

Inventor 2013 – What’s New!

A brief snapshot of the most exciting new features in the 2013 release, as selected by CADline. The complete list of new additions in Inventor 2013 is very extensive – this document shows those that are likely to be the highlights for our customers.

All Inventor Users, Engineering and CAD Managers, Purchasers

Welcome Tools

The new 'Launch Pad' allows you to open recent files from thumbnails, view tutorials and training videos, download great Inventor Apps (see P8) and configure default templates.

Work

- New
- Open
- Projects

Learn

What's new in 2013
[See what's new](#)

Interactive Tutorials

- Create a 3D Bottle**
Create a 3D water bottle in a guided tutorial
- Import and use 2D data**
Import an AutoCAD file and convert to a 3D part in a guid...

Essential Skills Videos

- Overview**
Four short videos describing file types, view navigation, work fe...
- Fundamentals**
Four short videos describing sketches, parts, drawings, and ...

[More Learning Resources](#)

Extend

Autodesk Exchange

Discover and download apps that are powerful, fun and help you get your job...
[Launch the Autodesk Exchange Apps w...](#)

Autodesk 360

Autodesk® 360 can help you increase mobility, improve collaboration, and optimize your designs—advancing the way you work.
[Explore Autodesk 360](#)

Optimization

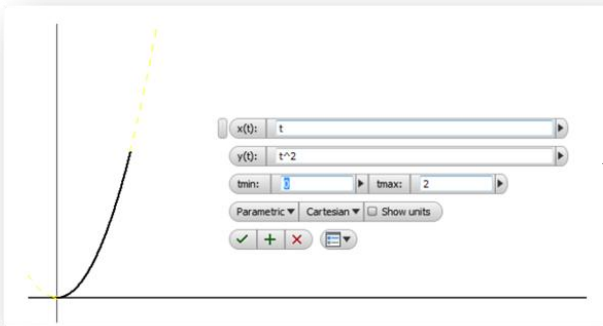
Extend ideation and simulation beyond the desktop by testing the performance of multiple product design options with ...

[Configure Default Template](#)

Display at Startup

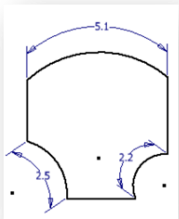
Close

welcome menu



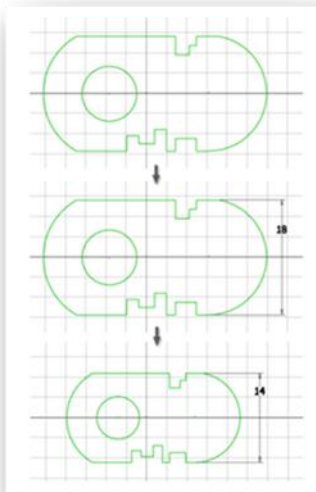
Equation Curves in Sketches

A huge addition! Use explicit & implicit equations in 2D and 3D sketches. Expands Inventors abilities with aerofoil, blade, gear and housing profiles, and all kinds of mathematically driven geometry.



Dimension Arc Lengths

There is now no need to perform your own calculations for the length of curved profiles – simply use arc length parameters – particularly useful in your sheet metal, iLogic and iPart files.



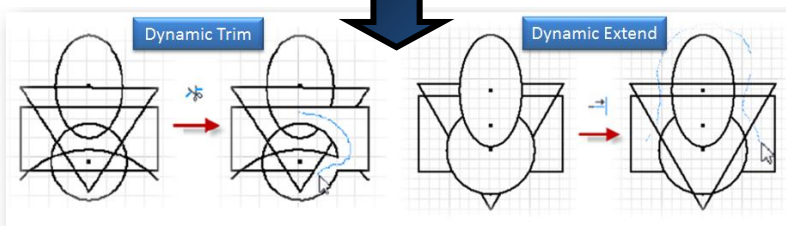
Scale of a roughly drawn sketch updates automatically with first dimension

