to arcs:

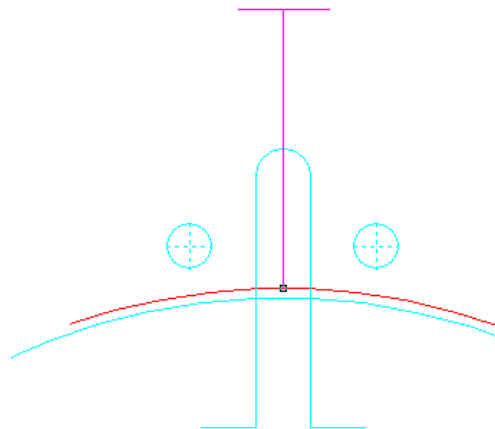


Figure 34 - *Trim Waste* component added to an arc

Stripper Tools – Strip Clip

The previously hardcoded dimensions for the different components are now exposed in the **Strip Clip Master Tool Settings (Stripper>System)**. For each **Strip Clip** entry in the **Stripper System** settings, the same **Override** options will be available and valid for all **Strip Clip** components. These values should be adjusted in small increments to make sure the resulting profile still creates a closed shape.

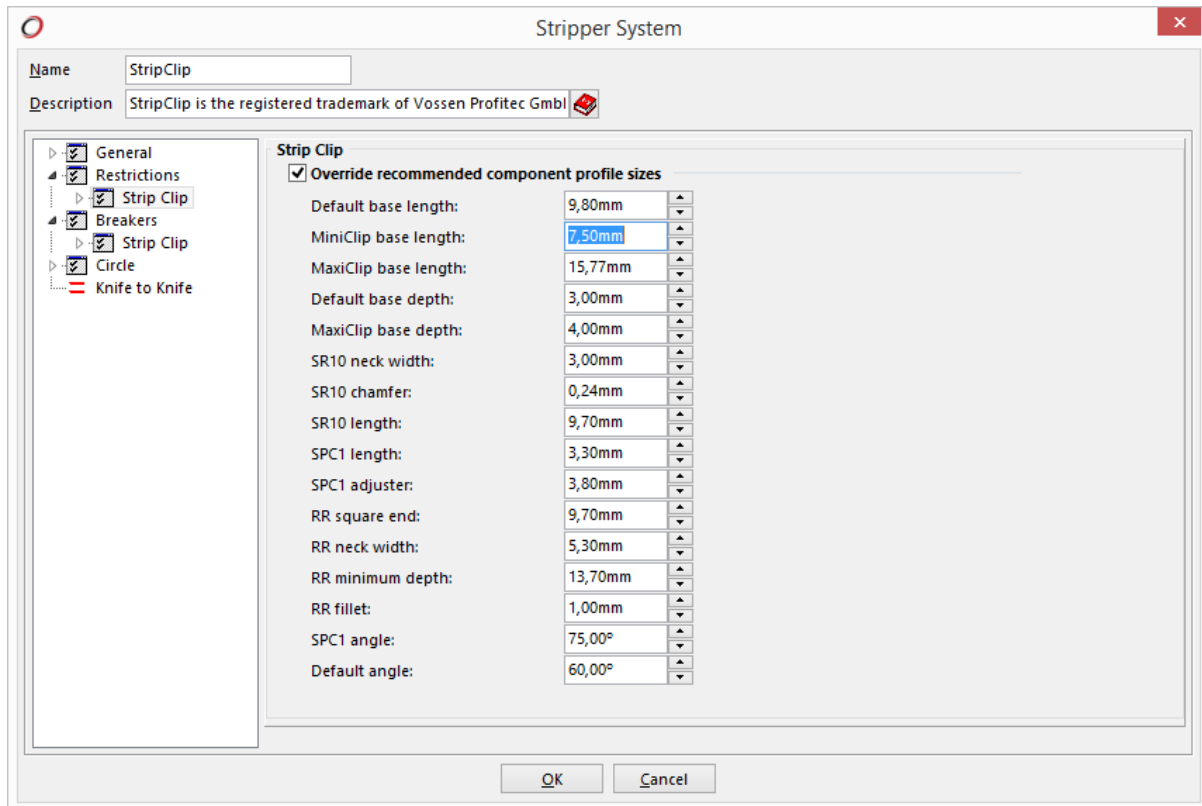


Fig 35 – Strip Clip Stripper Master Tool Setting

Diemaking – Flatbed

Dieboard Size Variables

Within the **Dieboard Master Tool Setting** some of the field values can now be defined via **Project (or Layer) Variables**.

The following variables can be used:

Mater Tool Setting Field	Variable Name	Variable Type
Dieboard Width	DieboardWidth	Distance
Dieboard Height	DieboardHeight	Distance
X Offset	DieboardXOffset	Distance
Grip Edge	DieboardGripEdge	Distance

Dieboard	Value
abc DieboardGripEdge	10mm
abc DieboardHeight	1002mm
abc DieboardWidth	1000mm
abc DieboardXOffset	11mm

To enable the use of these project variables inside a **Dieboard Master Tool Setting**, click on the toggle button next to the relevant field. The button will be toggled on and the field that is normally used to input the required value will be replaced with the name of the variable that will be looked for in the active project.



Fig 36 -Variable disabled (left) and enabled (right) for Width value

Please read the Help Guide for information regarding **Project Variables**.

Diemaking – Rotary

Rotary Dieboard Size Variables

Within the **Rotary Dieboard Master Tool Setting** some of the field values can now be defined via **Project (or Layer) Variables**.

The following variables can be used:

Mater Tool Setting Field	Variable Name	Variable Type
Dieboard Width	DieboardWidth	Distance
Dieboard Height	DieboardHeight	Distance
X Offset	DieboardXOffset	Distance
Grip Edge	DieboardGripEdge	Distance

Variable Name	Value
DieboardGripEdge	10mm
DieboardHeight	1002mm
DieboardWidth	1000mm
DieboardXOffset	11mm

To enable the use of these project variables inside a **Dieboard Master Tool Setting** click on the toggle button next to the relevant field. The button will be toggled on and the field that is normally used to input the required value will be replaced with the name of the variable that will be looked for in the active project.



Fig 37 - Variable disabled (left) and enabled (right) for Width value

Please read the Help Guide for information regarding **Project Variables**.

Predefined Dovetail Symbols

Dovetail symbols can now be assigned to the **Rotary Master Tool Setting**, allowing dovetails to be customized and linked to customers. The list of dovetail symbols can be accessed in the **Dovetails** page. Please note this is a list of **Symbols** and *not* a list of **Symbol Patterns**.

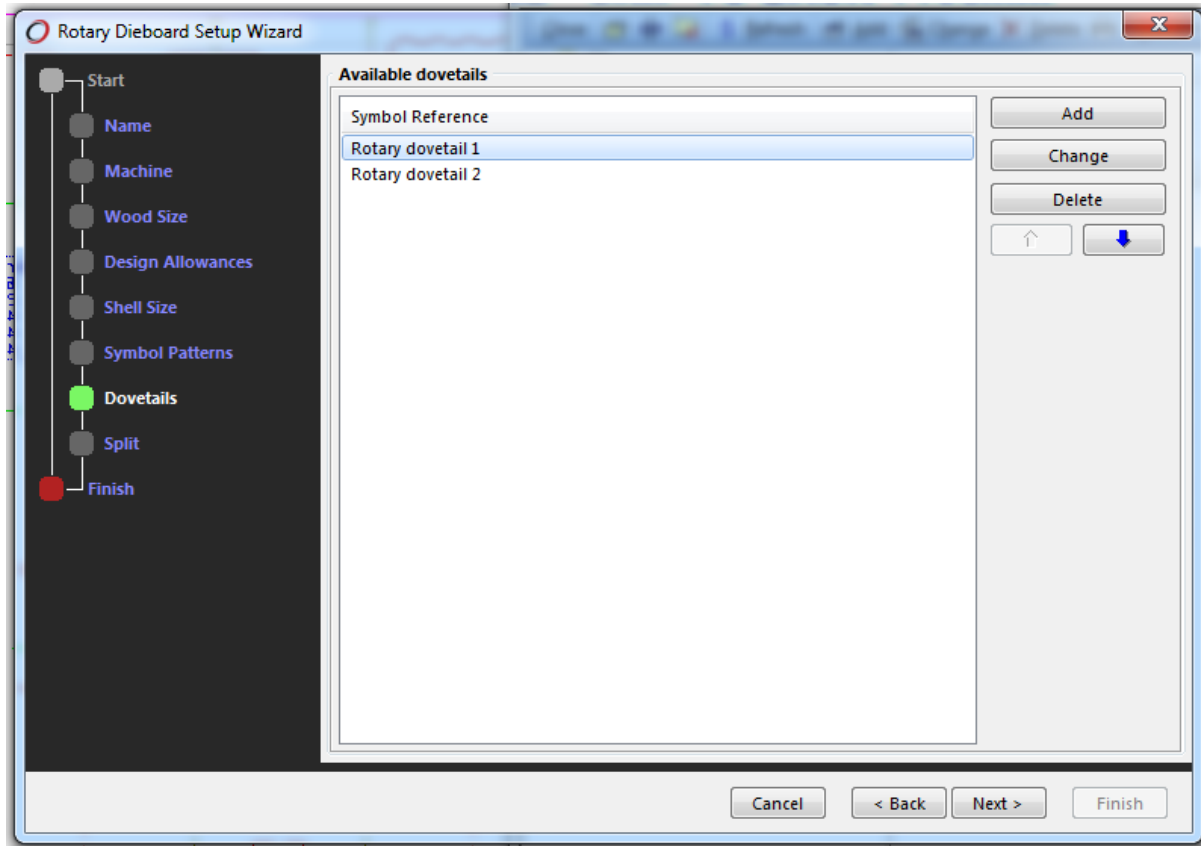


Fig 38 - Dovetails Page within the Rotary Dieboard Master Tool Setting

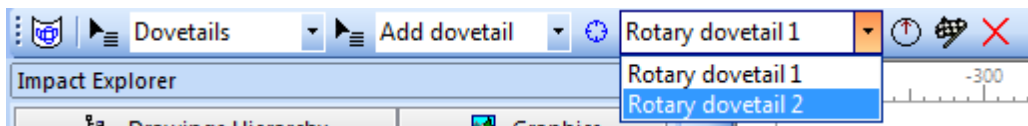


Fig 39 - Add Rotary Dieboard Tool Edit Bar Showing available Dovetail symbols

Diemaking – Stripping Knives

Strip Knife Tool - Gutter Mode

When using the **Strip Knife** tool in **Gutter** mode there is now an additional toggle button - **Strip Knife**. When enabled, this allows stripping knives to intersect with *other* stripping knives.

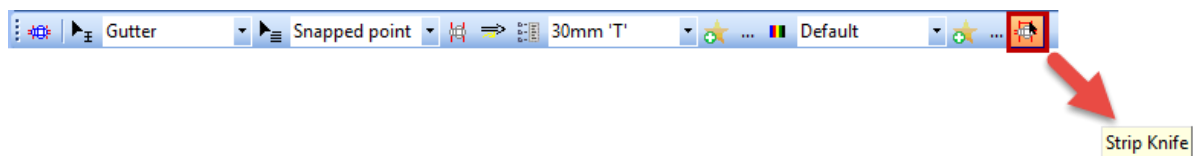


Fig 40 - Strip Knife Edit Bar Option

The screenshots below show the results:



Fig 41 - Intersect Strip Knife Option disabled (left) and enabled (right) for an external waste area

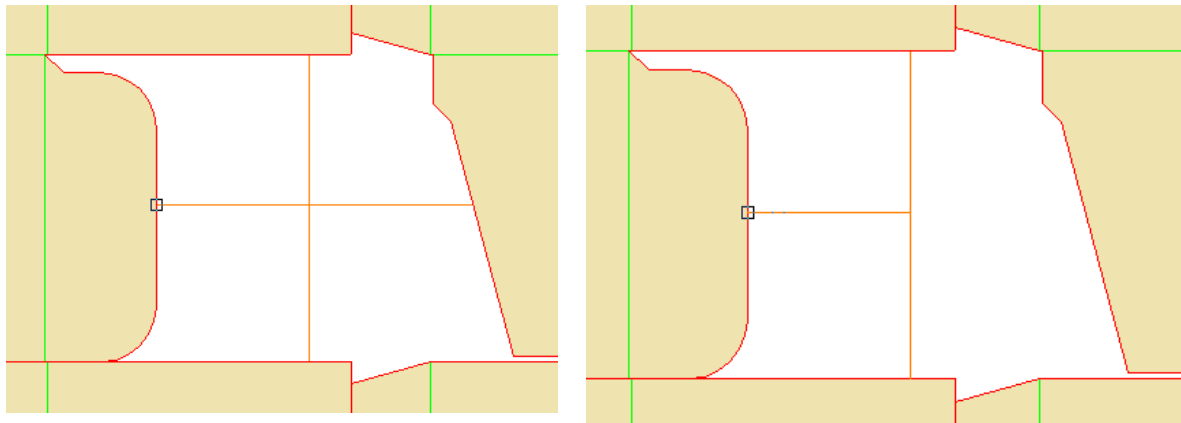


Fig 34 - Intersect Strip Knife Option disabled (left) and enabled (right) for an internal waste area

Strip Knife Tool - Perimeter slot

When using the strip knife tool in **Perimeter Slot** mode the tool will now use the angled knife offset value given in the *active* **Stripping Knives Master Tool Setting**.

