Radan 2013—Release Notes

Welcome to Radan 2013

Radan 2013 offers major advances in the field of punching, nesting and bending.

Multi-Tools

Support for multi-tools in Radan has been completely re-designed making the use of multi-tools intuitive and flexible.

Nesting

Parts can now be easily identified on the setup sheet and during nesting by using colours based on chosen parameters.

Single Part Layout

Single part layout has been optimised for use within the nest projects environment.

2D CAD

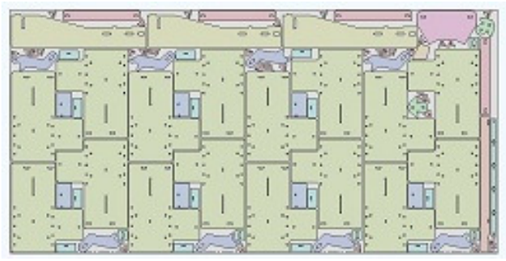
A new region selection tool allows complex shapes to be easily copied to the cursor.

Radan 3D

The ACIS kernel has been updated to the latest version, improving performance and stability, as well as updating the 3D translators to more recent versions.

Radbend

The introduction of a new file format (.c4cx) allows a press brake program to include the original 3D model and development. This allows information to fluently pass between Radan 3D and Radbend.



Introduction

This information package contains an overview of all changes introduced in the Radan 2013 R2 level of software. Follow the links at the bottom of this window to find out the details.

If you have any questions regarding any of the changes made in this issue of software, please contact Radan or your system supplier.

General

File Name Lengths

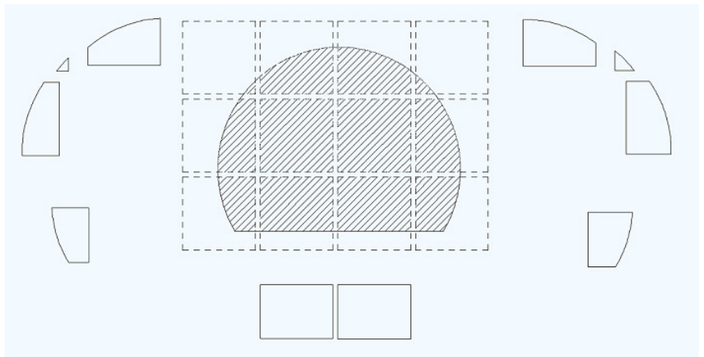
The maximum length of file names for parts and nests in Radan has been increased to 125. The maximum length of project names remains unchanged at 36.

Material Names

The maximum length of material names in Radan has been increased to 100.

Single Click Region Select

A new function allows a region bounded by geometry to be selecting using a single click. This can for example be used to determine the shapes needed to make the shape shown in the image.



