



Design to Fabrication™ Tools

Release Notes

- *EC CAD - Fabrication for AutoCAD MEP*
- *EC PartManager*
- *EC DuctMaker*

Version 8.0
for Autodesk 2018

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The manufacture, offer for sale, sale or use of this product is subject to exclusive patent rights owned by EastCoast CAD/CAM as claimed in one or more claims of U.S. Patent Numbers 7,499,839, 7,917,340 and 8,335,667, entitled: Method and Apparatus for Importing Data into Program Code also known as “Design to Fabrication”, which is a trademark of EastCoast CAD/CAM.

Release	Release date	MEP Design to Fabrication	EC CAD	PartManager	DuctMaker	PartManager Database
Version 8.0 for 2018	October 2017	8.0.3.180	8.0.3.180	8.0.3	8.0.3	8.0.3.14
		All Style Drawings (dwgs)	All Templates (dwts)	EC Manufacturer Specific Catalogs	EC Parametric Part Wizard Templates	CDM Database
		8.0.0.180	8.0.0.180	8.0.3.180	8.0.3.180	8.0.3

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1 EastCoast Design to Fabrication

Design to Fabrication Version 8.0 is a full installation for new customers, and applies software enhancements and corrections for customers who are upgrading from an earlier release (V7.2 or earlier version) of all the Design to Fabrication software components, including Design to Fabrication Release Notes V8.0 2018 including MEP Design to Fabrication, EC CAD, PartManager, and DuctMaker. Your license and specific installation may include some, or all, of these components.

1.1 General Release Information

This release is being provided as a full installation (via the setup.exe) so that both new and upgrading customers can apply the latest software to their system using the Design to Fabrication Setup user interface.

Refer to each product section in this document to identify specific corrections, updates and known issues associated with this software version, as follows:

- [Installation](#)
- [EC CAD](#)
- [EC DuctMaker](#)



1.1.1 Software Distribution

This software update is available for download from the [EastCoast CAD/CAM Customer Portal](#) as a **Design to Fabrication V8.0 2018** Installation zip file.

Customer Portal Access

The [Customer Portal](#) is an area of the EastCoast web site available to EastCoast Subscription Customers, providing software updates, documentation and video resources. To gain access, simply fill out a short registration form which requests access from EastCoast CAD/CAM Customer Support. Once approved, you can then log in with your user name and password at any time. To register, copy the link below into your Internet browser:

<http://eccccustomerportal.worldsecuresystems.com/register.htm>

1.1.2 Prior Release Notes Documentation

This document describes the enhancements and updates when moving from Version 7.2 to Version 8.0. For customers upgrading from a release earlier than Version 7.2, you can access and review new features and functionality for each prior release on the [EastCoast Customer Portal](#).

1.1.3 Design to Fabrication Components Overview

The EastCoast CAD/CAM Design to Fabrication software system provides a streamlined workflow that allows users to move from design to fabrication with one set of products.

- **MEP Design to Fabrication** is the tool for converting MEP engineering designs (duct and pipe systems from Revit, or generic AutoCAD MEP duct systems) to Fabrication-ready drawings using automated routines, saving significant fabrication detailing resources and time. MEP Design to Fabrication works inside both Autodesk's Revit and AutoCAD MEP software. Customers have the choice of purchasing their CAD seat(s) with or without an **MEP Design to Fabrication** license.
- **EC CAD** includes several software components. **Fabrication for AutoCAD MEP** software is integrated directly inside AutoCAD MEP, to give users enhanced detailing capability and tools to work with real-world specifications and sizing for duct, and real manufacturer mechanical content. Customers choose to install only the elements of Fabrication for AutoCAD MEP that they are licensed for and plan to use - Pipe, Duct, or Combo (for both Pipe and Duct functionality). **PartManager** is the user interface to the EastCoast manufacturer library and database that is used by Fabrication for AutoCAD MEP, providing easy access and organization and management of all parts, fittings, valves and shop defaults being used for project design. **EC Project** is the software tools and database for transferring As-built Sheet Metal drawings into Revit as native Revit objects. A limited license of **EC DuctMaker** is also included with EC CAD. This limited license provides EC CAD users with the ability to review their fabrication pickoffs in DuctMaker and to gain full CAD and CAM access to the EastCoast manufacturer library and database.
- **EC DuctMaker** is the CAM software tool, providing a fabrication interface used to build a highly-customized duct library that can be shared with design team colleagues, via Fabrication for AutoCAD MEP Sheet Metal. DuctMaker contains a comprehensive library of Oval, Round and Rectangular fittings and duct as well as specialty parts. It accepts Fabrication for AutoCAD MEP pickoff lists, estimating downloads, and allows for more editing if required. The software downloads fittings directly to the shop floor plasma cutters, liner cutters and coil lines, and uses barcode scanners to track the inventory of items during fabrication.