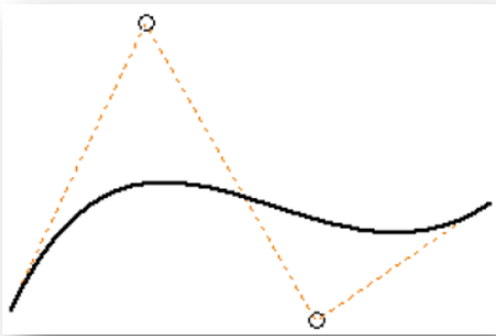
The whole sketch will resize based on only the first dimension – so a very quick free-sketch can be produced without a sketch explosion upon adding dimensional constraints!

The second placed dimension has no effect on overall sketch scale.

Dynamically Trim and Extend

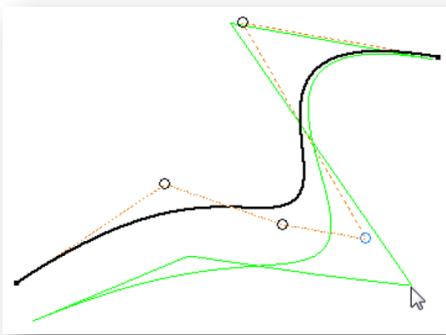
Drag the cursor freehand to trim or extend geometry in a sketch. Steady those hands!





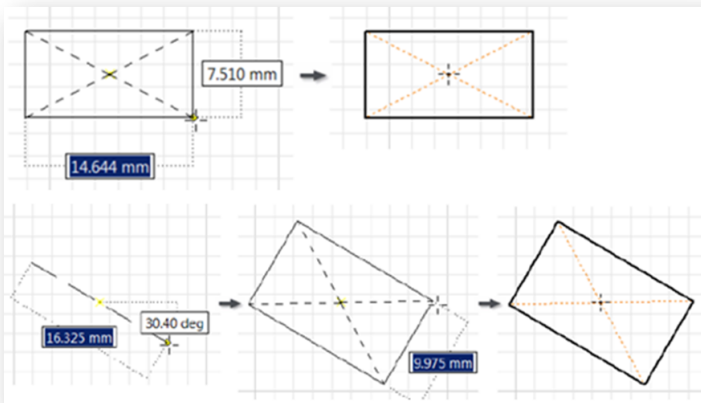
Control Vertex Spline

Use an automatically created control frame to control your splines with tangent, perpendicular and smooth (G2) constraints. Massive improvement to spline control and behaviour.



Drag 3D Sketch Geometry

Modify 3D sketches like you modify 2D sketches by dragging (in addition to 3D Move/Rotate command). The sketch doesn't have to be active, and a dynamic preview of the results will display.



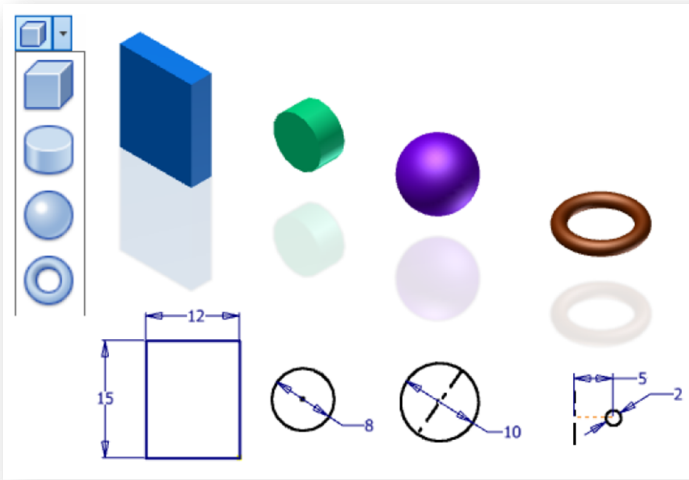
Drumroll Please.....

Centre-Point Rectangle

Inventor Wish List contributors we salute you! Like the proverbial bus, you wait 13 years for one, and then two varieties of centrepont rectangle arrive at once.