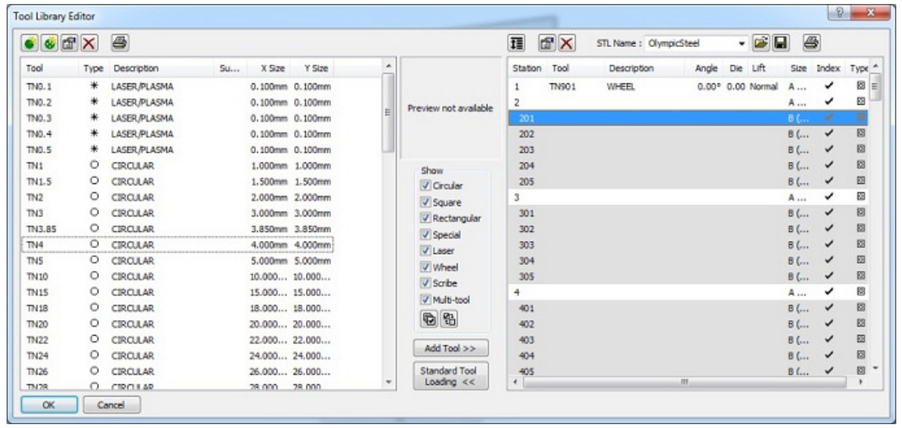
Multi-Tools

New Multi-Tool Support

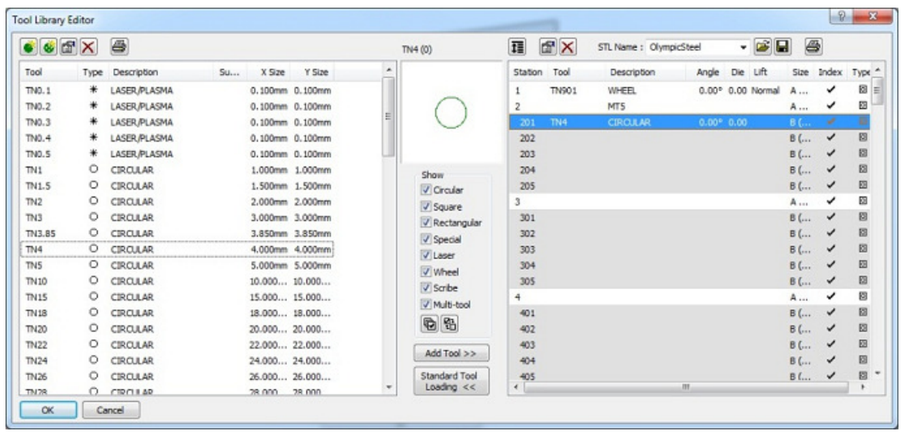
Multi-tools offer the user of a machine tool a way of expanding the number of useable tool stations. In Radan 2013, the definition and use of these multi-tools is now more intuitive and flexible.

Loading Tools

The tool loading lists in the software now correctly display multi-tools as sub-stations to the main stations. The user can, as before, place a tool in one of the main stations or in the multi-tool stations. When a tool is placed in one of the multi-tool stations, the corresponding main station is automatically shown as occupied with a multi-tool.



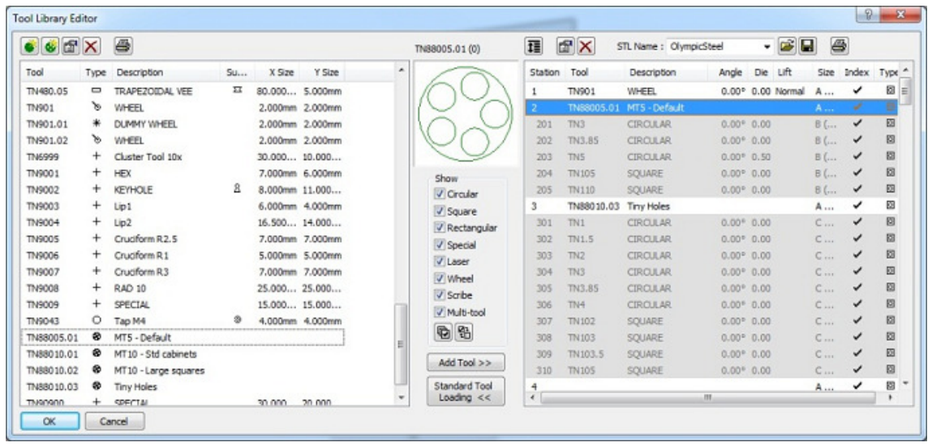
Conversely, if a tool is placed in a main turret station, the multi-tool positions are not shown (as can be seen in the image – station 1).



Multi-Tools (cont.)

Pre-loaded Multi-Tools

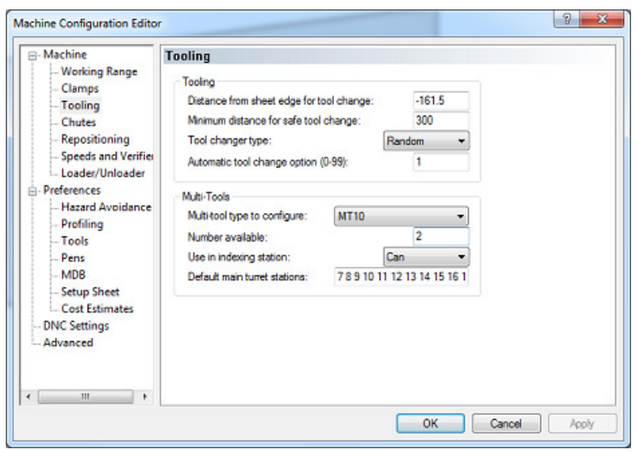
The master tool file can contain pre-loaded multi-tool assemblies (a standard set-up for a multi-tool). It is possible to make several pre-load configurations for a multi-tool, even though only one multi-tool is physically present.



These pre-loaded multi-tools can be loaded into the (standard) turret, therefore loading all tools at once – they can also be moved to a different turret station as a whole.