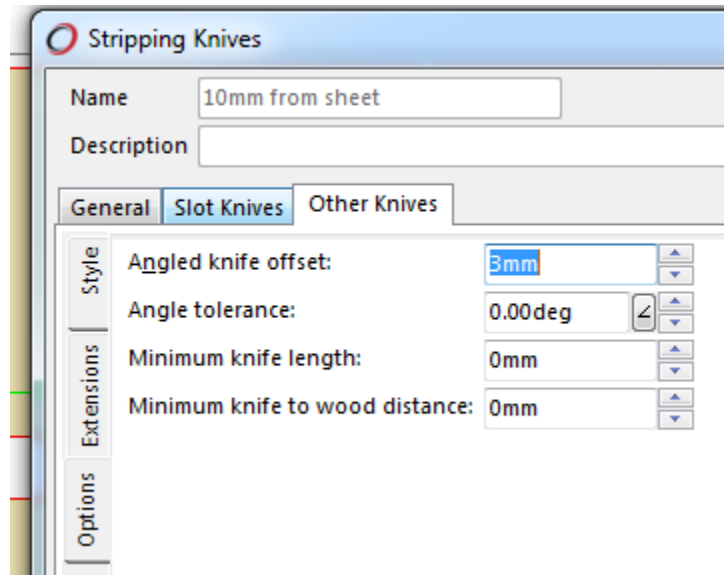


Fig 42 - Dialog showing the length of the additional entity

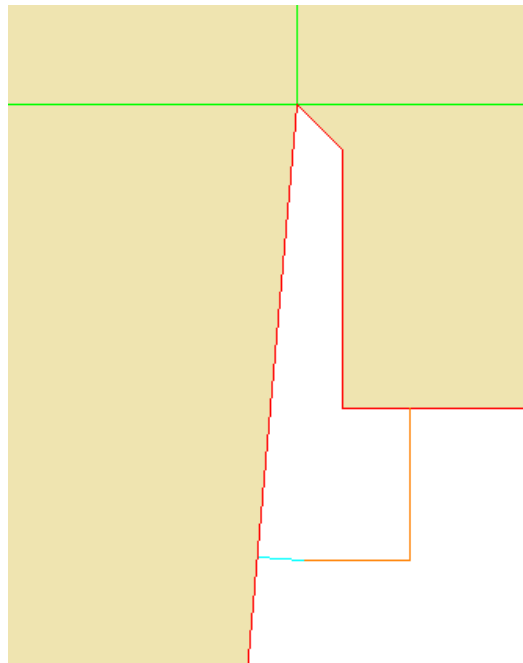


Fig 43 - Result when the angled knife offset value is greater than 0

Strip Knife Tool - Perimeter Slot L and U Style

This function has been tidied up and a new placement mode has been introduced as a result. The **Interactive Mode** and **Override Settings** shown on the **Edit bar** when the tool is active...



Fig 44 – Interactive & Override Settings Edit Bar Options

..now has the following functionality:

- **Interactive Mode Off, Override Setting Off** – click on 2 knife entities (the cursor is locked to **Entity Snap**), the respective size of the resulting strip knives are set by the current **Strip knife Master Tool Setting**, i.e. pre-defined.
- **Interactive Mode Off, Override Setting On** – enter override values in the **Extension** and **End Length** fields in the **Edit Bar**. Click on 2 knife entities (the cursor is locked to **Entity Snap**), the respective size of the resulting strip knives are set by the previously entered values.
- **Interactive Mode On, Override Setting Off** - click on 2 knife entities (the cursor is locked to **Entity Snap**), where after the cursor will change back into the previously used snap mode (**Smart Snap** is recommended) and the respective size of the resulting strip knives are set by moving the mouse, reading the cursor feedback, until a desired size has been achieved. Click to set.
- **Interactive Mode On, Override Setting On** - click on 2 knife entities using any snap mode, i.e. **End, Mid, On Entity**, etc. and the respective size of the resulting strip knives are set by the intersection of the points identified.

Diemaking - Blanker

Blanker Size Variables

Within the **Blanker Master Tool Setting**, some of the field values can now be defined via Project (or Layer) variables.

The following variables can be used:

Mater Tool Setting Field	Variable Name	Variable Type
Female Outer Width	BlankFemWidth	Distance
Female Outer Height	BlankFemHeight	Distance
Female Outer X Offset	BlankFemXOffset	Distance
Female Outer Grip Edge	BlankFemGripEdge	Distance
Male Base Width	BlankMaleWidth	Distance
Male Base Height	BlankMaleHeight	Distance
Male Base X Offset	BlankMaleXOffset	Distance
Male Base Grip Edge	BlankMaleGripEdge	Distance



Variable Name	Value
BlankMaleXOffset	17mm
BlankMaleWidth	1007mm
BlankMaleHeight	1008mm
BlankMaleGripEdge	16mm
BlankFemXOffset	19mm
BlankFemWidth	1009mm
BlankFemHeight	1010mm
BlankFemGripEdge	18mm

To enable the use of these project variables within a **Dieboard Master Tool Setting**, click on the toggle button next to the relevant field. The button will be toggled on and the field that is normally used to input the required value will be replaced with the name of the variable that will be looked for in the active project.



Fig 45 - Variable disabled (left) and enabled (right) for Width value

Please read the Help Guide for information regarding Project Variables.

Blanker Snap Settings

The Blanker tool now has a **Snap Settings** toolbar for easier adjustment of settings.

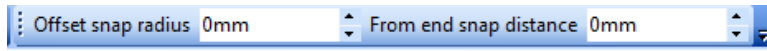


Fig 46 - Snap Settings toolbar in Blanker Tool

Symbol Placement Guides Settings

The **Symbol** tool now has the ability to add a *guide* line. Depending on the alignment mode, this will either give you the option to *infer* or *infer in a locked direction* and this can help to provide consistent alignment of symbols.

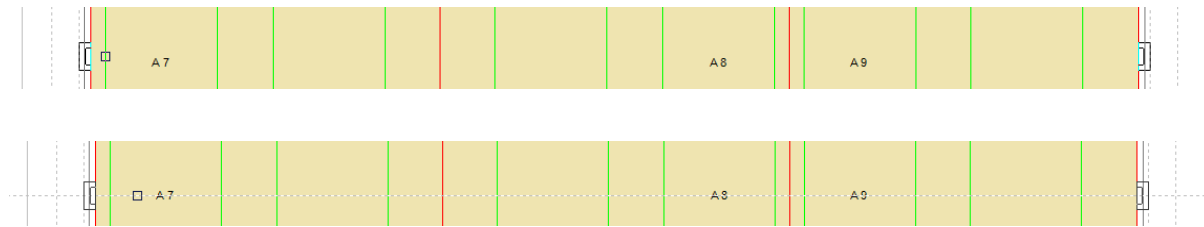


Fig 47 - Infer lines disabled (top) and enabled (bottom)

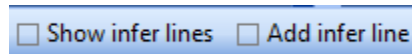


Fig 48 - Infer options available to Grip Alignment options

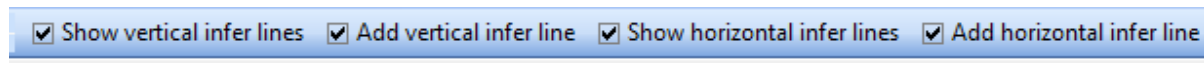


Fig 49 - Infer options available to Frame, Bars and Cut Alignment options

The **Show** buttons allow the visibility of the guide lines to be toggled on and off. These guide lines are only shown while *inside* the **Blanker** tool - they are not moved to the output layer.

Dimensions

New Text to Dimension Gap Option

A new dimension property (**Text Position – Base Line**) has been added to reduce the distance between the dimension *line* and the actual dimension *text*. This is especially noticeable when using large text sizes.....

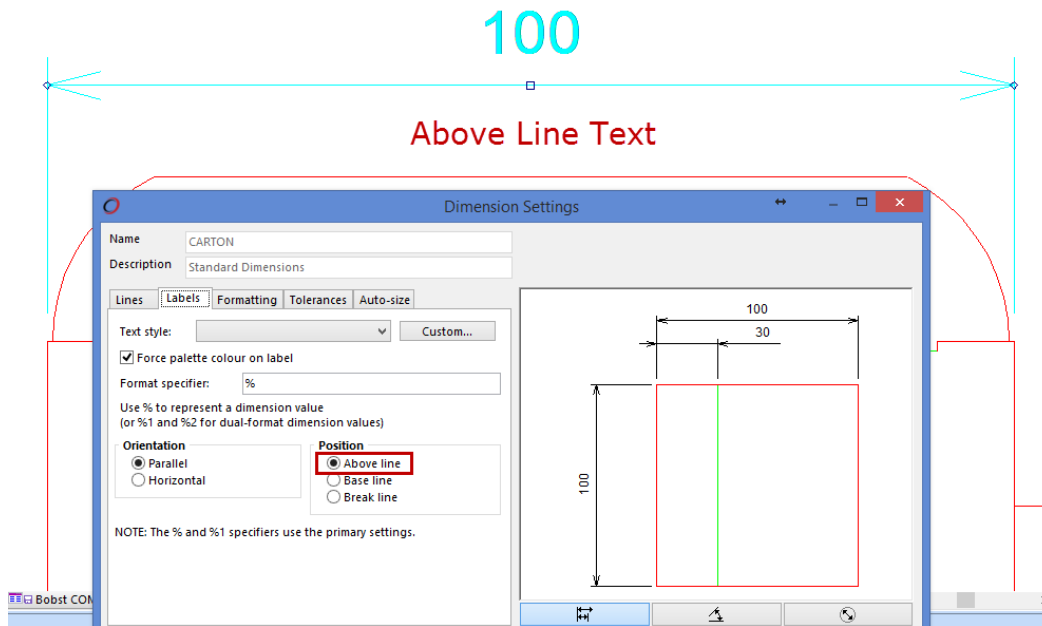


Fig 50 – Dimension Text using *Above Line* option

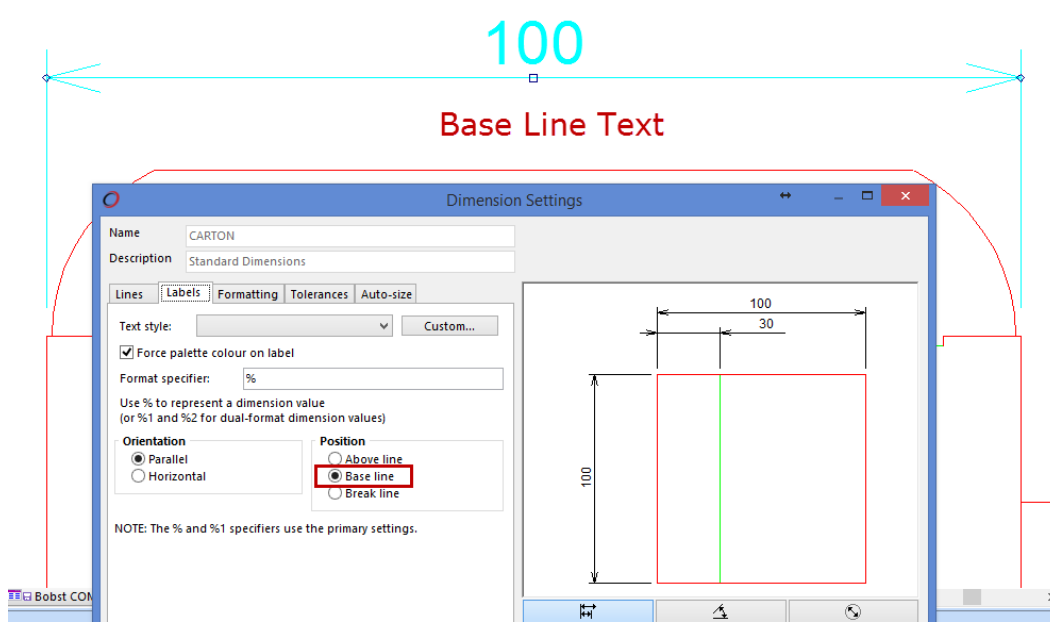


Fig 51 – Dimension Text using *Base Line* option

The property **Text Position – Base Line** may be configured for **Dimension Master Tool Settings** (via **Options>Master Tool Settings>General Tools>Dimension Settings**) or to selected dimension entities within an existing project via the **Entity Inspector (Dimension tab)**.