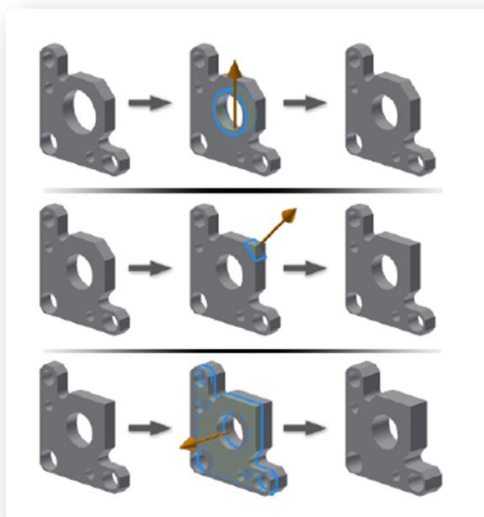
Other Sketching Highlights:

- Mirror a 3D Sketch.
- Add Text Parameters to Model Sketches, Drawing Sketches and Drawing Notes.



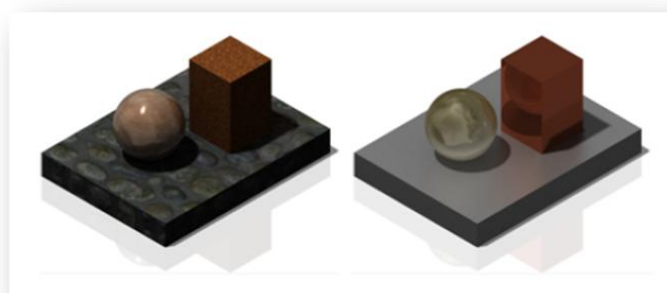
Primitive Shape Creation

New panel in the Modelling Tab to automate the process of creating any of the simple solids shown on the right – speed up your base solid creation or use them as tool solids.



Drag to Offset Faces Without Fusion

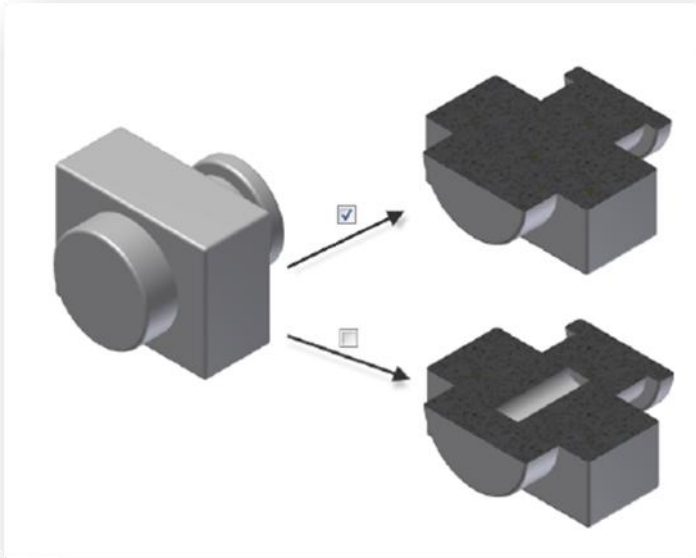
Save time by offsetting radial and planar faces in the normal modelling environment – no need to open Inventor Fusion. No additional features are created in the modelling tree so the edits are not parametric.



Texture On/Off Button

Toggles the display of textures (in a part or assembly) to simplify visual appearance and efficiency.

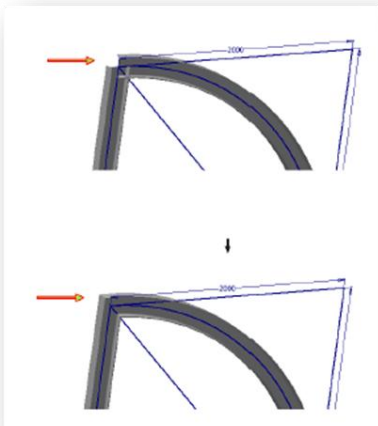
This button does not affect decals or thread representations



Derive/Shrinkwrap Remove Voids

Remove all internal cavities when creating simplified parts using the Derive or Shrinkwrap.