Number Available

On the Tooling page in the Machine Configuration Editor, the number of available multi-tools can be configured.

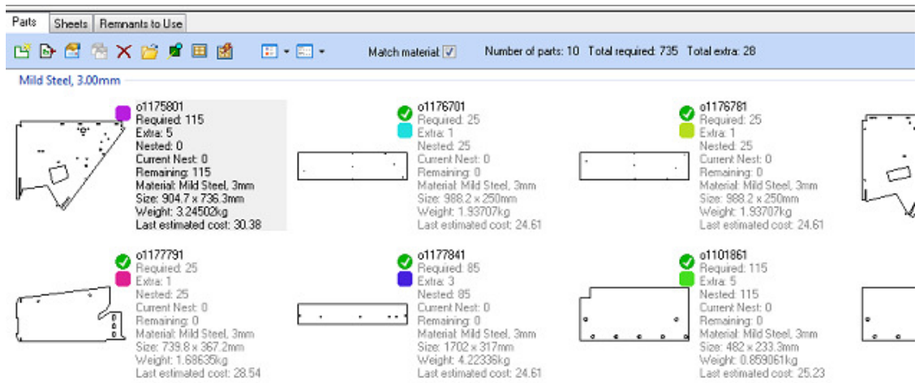


Nest Projects

Part Identification

Coloured Parts

In Radan 2013, each part in a nest project will be assigned a unique colour. This colour can be seen in the list as a small coloured patch.

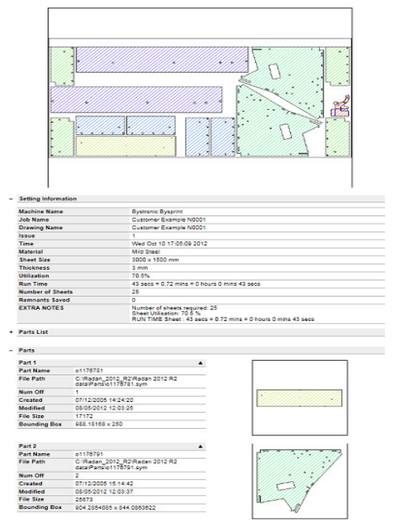


Coloured Parts

These colours are assigned automatically, based on the part name. The property that makes a part have a different colour can be set by changing the 'Colour By' setting in the pop-up menu. Changing this to 'none' will switch off any colouring.

Setup Sheet

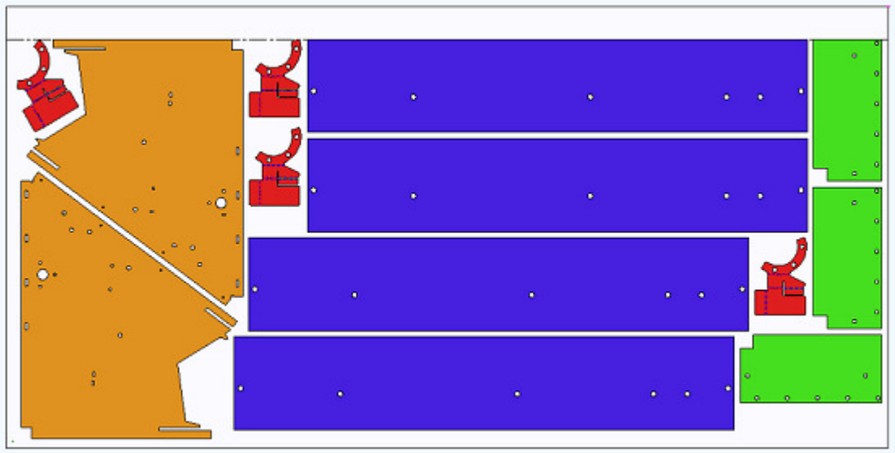
These colours will appear on the html setup sheet and will help the machine operator identify the parts on the sheet. The parts on the setup sheet can be solid-filled or hatched (default) - this behaviour can be set in the machine configuration editor.



Nest Projects (cont.)

Screen

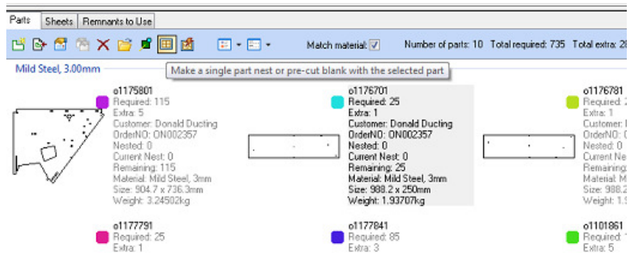
Optionally, the colours can be visualised during nesting by using the 'View'-'Colour Fill'-'Multi-colour Parts'.



