SysQue v8.0

This document provides information about new features and modifications in the latest release of Trimble® SysQue®. More detailed information can be found in the online help system here.

Introduction

These release notes describe the features and enhancements that are new for the major installer release dated 2020-09-07. For additional assistance, please use the live chat feature on the online help system, email mepsupport@trimble.com, or call 1-800-234-3758.

To download the latest release, log into SysQue support forum here.

Compatibility

Autodesk software

SysQue v8.0 is compatible with currently supported Autodesk versions of Revit: 2021, 2020 and 2019. New features will be available for these three versions. SysQue installed for Revit 2018 will continue to function as installed.

SysQue for Revit 2017 will be uninstalled if SysQue version 8 is installed on that workstation.

Please see the Revit 2021 system requirements, *Performance: Large, complex models* section for recommended system requirements. If you run Revit/SysQue on a system with lower specifications you will not realize the full productivity of the software due to slower system performance.

Please also ensure that you have the latest version of Dynamo installed.

Windows

SysQue is compatible with 64-bit Microsoft® Windows® 10.

Backwards compatibility

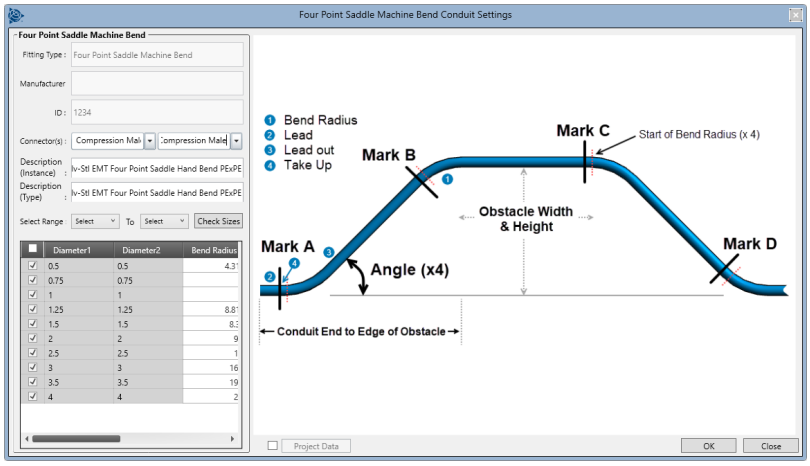
Digital models produced in Revit & SysQue cannot be saved to or opened in prior year versions.