1.2 Compatibility

1.2.1 Operating System

The software was primarily tested under the Windows 10 64-bit operating system. It is also supported under Windows 7, 8 and 8.1.

Note: Support for Windows 10 is new in Version 8.0.

1.2.2 Microsoft SQL Server

The software was primarily tested with Microsoft SQL Server version 2016. It is also supported under Microsoft SQL Server Versions 2008 R2, 2012, and 2014.

Note: Support for Microsoft SQL Server 2012, 2014, and 2016 is new in Version 8.0.

Prior to Version 8.0, the EC Design to Fabrication software was only supported with Microsoft SQL server Version 2008 R2. While there is no need to upgrade to a later version of SQL server to work with Version 8.0 we do recommend planning your upgrade to a newer version of SQL server.

Note: Microsoft SQL Server is not backwards compatible. The database that ships with our program is version 2008 R2. Once you attach it to a newer version of SQL server you will not be able to attach or

use it with an earlier version of SQL. Make backups of your database and plan accordingly before moving to a newer version of SQL.

EC Design to Fabrication software now ships with the installer for SQL Server Express 2016. This version is recommended for all new installations.

For those customers migrating to a newer version of SQL Server, we recommend that you first upgrade your software completely to Version 8.0 and then migrate your Version 8.0 database to the newer version of SQL Server.

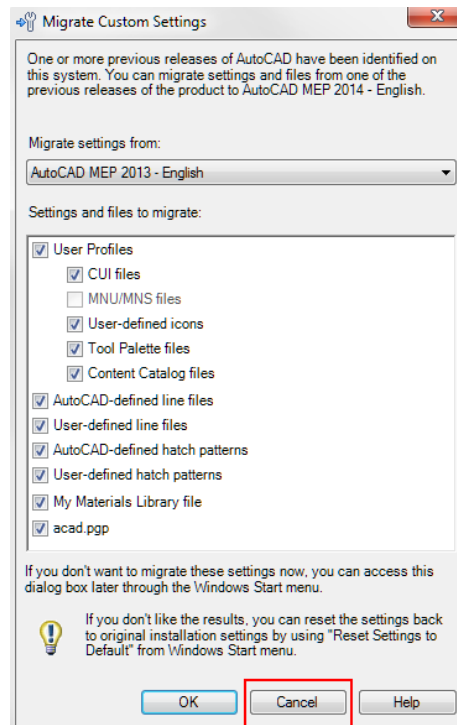
1.2.3 Autodesk Software

This release supports Autodesk **AutoCAD MEP 2018** and **Autodesk Revit 2018** software. It was primarily tested using AutoCAD MEP 2018 Version 8.0.44.0 and Autodesk Revit 2018 Version 18.0.0.420.

AutoCAD MEP Migration Assistant Issue

Autodesk has reported that verticals of AutoCAD, including AutoCAD MEP, should NEVER use the Migration Assistant. Use of the Migration Assistant will cause problems with the software, requiring a complete uninstall and reinstall.

When upgrading AutoCAD MEP, if you are prompted with the Migrate Custom Settings dialog box shown at right, click **Cancel**.