Nest Projects

Single Part Layout in Nest Projects

The nest projects environment now fully supports the single part layout method of nesting. A new icon allows the selected part to be instantly nested on a chosen sheet.



A new nest with the correct name is automatically created and added to the project.

New File

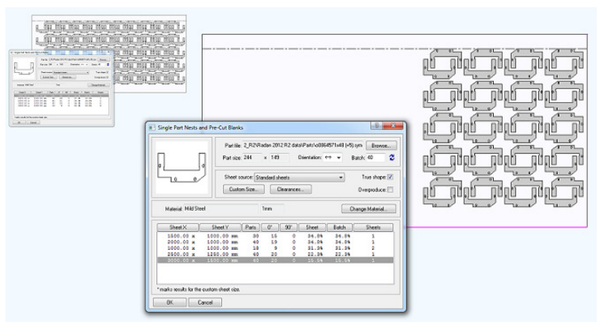
The single part layout function has been changed to ALWAYS create a new drawing. This may take some getting used to, but especially in the nest project environment, this is a natural thing to do.

Editing

As before, an existing single part layout can be edited. This is now done using a new menu option in the Nest menu: 'Modify Single Part Nest or Pre-cut Blank'. The main reason for this change is to allow nests that are created using the automatic nester, and have only one type of part on them to be modified in the same way.

Overproduction

The user now has a choice whether single part layout should allow overproduction. Previously, single part layout would always fill the sheet, even if the batch size (the number of parts required) was insufficient to fill a sheet.

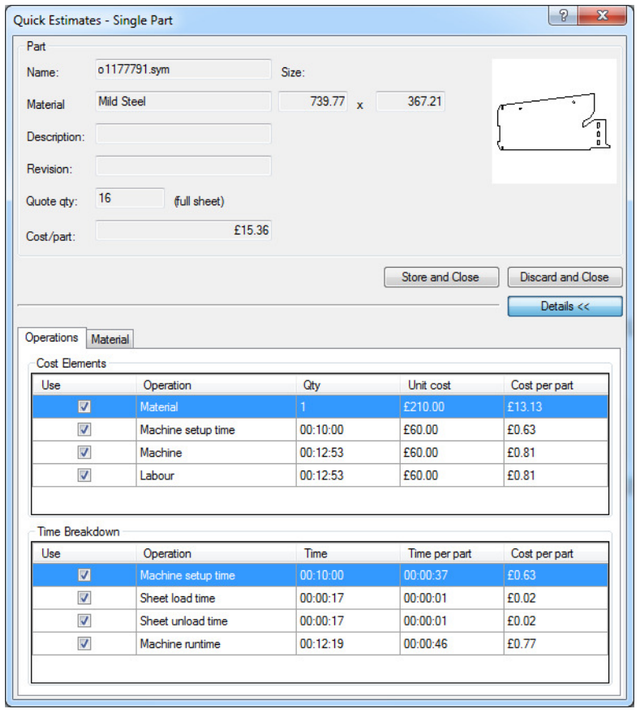


Quick Estimates

Single Part Estimates

Quick Estimates for single parts has been changed to improve the focus of the function. The estimate is now always based on a single full sheet of the part. This means that the estimate quantity can no longer be set, but depends on the selected sheet for the estimate.

The margin field has also been removed.



Radan 3D

ACIS R22 SP2

The kernel of Radan 3D has been upgraded to version R22 SP2. In addition to increased performance and stability, this will bring the versions of 3D translators up to the following:

- Pro/E versions 16 to Wildfire 5 and Creo Parametric 1.0
- Catia V4 versions 4.1.9 to 4.2.4
- Catia V5 versions R2 to R21
- Parasolid versions 10 to 24
- SolidWorks part files versions 2000 to 2012, assembly files versions 2003 to 2012
- Solid Edge versions up to V100
- Inventor up to and including version 2012
- Unigraphics up to and including version NX5

3D Import

It is now possible to import a 3D file using drag-and-drop - the software will automatically ask to confirm the material.