Environment

Alternative Colours for *Inside/Outside* (or *Print Face/Die Face*)

To help distinguish between viewing the **Inside/Outside** (or **Print/Die**) **Face** of a project, the rulers have been modified. They now show the defined **Project Background** colour when a project is viewed from the **Outside** and a *contrasting* colour when a project viewed from the **Inside**:

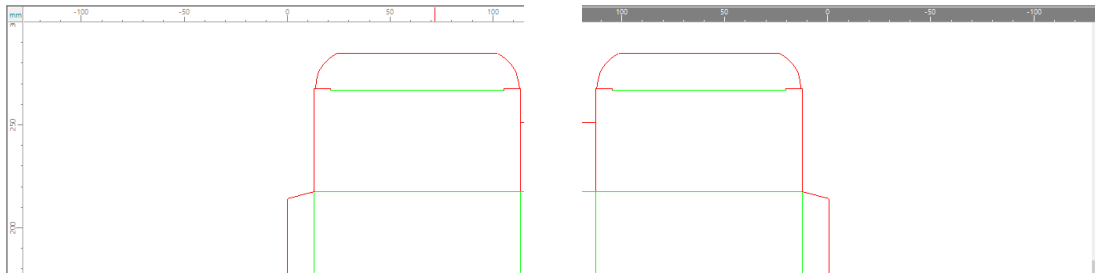


Fig 52 - Rulers for *Outside/Print Face* (Left) and *Inside/Die Face* View (Right)

Hotkey for *Previous Tool*

It's now possible to restart the *previous* tool via a hotkey – as opposed to the context menu (saving time):

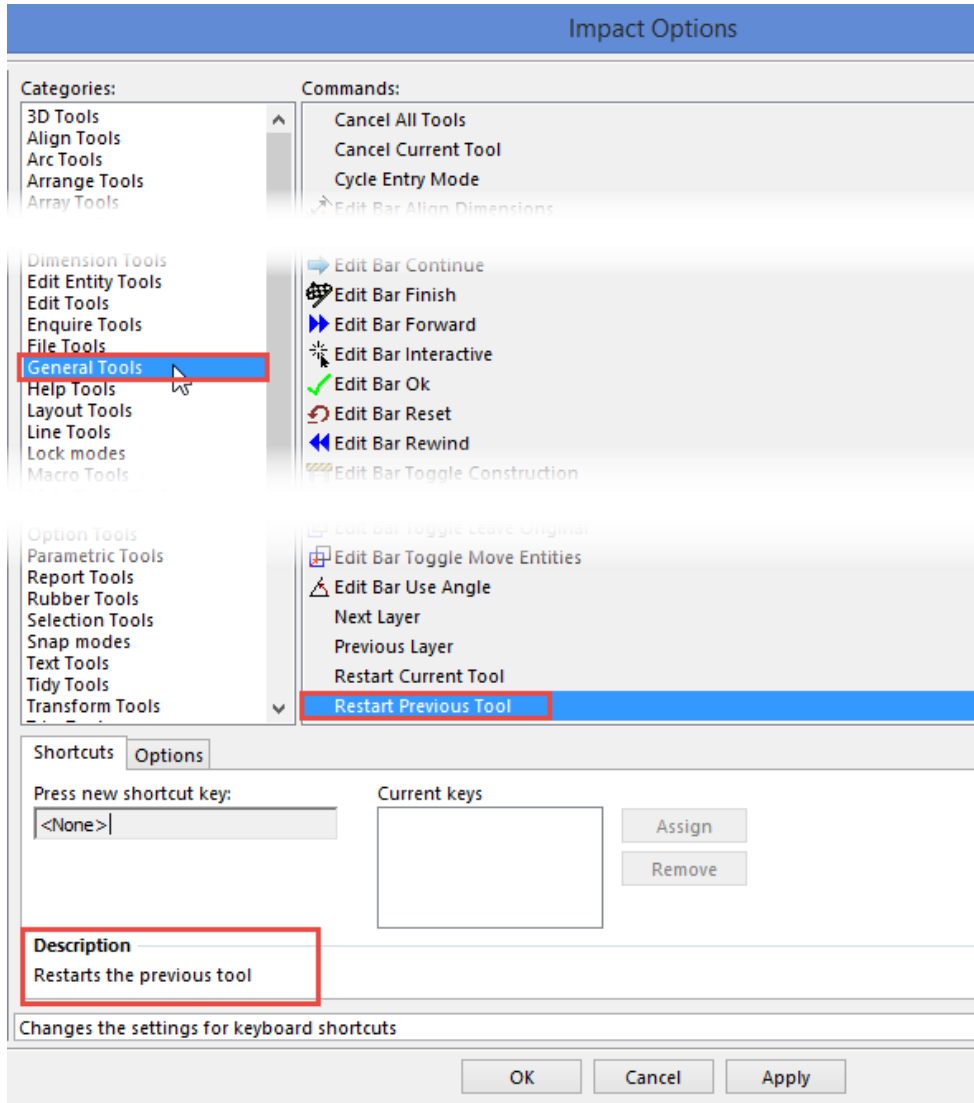


Fig 53 - Keyboard Shortcut Options and Restart Previous Tool

Hotkey for *Select & Drag* tool 'Move Entities' Option

Another long-standing request It's now possible to assign a hotkey for the **Select & Drag Move Entities** option. This means that all the associated **Drag Handle** functionality can be enabled/disabled via the keyboard – again, saving time whilst adding consistency:

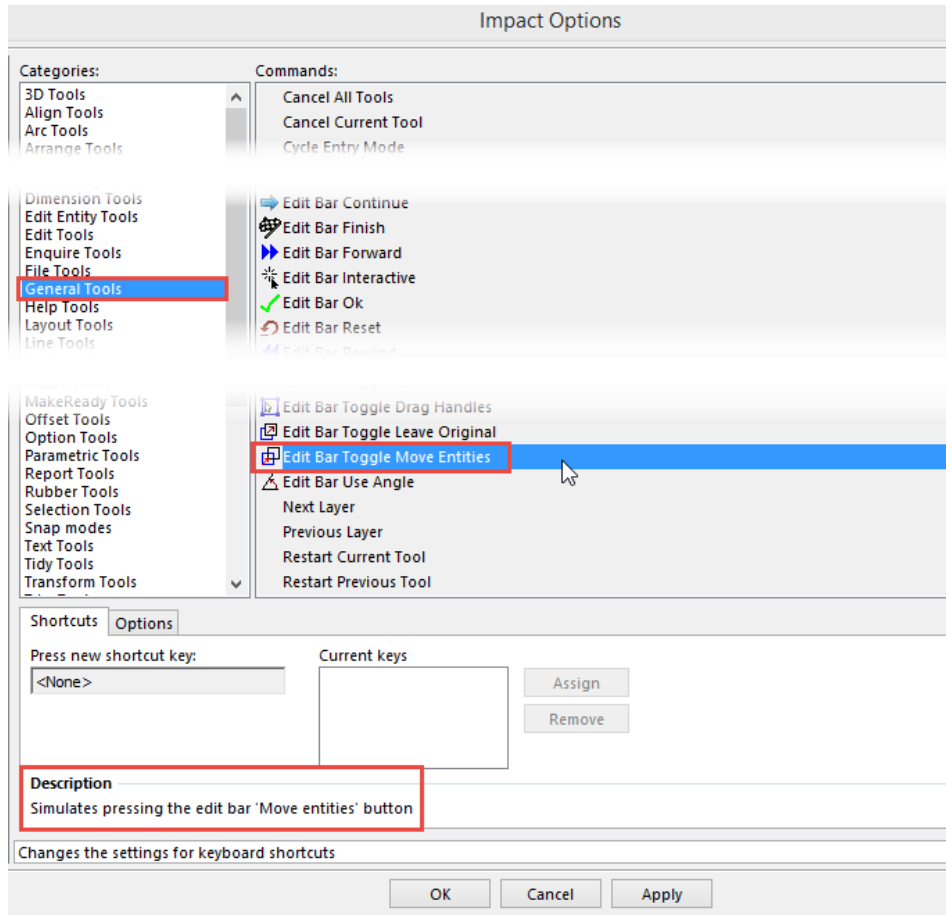


Fig 54 - Keyboard Shortcut Options and *Toggle Move Entities*

General Tools

Click & Hold

Click & *hold* has finally been added to Impact – and may be used as a quicker alternative to *multiple* mouse clicks. The following tools have been modified to use this functionality:

- **Selection Tools:** Select & Drag, Select Window, Select Box & Select Line.
- **View Tools:** Zoom Box
- **Edit Tools:** Delete
- **Draw Tools:** Circle tools, Rectangle & Report Drawing Area.
- **Block Tools:** Block New.
- **Transform Tools:** Drag, Move, Scale, Asymmetric Scale, Bend, Rotate, Mirror, Align, Stretch Points, Stretch Entities; Rectangular Array, Array & Polar Array.
- **Graphics Tools:** Add Graphics.

Graphics

Acquire & New Image Wizard

It's now possible to *acquire* an image from a TWAIN data source directly from Impact (from within the **New Image** and **ArtTrace Wizards**), as opposed to using a 3rd party scanning application to acquire the image and *then* saving/loading the resultant file.

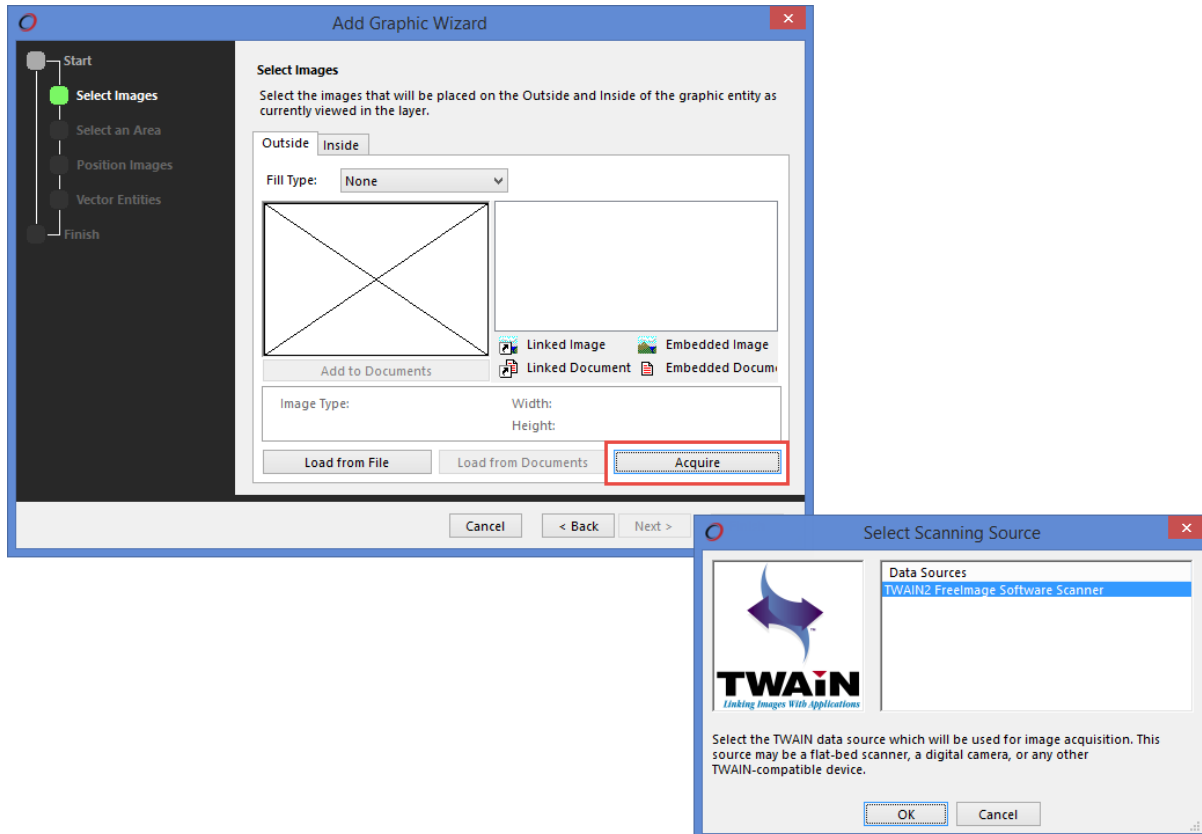


Fig 55 - Acquiring an Image within the *New Image Wizard*

Internals

OK, Accept & Apply Buttons

Impact 2015 and earlier featured **Edit Bar** buttons for **Apply**, **Accept** & **OK** which performed the *same* function *and* featured the *same* icon. To add to the confusion, these buttons could also have different hotkeys assigned to them... In Impact 2016, to improve ease-of-use (and to add consistency) **Accept** & **Apply** have been removed, leaving just the **OK** button.