Simplifies the process of protecting your IP and reducing file size.



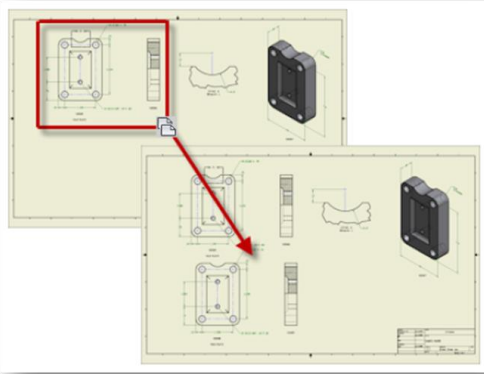
End Treatments for Curved Frame Generator Components

Use the following operations on curved or merged beams; Mitre, Notch, Trim to Frame, Trim/Extend, Lengthen/Shorten.

This greatly expands the capabilities of one of Inventor's most powerful and popular tools.

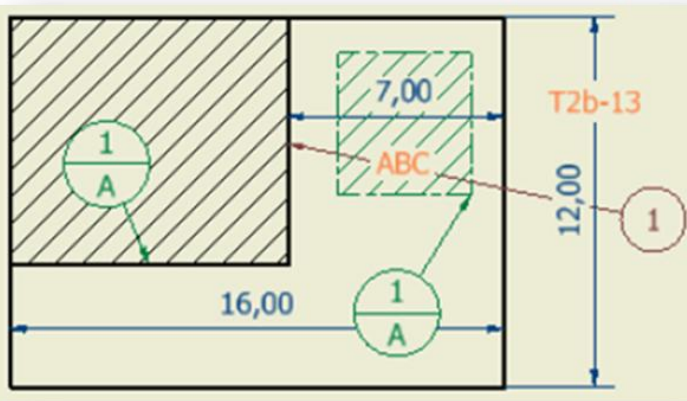
Other Assembly Highlights:

- Align Frame Generator Beams with Geometry (instead of arbitrary rotation angle).
- Intelligence added to the Mirror Components dialog box – symmetric and assymetric components highlighted automatically.



Copy Multiple Drawing Views to Same Sheet

Simple copy and paste operation speeds up drawing creation.



Automatic Trimming for Annotations and Hatching

Hatch in section views and datum target area clips around all drawing annotations. Dimension leaders and text trim automatically.

		8	4	232894
		9	1	11587
		10	1	51442
		11	1	230976
		12	1	229672
		13	1	245671
		14	1	245667
		15	1	238807
		16	1	243992

		8	4	232894
		9	1	11587
		10	1	51442
		10.1	1	248800
		10.2	1	237554
		10.3	1	237490
		11	1	230976
		12	1	229672
		13	1	245671

Easy Expanding of Parts List to Show All Levels

Just double click on parts list in drawing and expand where required.

drawing

Other Drawing Highlights:

- Open Component Drawing by Right Clicking on Component in an Assembly Model
- Intelligence added to the Mirror Components dialog box – symmetric and asymmetric components highlighted.



Point Clouds

Import one or more point clouds into Part or Assembly files in any of the formats shown on the left.

Point clouds can be scaled, rotated, cropped, uncropped or reduced in density.

Work geometry can be attached to cloud points.

Factory Assets can be snapped to cloud points.