Autodesk Learning Resources

In addition to this document, be sure to review the Autodesk resources listed below to learn more about the features and functionality of the base software which Design to Fabrication runs within:

- **AutoCAD MEP Support and Learning** http://knowledge.autodesk.com/support/autocad-mep/#?p=BLDSYS&p_disp=AutoCAD%20MEP&sort=score
- **Revit MEP Support and Learning** http://knowledge.autodesk.com/support/revit-products/#?p=RVT&p_disp=Revit%20Products&sort=score

1.3 Upgrade Preparation

1.3.1 HASP Key License Update

A HASP key license update will be required for use with this version. The HASP key update must be done first, before updating the software components. Refer to the *Upgrade Installation Guide* or contact Customer Support for information on how to obtain and apply HASP key license updates before upgrading the software.

1.3.2 Backing Up Your Data

IMPORTANT NOTE TO ALL UPGRADE CUSTOMERS: Before installing, remember to create a backup of your database, and any custom content you may have added to the **Styles** and **Template** folders used by Fabrication for AutoCAD MEP, located in the following directories, to retain any customization you may have applied to these files:

C:\Program Data\EastCoast\Fabrication for MEP <version#>\Styles

C:\Program Data\EastCoast\Fabrication for MEP <version#>\Template

For more detailed information on database backup procedures, refer to the following technical document for assistance:

Backing up your SQL Database

<http://ecccusercontent.worldsecuresystems.com/LiteratureRetrieve.aspx?ID=94855>

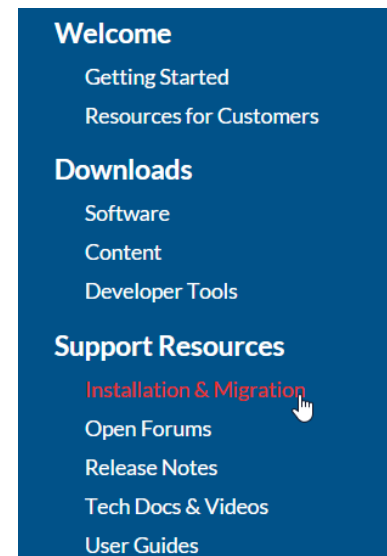
1.3.3 Upgrade Installation Documentation

Customers who have Version 6.5 or higher can upgrade to this version using the instructions in the *Upgrade Installation Guide*, which can be viewed or downloaded from the [EastCoast Customer Portal](#).

Once logged into the Customer Portal, to access Installation documentation, click **Installation & Migration** on the left, and then on the right, select the installation guide that pertains to your installation.

- **Design to Fabrication Upgrade Installation Guide** - For customers who are using one or more components in the Design to Fabrication software system.
- **DuctMaker Upgrade Installation Guide** – For customers who are only using and upgrading EC DuctMaker

NOTE: If you are upgrading from an earlier version than Version 6.5, please contact [EastCoast CAD/CAM Customer Support](#) for assistance.