Note that any pre-existing hotkey assignments for **Accept** & **Apply** buttons will be moved to **OK** during an upgrade to Impact 2016:

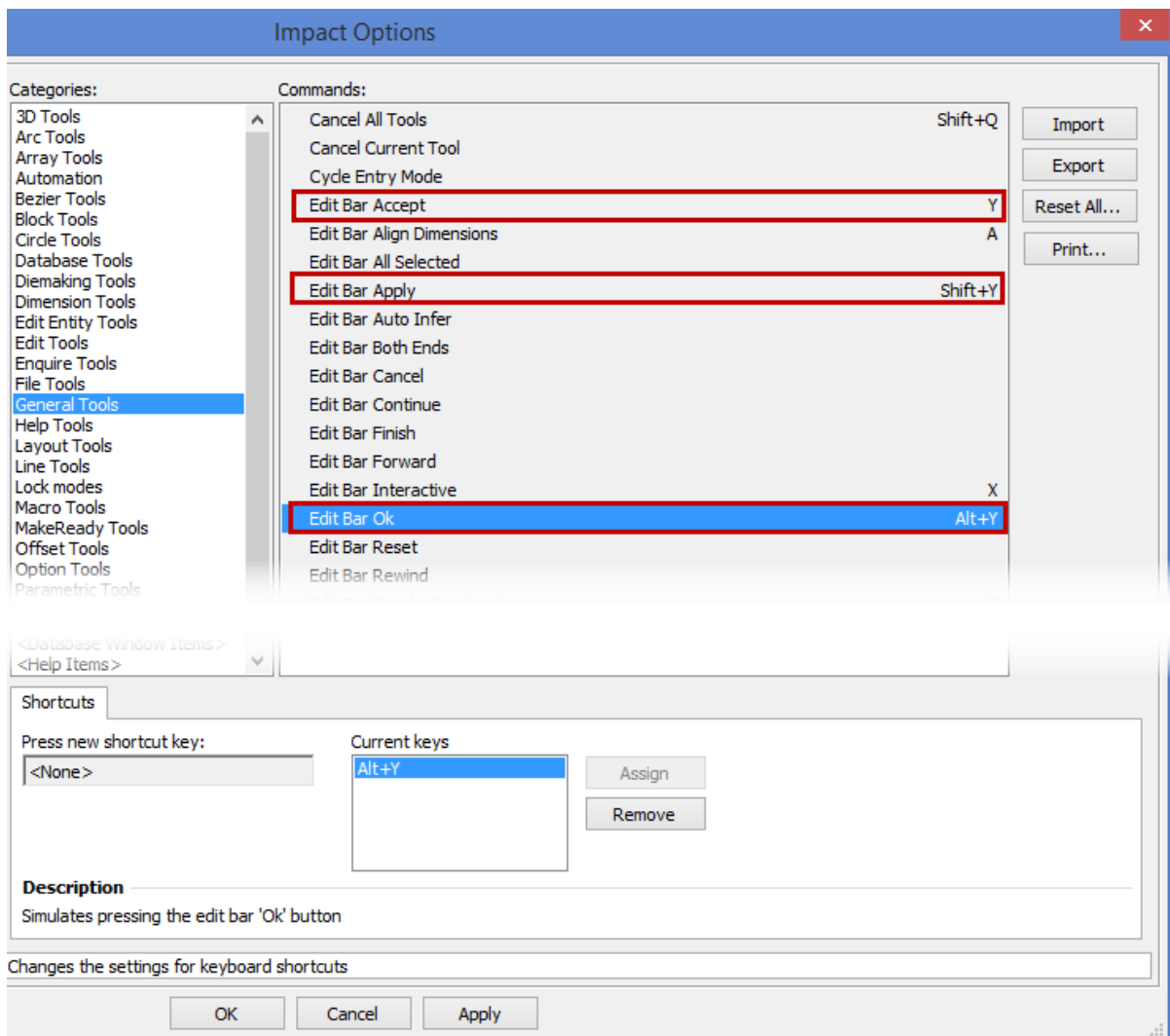


Fig 56 - Impact 2015 Keyboard Shortcut Options for Edit Bar Accept/Apply/OK Buttons

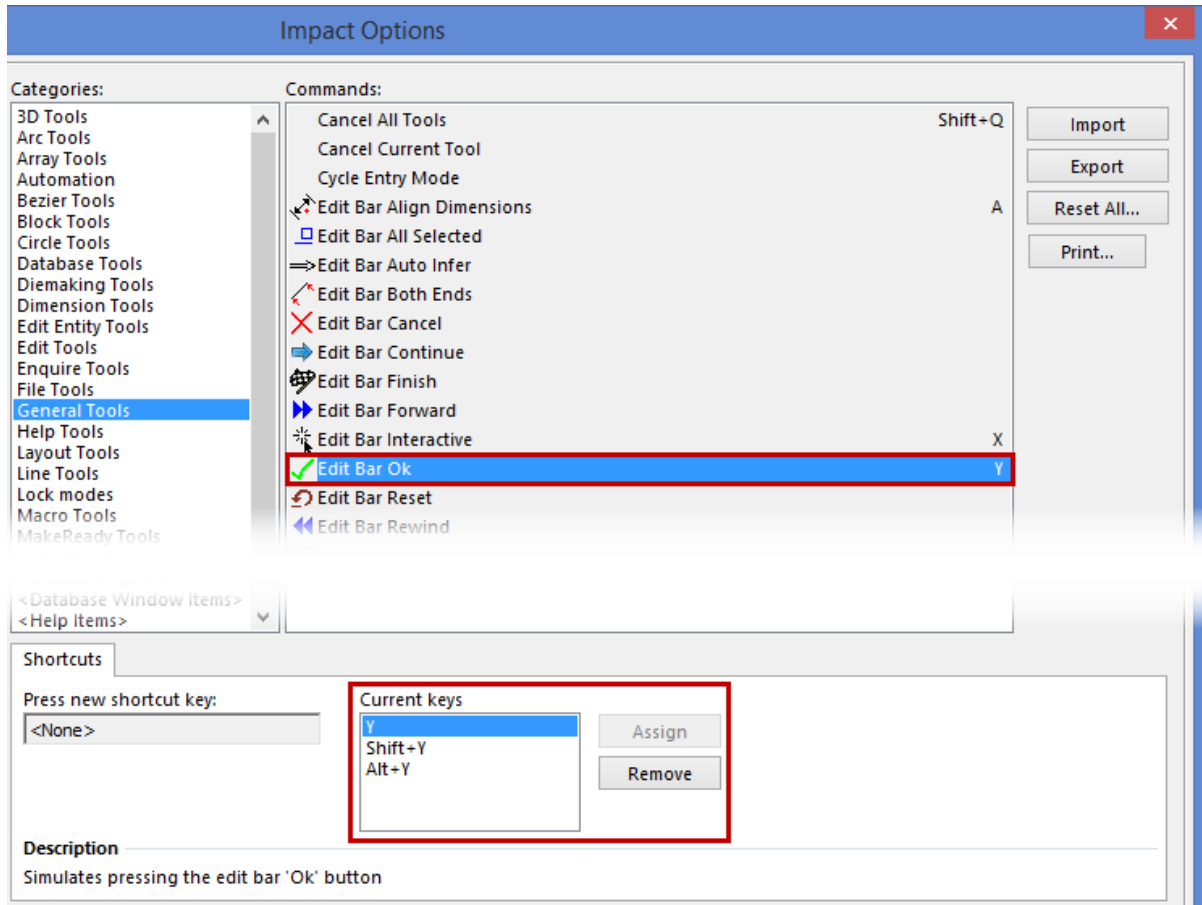


Fig 57 - Impact 2016 Keyboard Shortcut Options for Edit Bar OK Button

Third-Party Library Updates

3DX Library

Version 1.6 of the optionally 3DX import library provides *updated* support for the following file *import* formats:

- **Solid Works** – support for version 2016 has been added
- **Solid Edge** – support for version ST8 has been added
- **JT** – support for version for 10 has been added
- **Parasolid** – support for version 27 has been added
- **NX** – support for version 10 has been added
- **Inventor** – support for version 2016 has been added
- **CATIA** support for version v5-6 R2015 (R25) has been added

Additionally, there are performance improvements *and* bug fixes for **CATIA V5 & Solidworks** formats and bug-fixes for **ACIS, NX, Inventor, Solid Edge, IGES, STEP, Parasolid, JT** and **IFC** formats.

Teigha (DWG/Collada) Library

Impact 2016 provides much improved **Collada export** including bump-maps (to facilitate simulation of embossing/debossing) and metallic texture effects). This is particularly significant when viewing **Collada** objects via applicable web viewers and *Augmented Reality* solutions.



Fig 58 - COLLADA Export – Bump Mapping & Metallic Effects

The following options are available within the **COLLADA** branch of the **3D Export Master Tool Settings**:

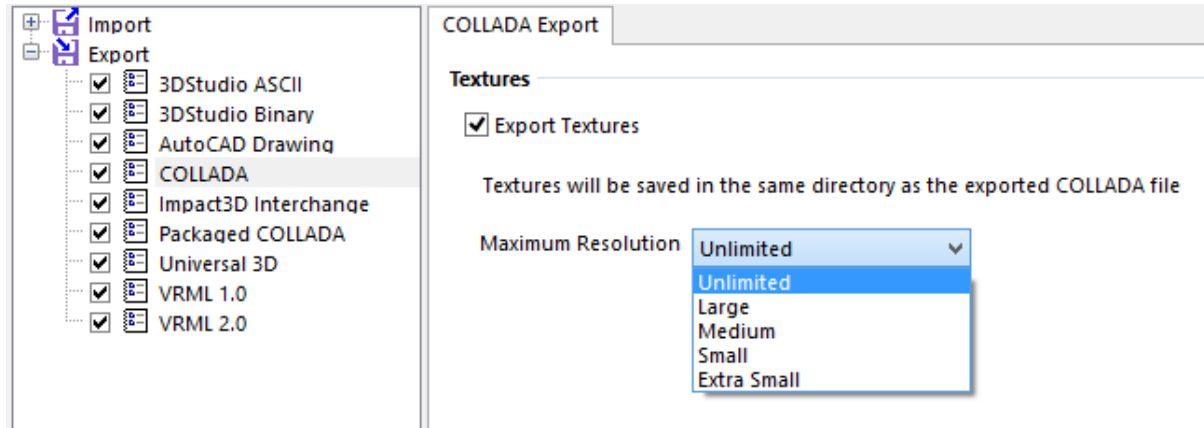


Fig 59 – 3D Export Master Tool Settings - COLLADA Export Branch

Additionally, Impact 2016 now facilitates the import of Collada (*.dae) files:

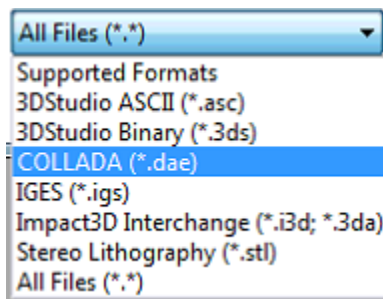


Fig 60 – 3D Import Supported Formats

The following options are available within the **COLLADA** branch of the **3D Import Master Tool Settings**:

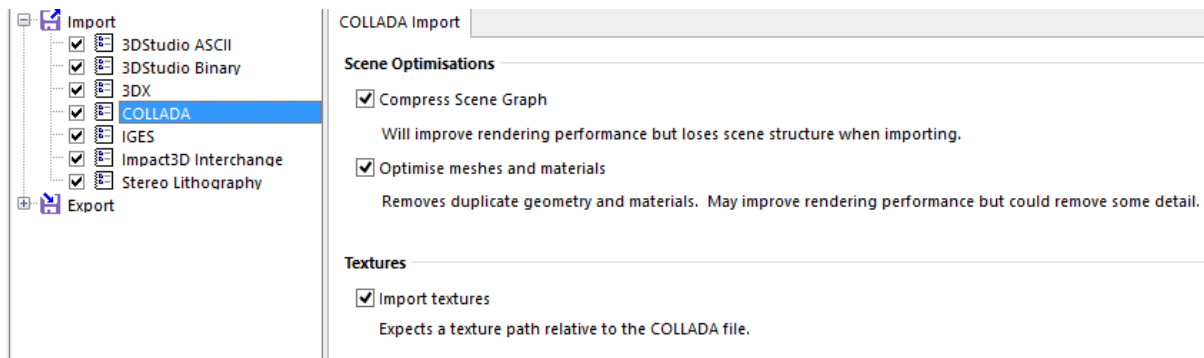


Fig 61 – 3D Import Master Tool Settings - COLLADA Import Branch

Path Finder & Hole Finder

Pathfinder – New Interactive Mode and *Stick to Palette* Option

One of the many manufacturing-tool enhancements made for Impact 2016 was a reduction in the number of mouse-clicks needed by the **Rule Preparation** tool. As this tool makes use of the **Pathfinder** functionality, it was decided to modify the underlying **Pathfinder** tool – which allows any modifications to be applied to all tools using this functionality. Therefore the changes mentioned below are also available in the following tools:

Select Path tool; **Rotary Bridge** tool; **Rule Preparation Blocks** tool; **Rubber Find Path** tool; **Path Rubber** tool & **Stripper Creator Path** tool.

A new **Stick to Palette Edit Bar** option forces the path to *ignore* entities that use a different palette to the *start* entity.



Fig 62 – Path Finder tool - Stick to Palette Edit Bar option

The new *Interactive Edit Bar* option offers several new features and also provides several enhancements /simplifications to the way that the tool works.

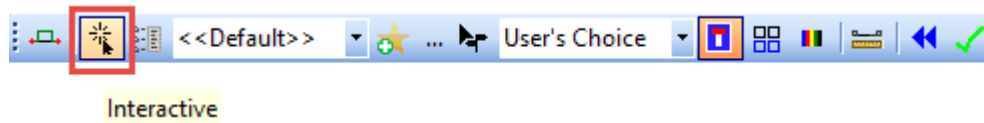


Fig 63 – Path Finder tool - Interactive Edit Bar option

Interactive mode provides the following enhancements:

- **Infer Direction** - the path is inferred to *start from the end of the entity that you click closest to*. As an example, if you select a horizontal line as the *start* entity and you want the path to go in the *left* direction then pick a point close to the *right* hand side of the line.
- **Auto Accept** - the path is *automatically accepted when it reaches a finish condition*. The accept button is still available on the Edit Bar in case you wish to accept the path before it has reached a finish condition.
- **Finish conditions** - several options have been added to the Edit Bar to specify when a path should finish. *You no longer need to click on a destination entity*. If multiple finish conditions are set then the path will finish and be auto-accepted when it reaches the first one.

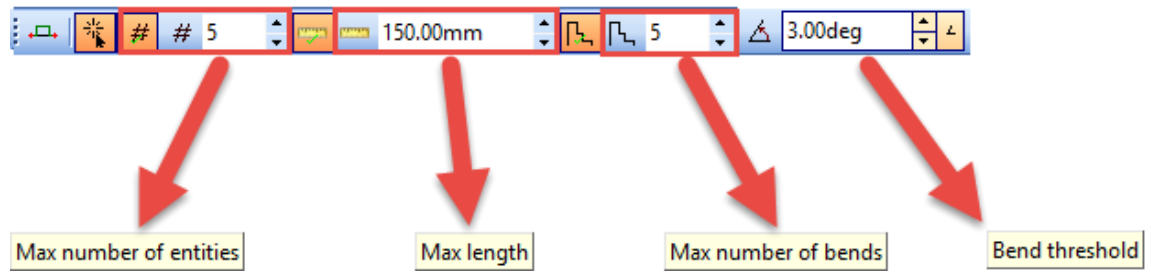


Fig 64 – Path Finder tool - Interactive options

- The currently available *finish conditions* are:
 - **Max number of entities** - If the path reaches this number of *entities* it will finish and be auto-accepted.
 - **Max length** – the path will finish and be auto-accepted *before it exceeds this length*. As an example, consider the following: the max length value is set to 100mm. The current path length is 95mm and the next entity along the path has a length of 7mm. *Including* this entity, the path length would reach 102mm which exceeds the specified maximum length (of 100mm). Under such circumstances, the path will finish at 95mm and be automatically accepted.
 - **Use maximum number of bends** - the path will finish and be auto-accepted *before it includes the next bend which would take it over the maximum number*.
 - **Bend threshold** is an angle below which a bend will be ignored. As an example, consider the following: you set the bend threshold to be 3 degrees and the max number of bends to be 4. The path will continue along ignoring any bends that are less than 3 degrees until it is just about to add the 5th bend which is over 3 degrees. At this point, the path will finish and be auto-accepted.

The **Rule Preparation** tool now offers the option to assign a hotkey for the Stick to Palette function.

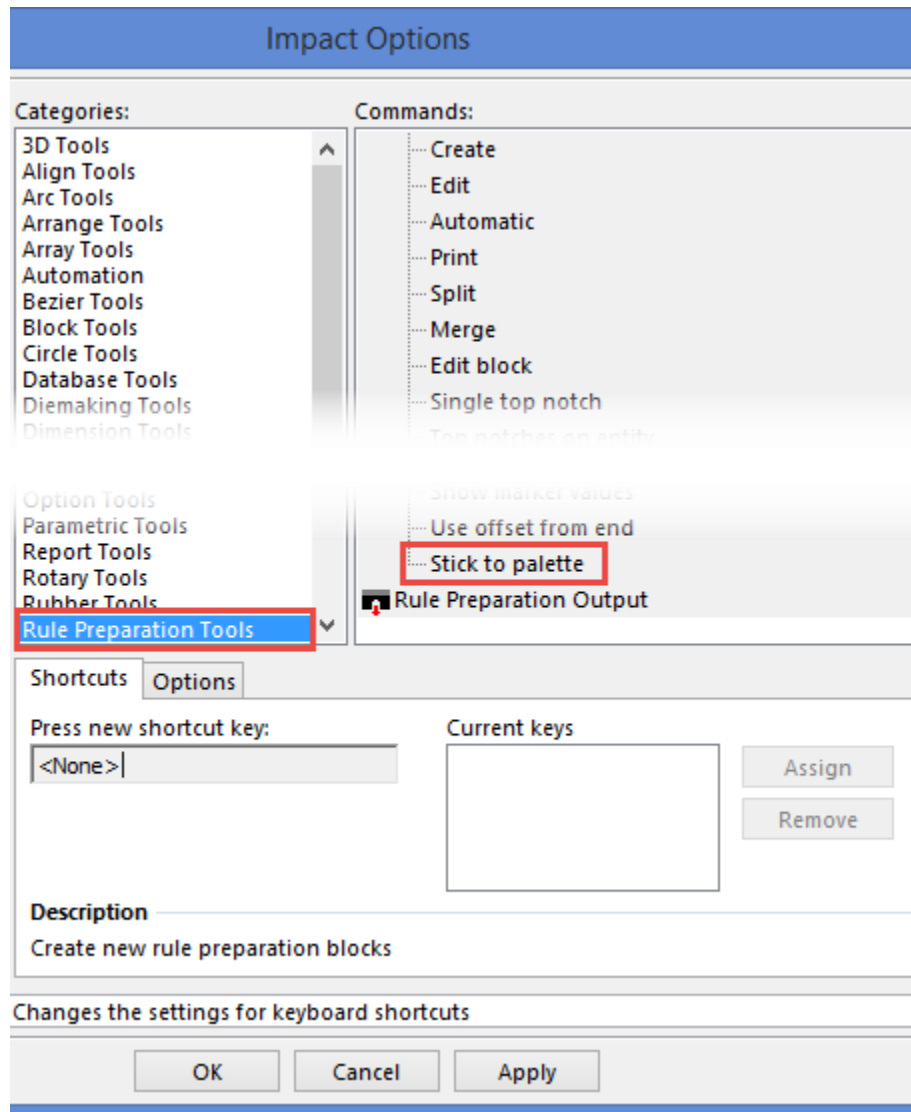


Fig 65 – Rule Preparation - Stick to Palette Keyboard Shortcut option

Printing

Print Marquee

The *Print* dialog has been reformatted and enhanced by the addition of a new *Current Marquee* option, which prints the contents of the active marquee rectangle:

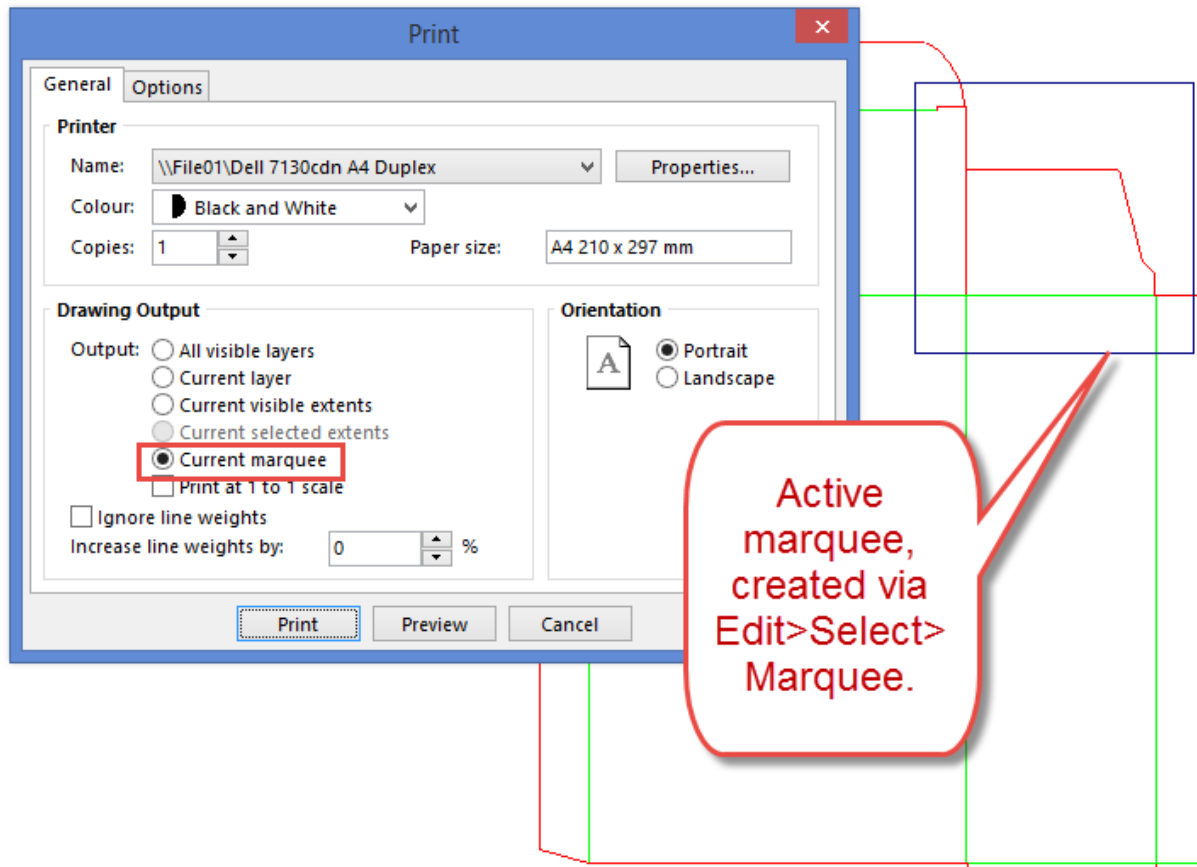


Fig 66 - Print Current Marquee Option

Consult the on-line Help guide to find out more about the **Select Marquee** tool.