Point cloud supported formats:

.asc .ptg
.cl3 .pts
.clr .ptx
.fls .txt
.fws .xyb
.las .xyz

You can now also import JT mesh models into Inventor

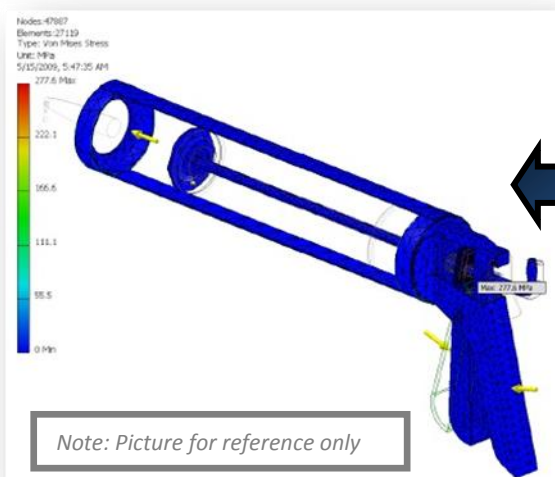
Simulation

Analysis of Thin Wall Bodies

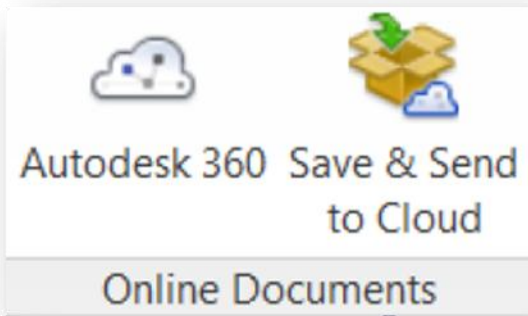
This is a massive bonus for sheet metal workers and others analysing thin sections. Thin wall bodies are automatically found and highlighted by Inventor – these areas can then be analysed much faster while still maintaining the accuracy required.

Simulation – Meshing and Solving Speed

Inventor's already class-leading meshing speeds take a huge boost – all available processor cores are now employed for both meshing and solving the simulation – Autodesk have reported solving speeds up to 40 times faster than with the 2012 software!



Note: Picture for reference only

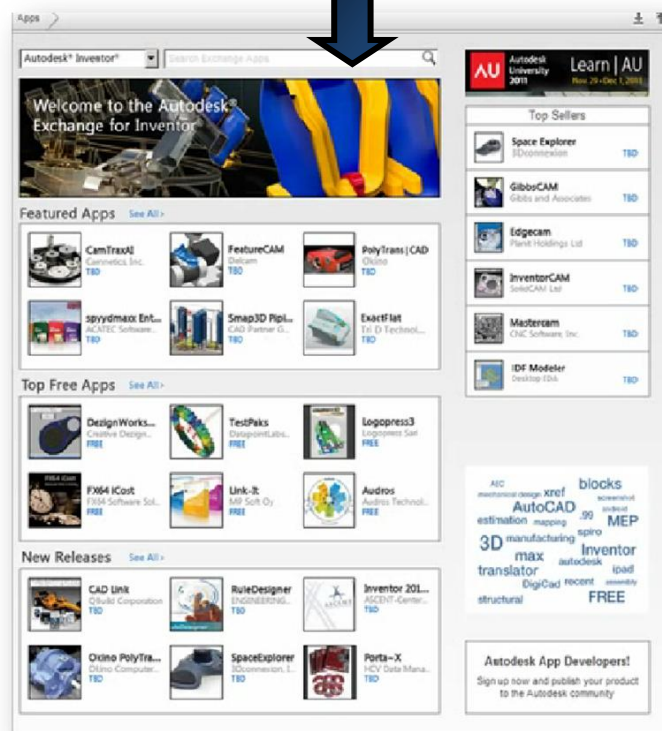


Online Services – Simple Collaboration

'Save and Send to Cloud' button – take advantage of the user-friendly Autodesk Cloud for online storage and sharing of large files. 1GB for non-subscribers and 3GB for subscribers (subject to change).

The Inventor App Store!

Direct from the welcome screen – view and purchase Apps for Inventor produced by developers around the world. Popular Apps from Autodesk Labs such as Feature Recognition, 2D to 3D tool and the Thread Modeller should feature, with superb 3rd party Apps such as the Drawing Translator (translate an entire Inventor drawing into another language with customer specific details) available. Access a vibrant global Inventor manufacturing community!



community