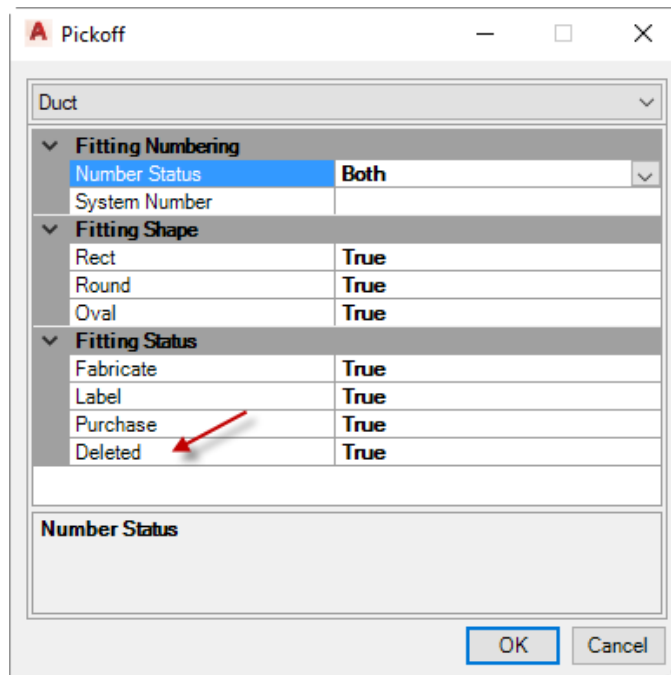
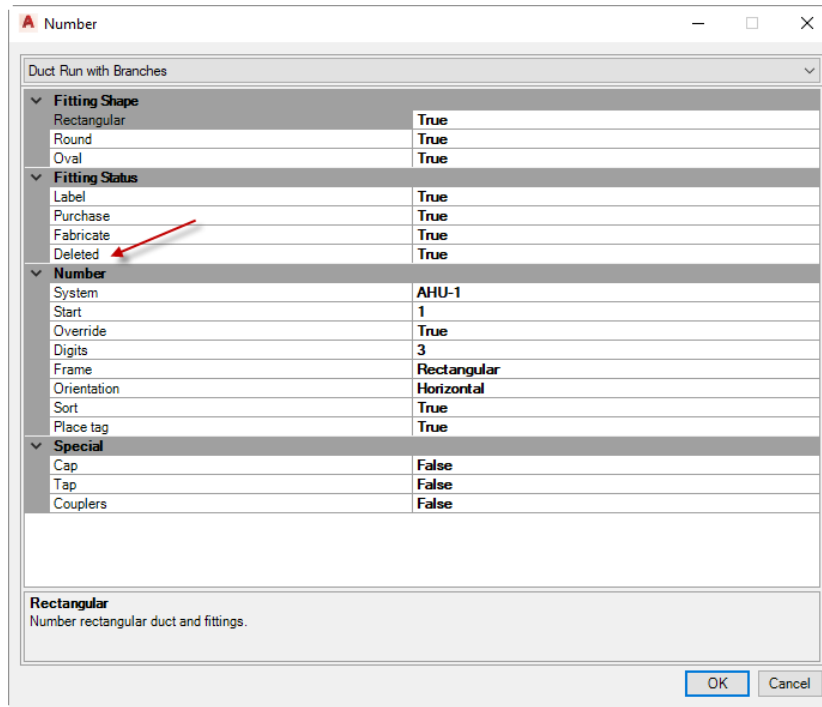


2 EC CAD

2.1 New Features and Enhancements

2.1.1 Deleted Fitting Status Filters for Pickoff and Numbering

The fitting status “Deleted” has been added to the filter selections for both the DuctPartNumber tool and the Pickoff tool.

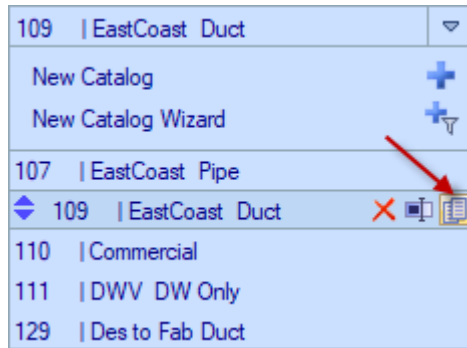


These filters will make it possible to both number and pickoff duct and or duct fittings with a Status of Deleted. This was introduced to accommodate dual wall duct couplings that require an inner wall fitting with no exterior shell. Now you can set your specification to up to have the duct coupling status set to deleted for the exterior and label for the interior for example.

2.1.2 PartManager Duct and Pipe -> Cloning Catalogs

Version 8.0 adds the ability to in PartManager to be able to clone your catalogs. Cloning an existing catalog may be the fastest way to setup another similar catalog. To clone a catalog in PartManager:

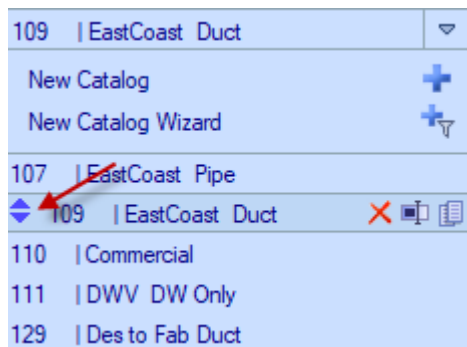
- Select the drop-down arrow in the upper left corner of the PartManager screen to display the list of catalogs, and then select the clone icon for the catalog that you wish to make a copy of.