Radan 3D/Radbend

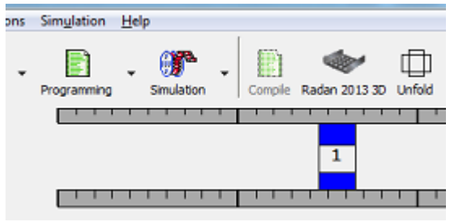
Radbend CAD4CAM Files

When Radan 3D (or CAD4CAM) and Radbend are present on the same system, Radbend can save the press brake program and the 3D model in one single file. The file extension for this file type is .c4cx.

When this file type is opened in Radbend, the user also has access to the original 3D model. This means that after changing the Radbend program, the 3D model and its unfolding can be easily updated.

Parametric Programming

Parametric programming is possible by opening a .c4cx file in Radbend, changing to Radan 3D, and making a modification to the part. On re-entry to Radbend, the press brake program is automatically updated.

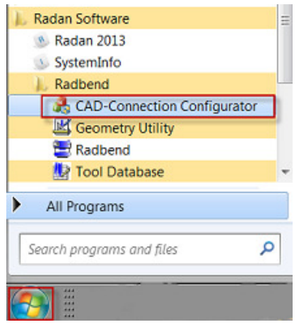


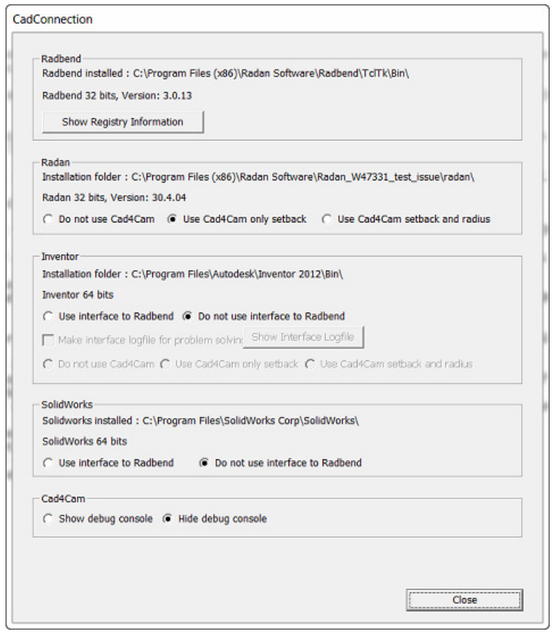
Radbend

CAD Connections

CAD Connection Configurator

A new CAD-Connection configurator allows installation and detailed configuration of the plug-ins and feedback to the 3D models.





Inventor 2013

Inventor 2013 is supported by the Inventor plug-in. The Inventor plug-in now also includes CAD4CAM functionality to feedback information from Radbend to Inventor.

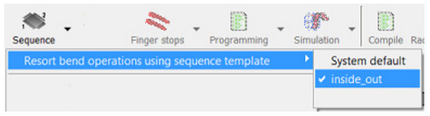
Radbend

Programming

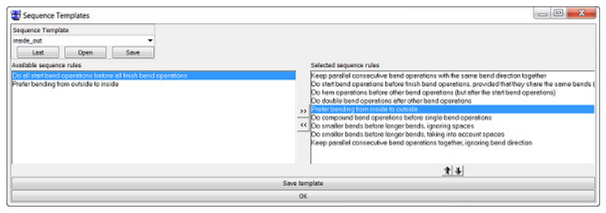
Bend Sequence Templates

Bend sequence template files enable the user to save customised set of bend sequence rules. it is possible to have multiple templates and these can be selected to handle a specific (range) of products. The 'system default' would normally prefer to work from outside to inside as shown:

In the following example, a template called 'inside_out' is used to change the sequence.



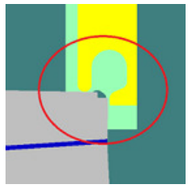
In the sequence template editor rules can be added and removed and listed in order of priority.



Fingerstops

Fingerstop placement has been significantly improved in the following areas:

- Enhanced corner stop placement
- Support for defining multiple horizontal support faces/cylinders that act as a side stop in a corner stop definition
- Support for skipping fillets/chamfers near corners to allow corner stop



Radbend Viewer

The Radbend viewer has been improved in the following areas:

- Synchronised file open function for Radbend View and safan machine controller - the software will automatically open the NC file with the same name as the SMB file if the file path stored in the SMB is not found
- Full screen button in viewer
- Touch screen friendly file open dialog with big icons and one click to open folder or file