Rule Preparation

Device Port – Add a Print Server/Printer

It is now possible to access Printers/Print Servers (as opposed to *just* COM & LPT ports) from the *Device Port* pull-down list within the *Rule Preparation Machine Setup* dialog. Certain machines can effectively be driven as a Windows Printer – with no additional drivers required.

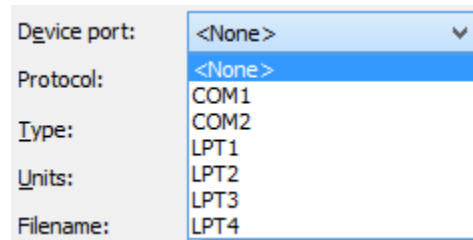


Fig 67 - Impact 2015 Rule Preparation Machines Device Port Pull-Down

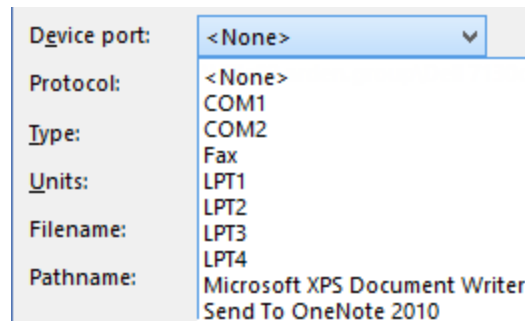


Fig 68 - Impact 2016 Rule Preparation Machines Device Port Pull-Down

Rule Preparation Enhancements

It's no longer possible to create Hugo blocks which overlap with any existing blocks, or to create a path which overlaps a Hugo block.

To improve the replication of Hugo blocks, Impact 2015's *Replicate* Edit Bar button:

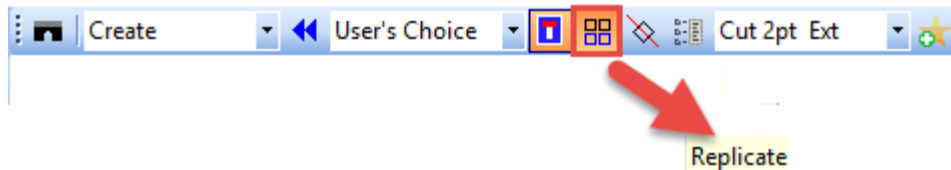


Fig 69 – Impact 2015 Rule Preparation Blocks Tool - Edit Bar *Replicate* Option

has been replaced by a pull-down list offering several new options:

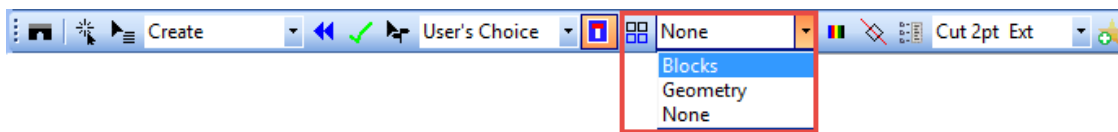


Fig 70 – Impact 2016 Rule Preparation Blocks Tool - Edit Bar *Replicate* Options

- **None** – no replication (same as the old button being unchecked)
- **Blocks** – replication to other blocks (same as old button being checked)
- **Geometry** - new method of replication using matching geometry. When this option is enabled, an additional Edit Bar option is displayed – *Match Ends Exactly*.

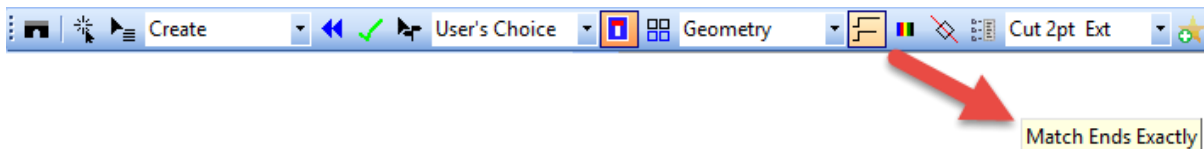


Fig 71 – Rule Preparation Blocks Tool Edit Bar *Match Ends Exactly* Option

When attempting to replicate geometry, Impact 2016 tries to find all the other geometry patterns that look the same, and use the same palette, as the original Hugo block. So for instance if you creates a Hugo block in the shape of the letter S then the replication will look for all other geometry in the shape of an S of the same size that uses the same palette.

If the geometry contains one or two entities then it only includes replicas where the lengths match exactly with the original lengths.

If the geometry contains three or more entities then it may include replicas where the lengths of the first and last entities don't have to match exactly..... This is controlled by the new Edit Bar button *Match Ends Exactly*. The reason it doesn't have to be as strict with matching in this case is because there's enough other information about the geometry (middle entity lengths and all angles) that must match that this will be enough to rule out false matches.

One additional check that Impact 2016 performs to try to rule out false matches is to check whether the start and end of the original Hugo block intersect with any other entities or are free. Impact 2016 rules out replicas which do not do the same as the original Hugo block.

Selection Tools

SelectNoneandViewExtents/aka Retreat

Unselecting entities and executing the *View>Extents* tool is a very common sequence of operations and many users have created simple scripts to achieve this in the past. Impact 2016 now features a dedicated tool to perform these operations – *Edit>Select>Retreat*:

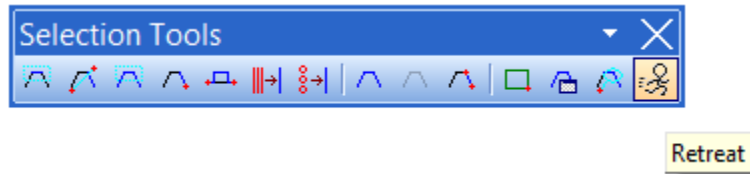


Fig 72 - Select Retreat Tool

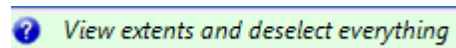


Fig 73 – Select Retreat Tool – Status Bar Description

When you run the tool any *selected* entities will be unselected and the current view will switch to the drawing layer *extents*.

Selection by Polygon/Lasso

Two long-standing requests which have been addressed for Impact 2016 are *Select-by-Polygon* and *Select-by-Lasso*. The new *Select Lasso* tool fulfils both requests.

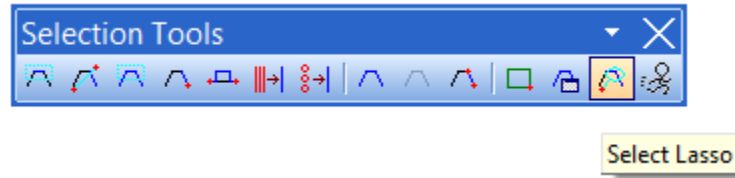


Fig 74 - Select Lasso Tool

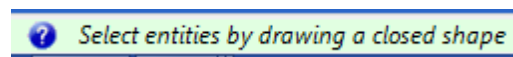


Fig 75 – Select Lasso Tool – Status Bar Description

Click and *hold* the mouse button to draw a *freehand polygon* (aka lasso) to enclose the entities for selection.

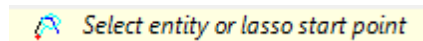


Fig 76 – Select Lasso Tool – Status Bar Help Tip

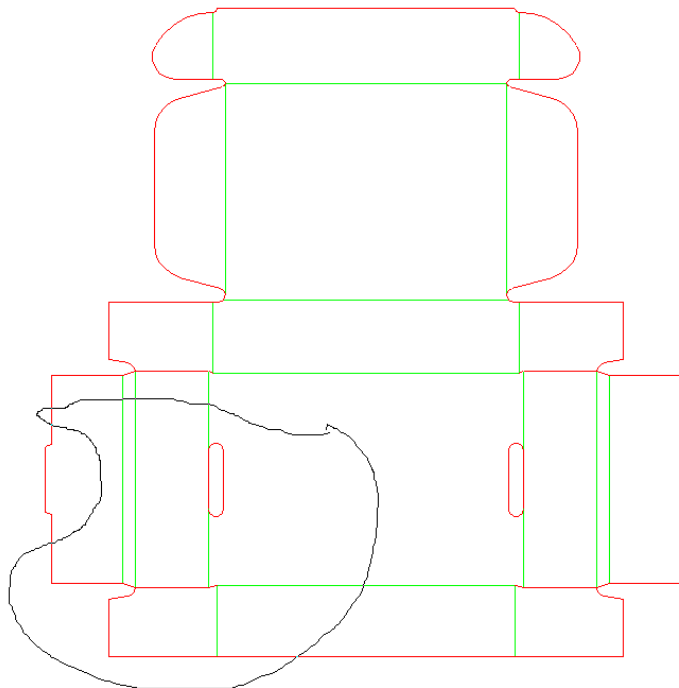


Fig 77 – Select Lasso Tool – Lasso Mode

Click and *release*, the mouse button to start the *rubber band* cursor, allowing you to draw *straight lines* (aka polygon) to enclose the entities for selection.

 Select next lasso point or select the start point to make selection

Fig 78 – Select Lasso - Status Bar Help Tip

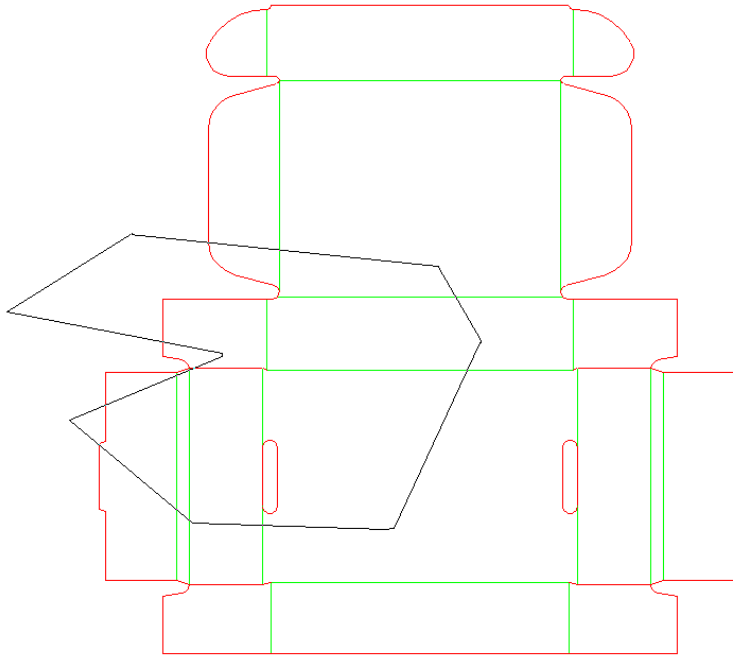


Fig 79 – Select Lasso Tool – Polygon Mode

In either case, the selection is made once you pick a point *within 10 pixels of the start point* of the polygon.

- If the polygon is created in a clockwise direction, *all entities enclosed by or intersected by the polygon* are selected.
- If the polygon is created in an anticlockwise direction, *only entities that are fully enclosed by the polygon* are selected.

The **Select Lasso** tool also makes use of **Ctrl (or Shift)** to allow the creation of *multiple lassos*.

Select and Delete/Delete Tool

Another example of a simple, but widely used scripted solution is *Select & Delete*. In Impact 2015 & earlier, in order to delete entities – you needed to select them. Many users wrote their own simple scripts to provide a simplified solution, combining a *selection* tool immediately followed by a *delete operation*. These ideas have now been incorporated into a new, improved *Delete* tool (the tool can still be found on the *Edit* menu - *Edit>Delete*) which can now be used on *unselected* entities.