2.1.3 PartManager Duct and Pipe -> Reorder Catalogs

Version 8.0 adds the ability to in PartManager to be able to reorder your catalogs. To re-order your catalogs in PartManager:

- Select the drop-down arrow in the upper left corner of the PartManager screen to display the list of catalogs, and then select the up/down arrows next to the catalog that you wish to reorder. (Note: this will also reorder the catalogs in the catalog load screen inside of AutoCAD MEP)



2.1.4 PartManager Duct and Pipe -> File Export and Import

Version 8.0 adds the ability to in PartManager to be able to export and import the following file types:

- Environment Configuration Files
- Manufacturer Default Files

- Specification Files
- PartManager Catalog Files

The ability to export and import these file types provides the option to store or archive project data. Should you want to work on the archived project later you can import the necessary files to work with that project.

To export files:

- Environment Configuration Files:
 - Select the export file icon from the lower right corner of the PartManager setup area user interface:



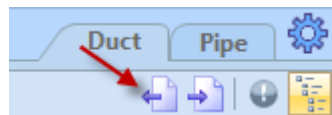
- Manufacturer Default Files:
 - From within the Manufacturer Defaults area of PartManager select the export file icon in the upper right-hand corner of the PartManager user interface:



- Specification Files:
 - From within the Specification area of PartManager select the export file icon in the upper right-hand corner of the PartManager user interface:

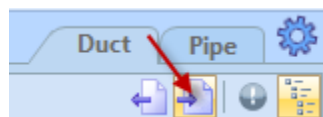


- Catalog Files:
 - Select the export file icon in the upper right-hand corner of the PartManager user interface:



To import files:

To import these files back into PartManager select the import file Icon from the upper right corner of the PartManager user interface:



Choose the file type to import, select the file, and select Open:

DM/PM - Environment Configuration File (*.ecc)
 DM/PM - Manufacturer Defaults File (*.md)
 DM/PM - Specification File (*.spec)
 PM - Catalog File (*.cat)

2.1.5 Saddle Property Set added to ECDuctSystemData

The manual property set “Saddle” has been added to ECDuctSystemData. It will display saddle information for taps and can be used with tags and schedules.

2.1.6 Specification and Manufacturer Default Improvements

- New Specifications for Oval have been added to the out of the box database.
 - 0 to 10 in WG Pos Oval Flange
 - 0 to 10 in WG Pos Oval Slip
 - Oval (Dampers-Misc-Access Panels)
- The out of the box Rectangular, Round, and Oval Manufacturer Defaults have been revised and improved.

2.1.7 Updated Pipe Content

Bonney Forge Content

This content has been added to the EC-CAD Version 8.0 Software. The following Product Lines and fittings are provided:

Bonney Forge Forged Fittings and Unions	Bonney Forge Branch Connections
Adapter	Weld Let
Cap	
Coupling	
Cross	
Elbow	
Tee	
Union	
Weld Let	
Wye, Lateral	

Fitting Groups and Filters

To assist in locating new content, you can use the filters in the table below to locate each product line, and if desired, build unique fitting groups for each.

The suggested filters listed below are intended to isolate the entire product line. More filtering may be required to further adjust the groups for optimal routing preference setup.

Product Line	Suggested Fitting Group Name	Filters to Use
Bonney Forge Forged Fittings and Unions	BF Forged Steel	Bonney Forge Forged Fittings and Unions (Product Line)
Bonney Forge Branch Connections	BF Branch Conn	Bonney Forge Branch Connections (Product Line)

2.2 Resolved Issues

2.2.1 AutoTag issue on Taps when Drawing Right to Left

AutoTag was not tagging consistently for all taps. This issue was corrected.

2.2.2 Tap Length Adjustments for Offset from Center Taps

AutoCAD MEP adjusts the tap lengths when you place them off center. This adjustment was making their coordinated model lengths incorrect as compared to the as installed tap lengths. EC CAD now adjusts the tap lengths correctly for proper and accurate coordination.

2.2.3 UpdateIfModified Button Removed from Pickoffs

UpdateIfModified was an available option within pickoffs but has no functionality for pickoffs. This button was therefore removed from the user interface.

2.3 Known Issues

2.3.1 AutoCAD MEP Object Viewer Liner and Insulation Display

Liner and insulation will not display correctly on Round and Oval Gored Elbows, Radius Elbows, and Ogee Transitions when viewing them via the AutoCAD MEP object viewer.

2.3.2 Duct Routing Performance

You may experience some jumpy cursor movement when routing depending on the complexity of your duct specs and the performance of your computer hardware.

2.3.3 Insulation Display on Attached Views and XREF Files

Insulation will not display correctly on Round and Oval Gored Elbows, Radius Elbows, and Ogee Transitions on attached views and XREF files.

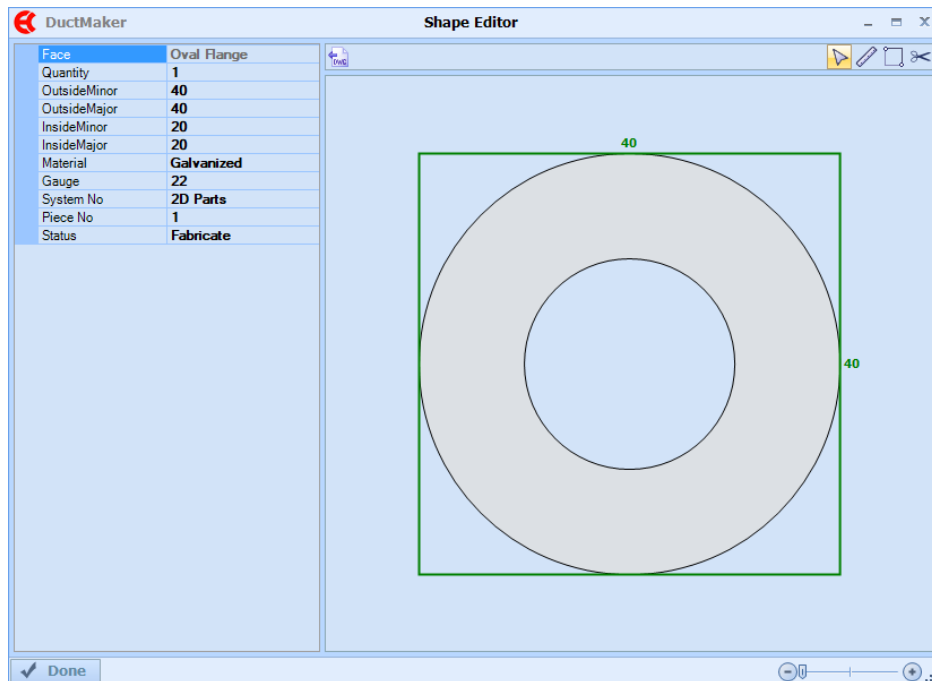
2.3.4 Oval Duct Display in AutoCAD MEP

In AutoCAD MEP 2017, oval ducts with flange thickness display an extra line in plan view for certain dimensions. This is a known issue in AutoCAD MEP 2017 and it has been reported to the Autodesk development team.