A new *Delete Cursor* has been created:

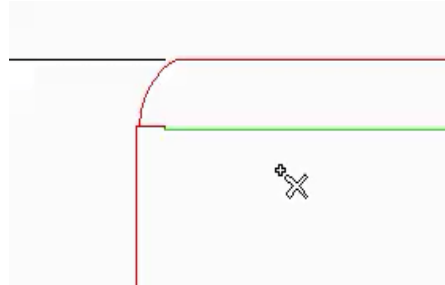


Fig 80 - Delete Tool cursor

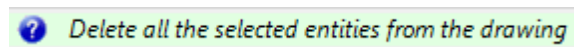


Fig 81 – Delete Tool – Status Bar Description

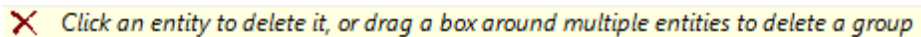


Fig 82 – Delete Tool - Status Bar Tool Tip

- Click on an *unselected* entity *directly* in order to delete it immediately.
- Click on *free space* to create a *deletion marquee* (similar in principle to the established *Select & Drag* functionality).
- A left-to-right marquee would delete all entities *completely* or *partially* inside the marquee, whereas a right-to-left marquee would only delete entities *completely* inside the marquee.
- Note that *selected* entities will be deleted as before.

Snap/Lock Modes

Snapping to Entities (Not Free Space!)

The *Allow smart snap mode to snap to grid* checkbox has been removed from the *Snap Settings* form (as *Smart Snap* should always snap to the grid) – and will no longer snap to *free space*. If you need to snap to *free space*, use the *Snap None* mode.

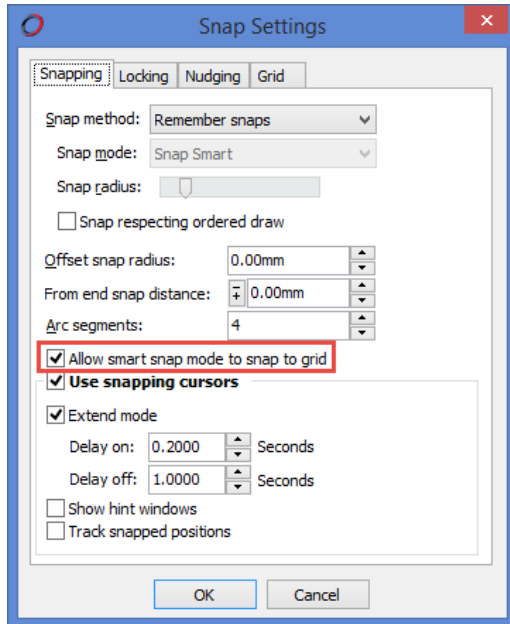


Fig 83 - Impact 2015 Snap Settings

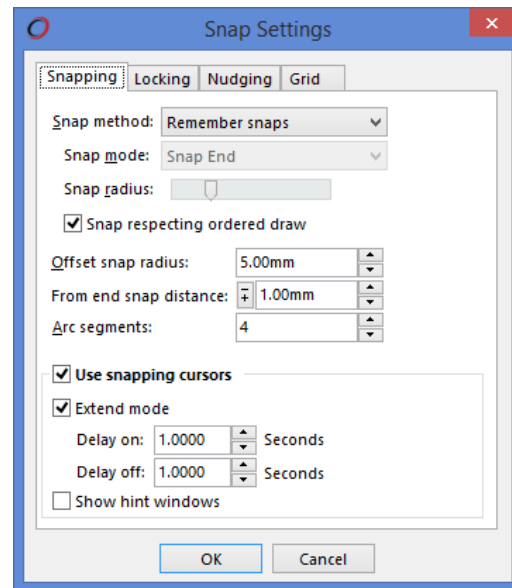


Fig 84 - Impact 2016 Snap Settings

Furthermore, in Impact 2015 (and earlier), placing *Dimension* entities using *Smart Snap* allowed you to pick points which were not *on* entities. Whilst this was desirable with certain *Dimension* tools (such as *Leader* or *Annotation*), it sometimes lead to dimensions being anchored in free space, resulting in inaccurate dimensions.

In Impact 2016, a new click *type* has been introduced, which means that, when creating dimensions using *Smart Snap*, the main *Dimension* tools (*Horizontal*, *Vertical*, *Aligned* and *Rotated*) will *no longer* allow you to snap to points which are *not* on an entity. These tools will *only* snap to points on an entity. In this regard, *Smart Snap* may now be considered truly *smart* and should lead to time-savings, improved dimensioning accuracy and greater confidence when using the dimension tools.

Standards

Standards Description Variable

Improvements to the value-mapping code allow the Standard Description data to be copied from the source Standard to the receiving project, *every* time. This allows the consistent use of the Standard Description within reports or *custom* value-mappings. As an example, you could value-map a Standard Description such as *Reverse Tuck End A2120* to the *One_Up.Style* field of a project, instead of the Standard Reference (which is *A20.20.03.01*).

Standards & Parametrics

Parametric Tools and Highlighter

The newly-introduced **Highlighter** functionality has been extended to the following **Parametrics** tools:

- **Parametrics Create & Associate Variables**
 - After running this tool, any dimension entity will receive highlighting as the cursor hovers over it.
- **Parametrics Associate (*aka Assign*) Variables**
 - After running this tool, any dimension entity will receive highlighting as the cursor hovers over it.
- **Parametrics Line Fold Angles**
 - After running this tool, any dimension entity will receive highlighting as the cursor hovers over it.
- **Parametrics Conditional Entities**
 - After running this tool, any geometric or dimension entity will receive highlighting as the cursor hovers over it.

The **Highlighting** behaviour is unaffected by the **Workstation>Performance** options (**Best Experience/Best Performance**) and occurs both inside *and* outside of the **Parametric Editor** form.

Parametric Redimension – Undo/Redo

The *Parametrics Redimension* tool is now an undoable operation. Note that this will only affect the parametric model *itself* and not status or value of the variables within the model.

Text Entities & Tools

Anchor Control Point for Text Entities

Text entities created by the *Text Single Point* and *Text 2 Points* tools now have an additional control point – the original picked anchor point. This allows for more accurate, flexible & intuitive repositioning of text entities.

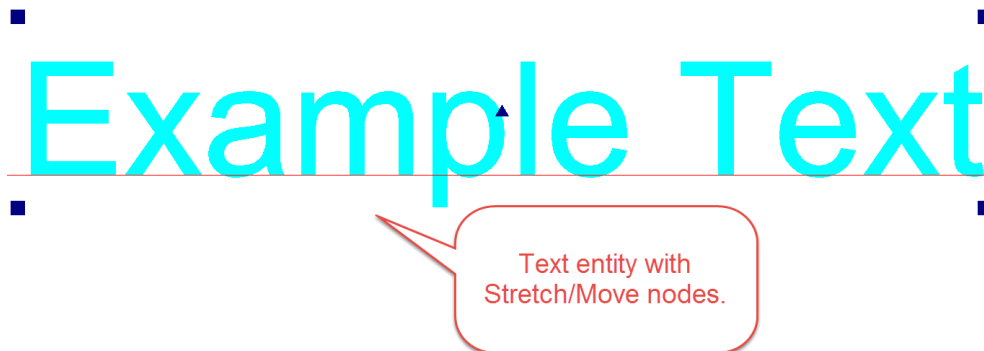


Fig 85 - Impact 2015 Single-Point Text Entity

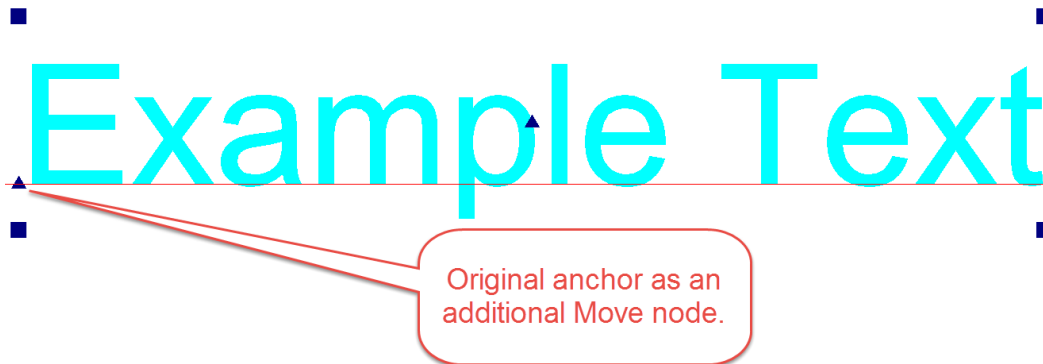


Fig 86 - Impact 2016 Single-Point Text Entity

Character Spacing Option for Open Type Text Fonts

A new *Text Style* option has been added (**Spacing**), to allow fine-tuning of the spacing used by *Open-Type* fonts. A *real* number is used to control the spacing, with special cases as follows:

- -1.0 – fully condensed – no spacing, all characters drawing on top of each other.
- 0.0 – ‘normal’ spacing, as currently performed by Impact.
- 1.0 – expanded with double the ‘normal’ spacing between characters.

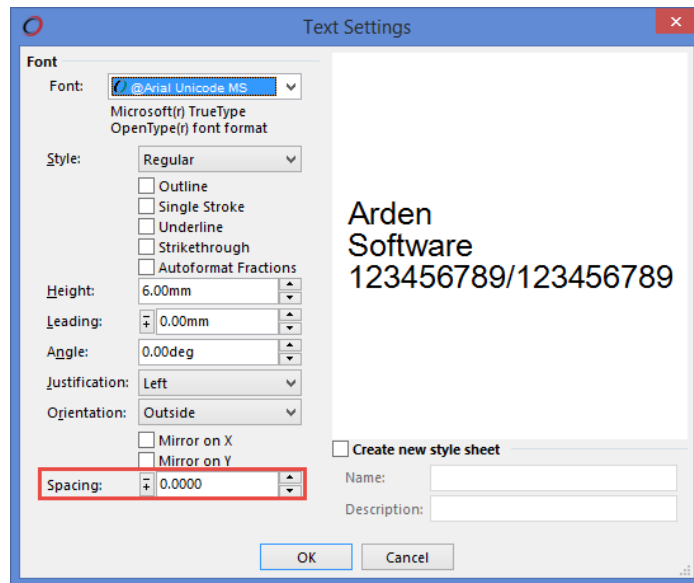


Fig 87 - Normal Character Spacing (0.0)

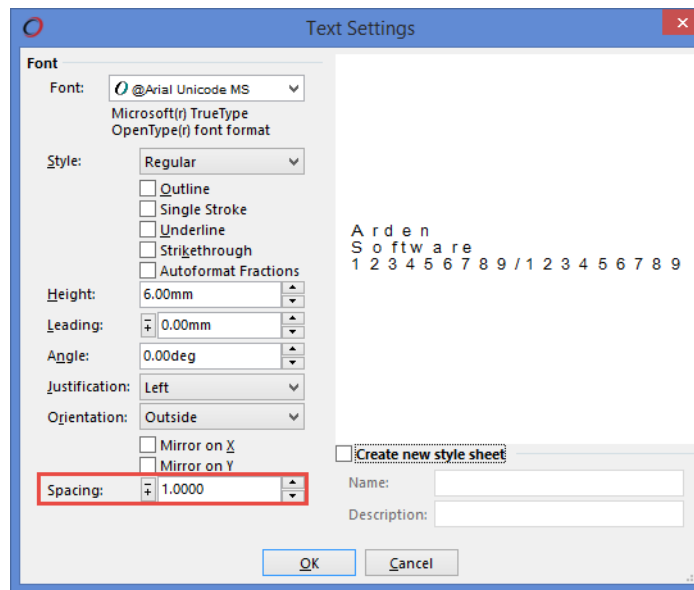


Fig 88 - Double Character Spacing (1.0)

Note that *any value* between infinity & -1 can be entered into the *Spacing* entry field.

Support for Single Stroke Fonts

A new *Single Stroke* option has been added to the *Text Styles* dialog, which forces Impact to ignore the closing entity within the characters, thus generating single-stroke paths for the letters (which is significantly better for machine-tool operations such as laser etching, milling etc).