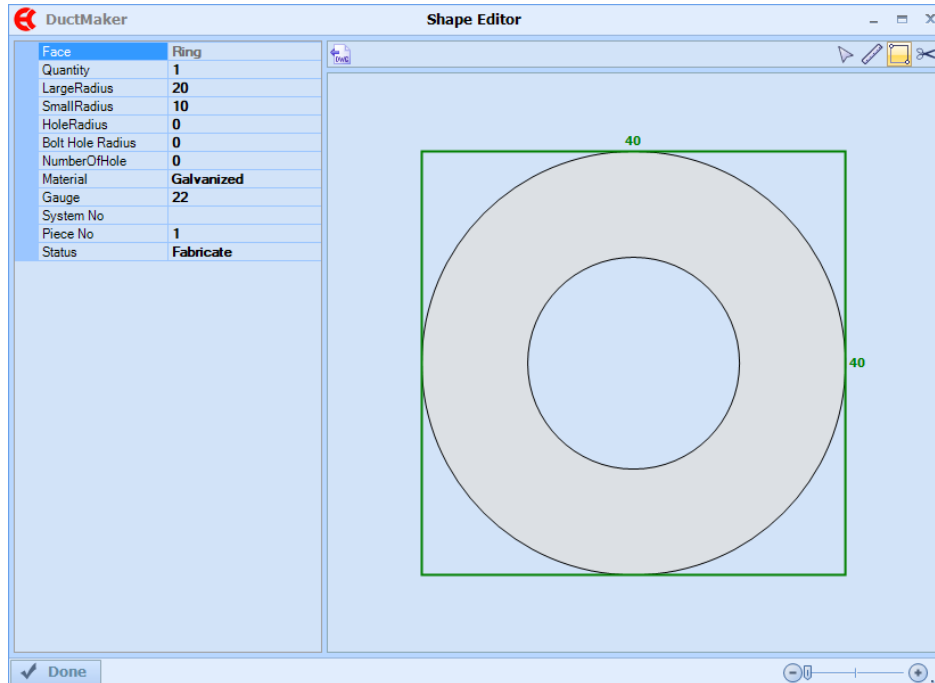
3 DuctMaker

3.1 New Features and Enhancements

3.1.1 DuctMaker Parts -> The Oval Flange Now Allows the Majors to Equal the Minors



3.1.2 DuctMaker Parts -> The Ring Now Allows NumberOfHole Parameter to Equal 0



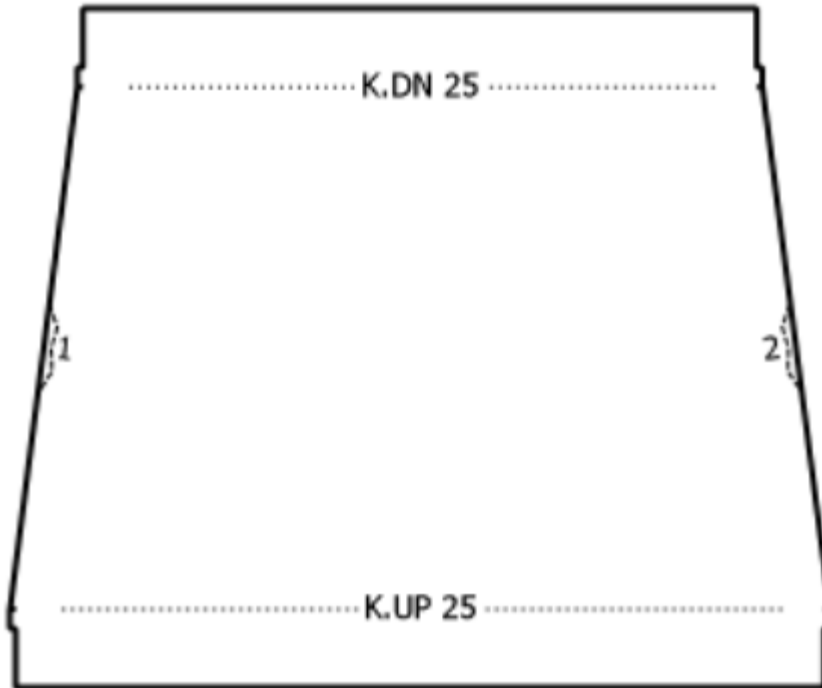
3.1.3 Import Estimate File -> Unknown Parts Will Produce a Warning

When you import an estimate file DuctMaker now allows the file to contain unknown parts. During the import you will receive a warning for these parts and they will be skipped and not imported.

3.1.4 New Shop Policy Option -> Flip Label Bend Instructions

A new option named Flip Label Bend Instructions has been added to the Shop Policies that allows you to flip the bend instructions that are provided on the 2D Labels. If you are placing the label on the inside of the duct for example it may be better to have these instructions flipped.

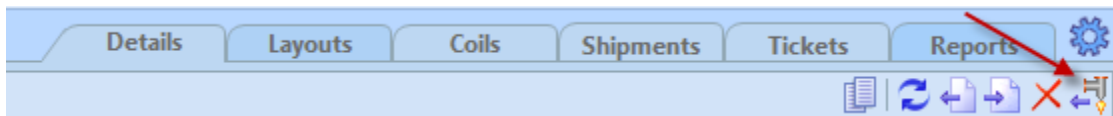
Properties	
General	
Defaults	Expert Mode
Specification	Expert Mode
Piece number minimum digits	3
Show Ranges	True
Tracking Enable	False
Tracking Override	False
Projected	True
CenterlineInput	False
Flip All Metal	False
Flip All Liner	False
Flip Label Bend Instructions	False
Apply specifications	True
Apply manufacturer defaults	True
Adjust last gore's length	False



3.1.5 Support for Vicon Spiral Pipe Cutting System

DuctMaker now integrates with the Vicon Spiral Pipe Cutting System. Any Round Spiral or Round Spiral Rib duct with Tap, Panel, or Access holes can now be exported out of DuctMaker. The Vicon Spiral Pipe Cutting System can then be used to cut the Tap, Panel, and Access holes in the round duct.

To export the Round Spiral or Spiral Rib duct that contains holes from DuctMaker you select the Vicon Cutter Export button from the Details screen in DuctMaker.



This will create an XML file that can be loaded into the Vicon Spiral Pipe Cutting System.

3.2 Resolved Issues

3.2.1 Agent Not Working on Windows 7

Agent now works properly on Windows 7, 8, 8.1 and 10

3.2.2 Convert Tap Joint Functionality Not Working

Convert Tap Joint functionality is now working properly again.

3.2.3 Custom Report -> Column Width Values Not Saving

Column width values were not saving correctly for some parameters. This issue has been corrected.

3.2.4 Dampers -> Specification Issue with Material, Gauge, and Status

The dampers that were added to duct or duct fittings were reading the material, gauge, and status from their host. This issue has been resolved.

3.2.5 Formula Based Manufacturer Defaults in DuctMaker

The formula based manufacturer defaults were not working properly in DuctMaker. This issue has been resolved.

3.2.6 Import Estimate File -> Allowance Mapper Duplicating the Line for Mapping to "NO ACC LINING"

The mapping line for "NO ACC LINING" was being duplicated in the allowance mapper file each time a new file was imported. This issue has been resolved.

3.2.7 Round and Oval Equivalence Table Not Saving when Sorting is On

Changes made to the Round and Oval Equivalence Tables were not being saved when one of the columns had ascending or descending sorting applied. This issue has been corrected.

3.2.8 Specification Label Color Schema Button Not Working

The Specification Label Color Schema button was not working in one customer database. This issue has been corrected.

3.2.9 Square to Round -> Connector Notches Disappear

Specific values were causing the connector notches to disappear on the Square to Round fitting. This issue has been corrected.

3.2.10 Vicon Type 1 Cutter Driver Removed

It was verified with Vicon that the Vicon Type 2 Cutter Driver was preferred and so the Vicon Type 1 Cutter Driver has been removed from the system.

3.3 Known Issues

3.3.1 CenterLineInput = FALSE

CenterLineInput in the **Shop Policies** is currently not working as expected when it is set to **TRUE**. We have set the CenterLineInput in the database to **FALSE** and recommend the user to set CenterLineInput to **FALSE** until it is implemented in a future release.

3.3.2 Duct Dimension Rule for Taps on Existing Specifications

We have removed the **Duct Dimension** rule from the taps portion of the specification, but some users may already have a specification setup that has taps using the **Duct Dimension** rule. The existing **Duct Dimension** rules for taps will still work as expected, but we recommend deleting these rules and creating new rules that use the new specification rule **Duct Dimension Outlets**.

3.3.3 Specification Export

If a specification has shapes turned off in the **Specification Options** and was exported using an earlier version than version 7.0, the specification will import into DuctMaker ignoring your **Specification Options** and all 3 shapes rectangular, round, and oval will be turned on. The **Specification Options** will need to be manually modified.