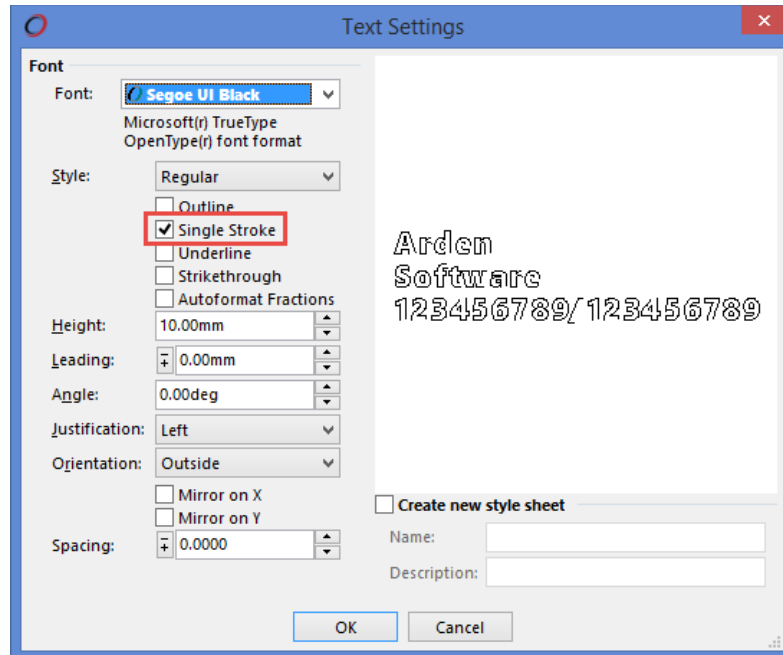


Fig 89 - Single Stroke Option within Text Style Dialog

Euro 2016

Arial Unicode MS

Euro 2016

Arial Unicode MS (with Outline option)

Euro 2016

Olf Simple Sans (with Single Stroke option)

Fig 90 - Text Examples

While single-line TrueType fonts are available from a number of sources, we recommend any of the “OLF Simple Sans” fonts from www.onlinefonts.com.

Transform Tools

New Transform Array Tool (Number of Copies)

A new addition to the Array tools, the *Transform Array* tool provides a simple method for quickly creating *single-dimension* arrays.

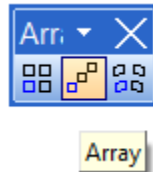


Fig 91 – Transform Array Tool

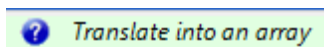


Fig 92 – Transform Array Tool Edit Bar Description

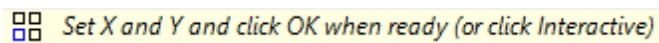


Fig 93 - Transform Array Tool Status Bar Help Tip

The tool offers the following *Edit Bar* options:

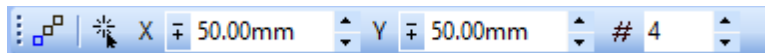


Fig 94 - Transform Array Tool Edit Bar Options

- **Interactive** - enable this option to specify the X & Y-axis offsets by *click & drag*. If this option is *not* enabled, the following options will be visible:
 - **X** -specify the X-axis offset distance.
 - **Y** -specify the Y-axis offset distance.
- **Number (of Copies)** - specify the total number of copies in the *complete* array.
- **Selection** – this option is *only* visible *if one (or more) entities are selected before running the tool*. You can choose to leave entities *selected* once the array has been created. Pick from or *Select New/Select None/Select Original/Select All or Select Last*.

Trim Tools

Trim>Trim to Remove All Entities

In Impact 2015 and earlier, the Trim>Trim tool would **only** remove geometry if the geometry extended *beyond* the intersections with an entity - otherwise entities had to be *selected & then deleted*. This has been addressed in Impact 2016 - entities will now be removed **regardless** of whether or not they extend passed an intersection. This should prove to be a time-saver as the *select & delete* process is no longer necessary. The Status Bar description, help tip and use of the CTRL + click functionality (for keep, as opposed to *trim*) for this tool has not changed.

User Interface

Context Menus – Icons

Tool icons have been added to the **Cancel_Toolname** and **Restart_Toolname** entries within the context menu:

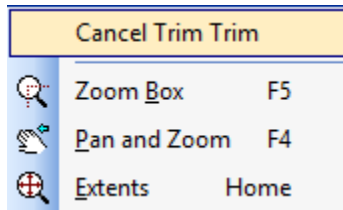


Fig 95 - Impact 2015 Context Menu

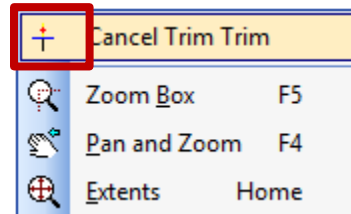


Fig 96 - Impact 2016 Context Menu

Additionally, when *Select & Drag* is being deployed as the default tool, the **Cancel Select & Drag** option has been removed from the context menu:

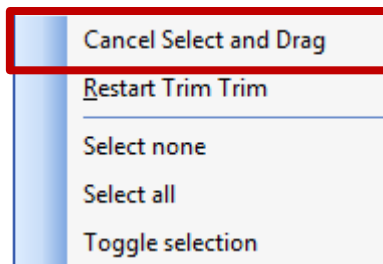


Fig 97 - Impact 2015 Context Menu

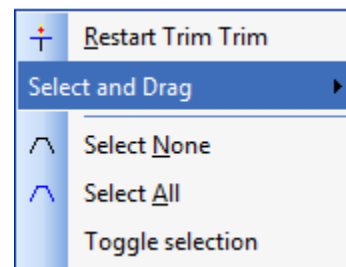


Fig 98 - Impact 2016 Context Menu

Edit Bar Options /Context Menu

Tool Edit Bar options are now available as an expandable context menu option – providing quicker access to the tool options:

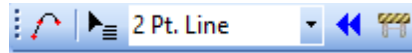


Fig 99 - Tool Edit Bar for Multi-Line tool

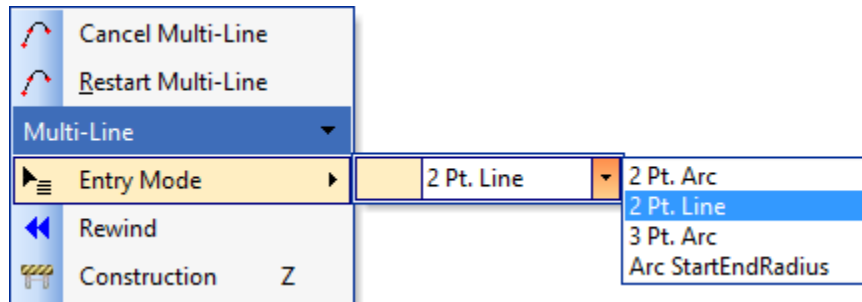


Fig 100 - Expandable Context Menu for Multi-Line tool

Note that the status of the content menu (expanded or closed) will persist for *all tools*. The status is *not tool-specific*.

Status Bar Hint/Help Tip Revamp

The Status Bar/Help Tip has had a face-lift. The tips are now displayed in the centre of the Status Bar (as opposed to the left-hand corner), using an italicised font. The status bar subtly changes colour depending upon whether a tool is active or not (and displays the accompanying tool icon when a tool is active):

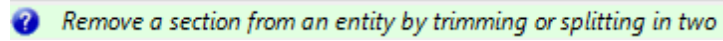


Fig 101 - Trim>Trim Status Tool Bar Tool Description

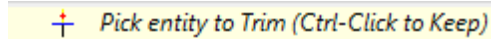


Fig 102 - Trim>Trim Tool Status Bar Help Tip

Icons

Many tool icons have been updated – improving the look & feel of Impact and improving consistency across the board:

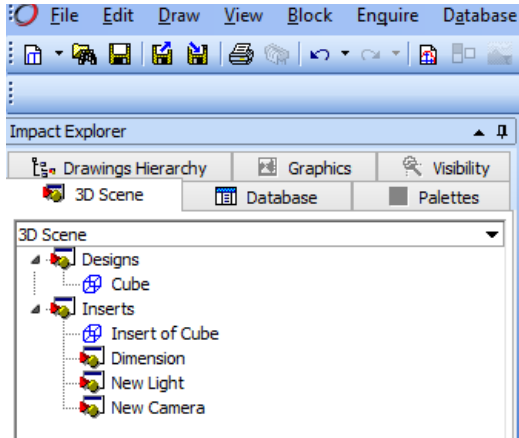


Fig 103 - Impact 2015 Impact Explorer & Edit Bar

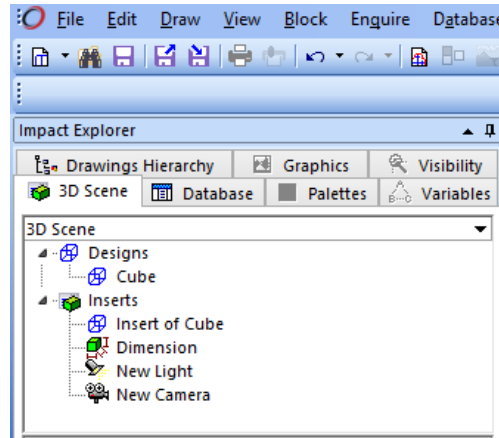


Fig 104 - Impact 2016 Impact Explorer & Edit Bar

Toggle Icons

The *Toggle* icons (*Grain Direction*, *Machine Direction*, *Grid Type*, *Absolute/Relative* and *Print Face/Die Face* or *Outside/Inside*) have been updated. In addition, the highlighting of the *Grid Interval Settings* has been improved, to provide a clearer indication of the *active* grid interval.



Fig 105 - Impact 2015 Toggle Icons & Grid Toolbox



Fig 106 - Impact 2016 Toggle Icons & Grid Toolbox

Wizards Revamp

The various Impact *Wizards* (all 50 of them!) have had a face-lift, providing a fresh, modern look & feel:

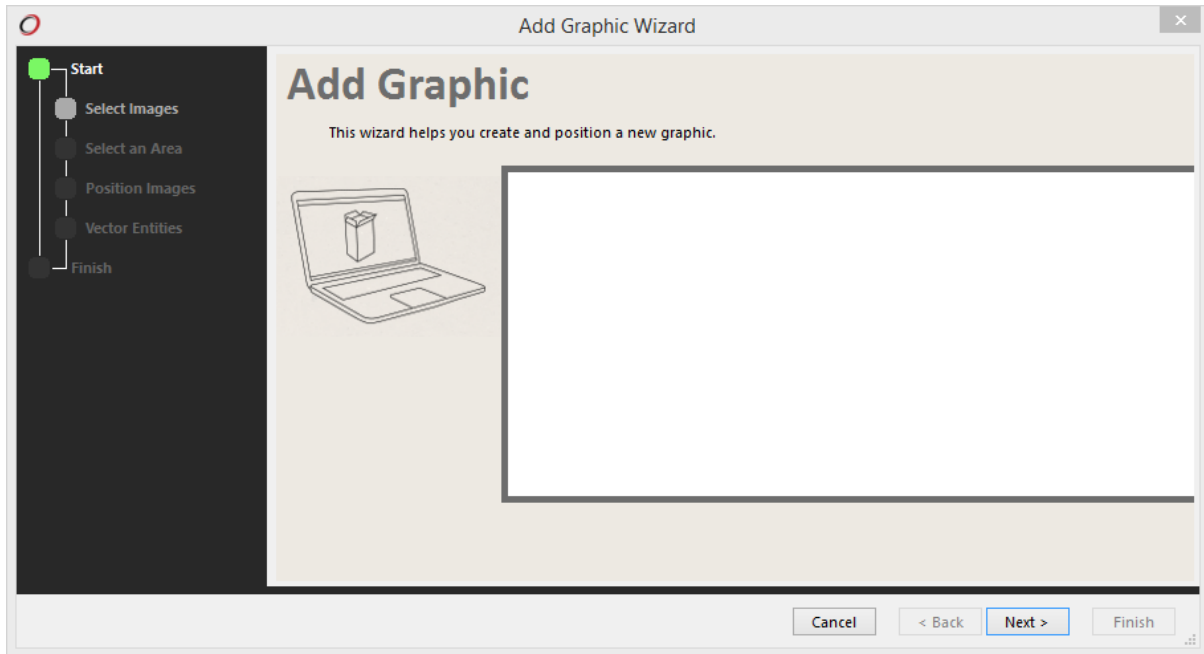


Fig 1008 - Add Graphic Wizard

The changes are purely cosmetic - the actual functionality/contents of the Wizards has not been changed.



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