Version: 8.0
Date: September 2020

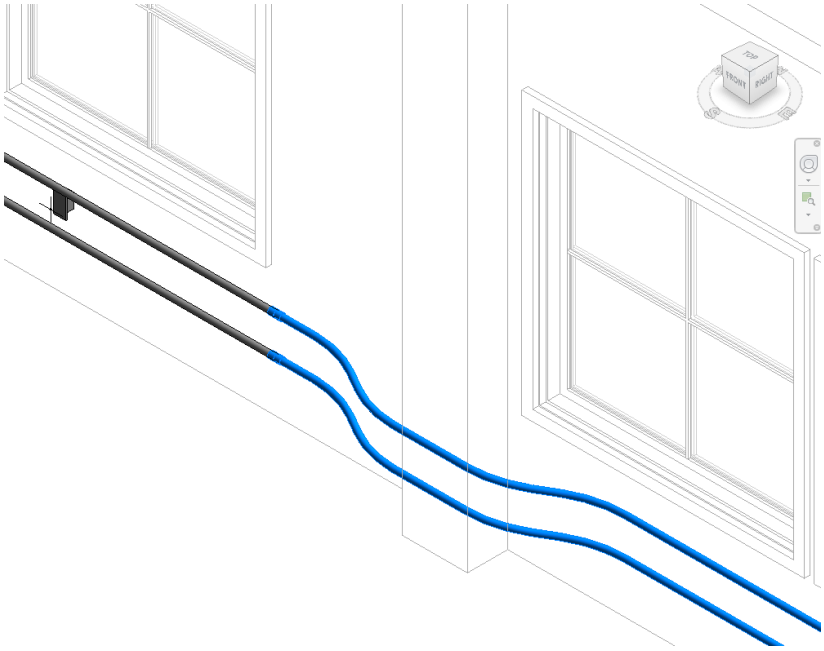
New Features, Enhancements, and Updates

Summary of Improvements & Business Value	This release contains improvements to the **Electrical, Pipe, Duct**, **PAC**, and **BOM** applications in SysQue. ● Revit 2021 compatibility for improved project coordination. ● Electrical has additions to content and modeling capability for streamlined prefabrication, improved 3D coordination, and modeling productivity. ● Pipe has improved connector types and content to allow for more accurate representation of your Mechanical Joint, and Flanged systems. ● Duct contains improved rectangular duct straight workflows with Trimble FabShop to optimize communication between detailer and fabricator. ● BOM has added Trade Service pricing to provide greater flexibility for procurement. As a result of these changes, SysQue is faster, more reliable, more feature rich, and easier to use across multiple areas of the application. Please visit the Trimble MEP YouTube Channel for all the latest SysQue product videos, SysQue v8.0 videos and the SysQue 101 Series videos. Please subscribe to the channel to keep up to date on the latest SysQue news.
Electrical	For the SysQue version 8.0 Electrical application comes with a multitude of enhancements to content and modeling capability for streamlined prefabrication, improved 3D coordination, and modeling productivity. ● EMT and RMC versions of four and three point saddles will equip the team with content to model complex installation scenarios and to help in 3D coordination. Machine bend and hand bend saddles provide streamlined prefabrication data for field bends by providing spooling sheets that identify exactly where to mark the conduit for bends or automating machine benders. ● Define values in the included Revit families for lead, lead out, bend radius, take up, distance from end of conduit to your obstacle, obstacle height and bend angles to get the exact results you desire. ○ Four Point Saddle Hand Bend ○ Four Point Saddle Machine Bend ○ Three Point Saddle Hand Bend ○ Three Point Saddle Machine Bend ● Hand bend default values are from the **Kline** hand bender. You can edit the Hand Bend families and enter the values for the hand bender you are using. ● Machine bend default values are from the **Greenlee 555** and confirmed up to size 2” conduit. The Take Up value is undefined from 2-½” to 4” (as the Greenlee 555 does not bend greater than 2”). You can edit the Machine Bend families and enter the values for the machine bender you are using. ● Note: For this release runs that contain a saddle, conduit length, wire length and bend angle will not appear in reports for the saddle and will be addressed in a future release. Other conduit and fittings in the run will report properly.

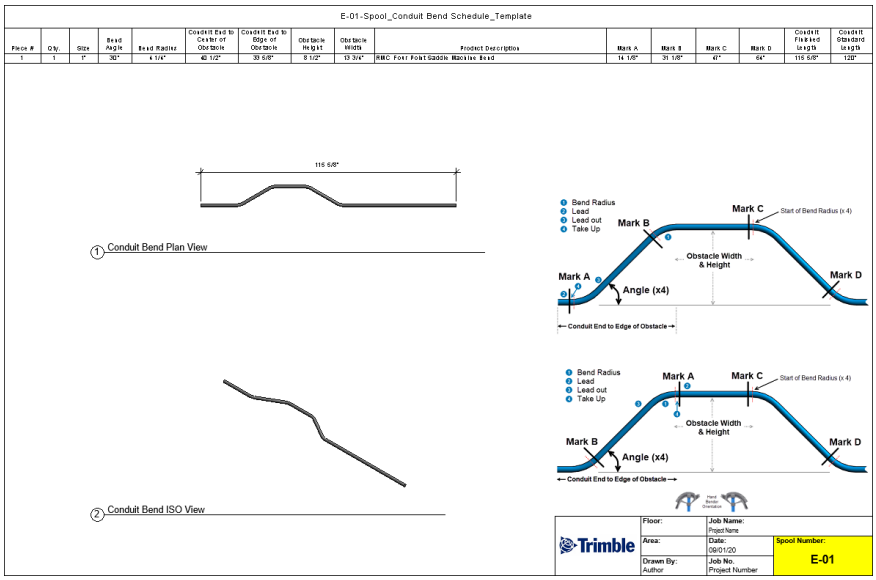
Machine Bend Dialog for setup of Bend Radius, Lead, Lead Out and Take Up values



Four Point Saddle routing around and obstacle



Four Point Saddle Spool Sheet for Prefabrication



- Auto Reducing - SysQue conduit will auto reduce upon size change. This will save time by reducing the number of clicks to draw a different conduit size from an existing conduit and have a conduit body automatically inserted.
    - In previous versions of SysQue if you wanted to change sizes coming out of a conduit body you had to insert a coupling, change it to a Reducing Bushing and then move that back to the conduit body.
    - For v8.0, simply draw the size of conduit you desire from the existing conduit. A conduit body and reducing bushing are inserted and the smaller conduit is drawn, drastically reducing the number of clicks needed.

Please visit the Trimble Community for more information on Piping for SysQue and the Trimble MEP YouTube Channel for all the latest SysQue Piping product videos.

Pipe

For Pipe in SysQue v8.0 we have expanded on Mechanical Joint pipe and Flanged pipe for an improved user experience.

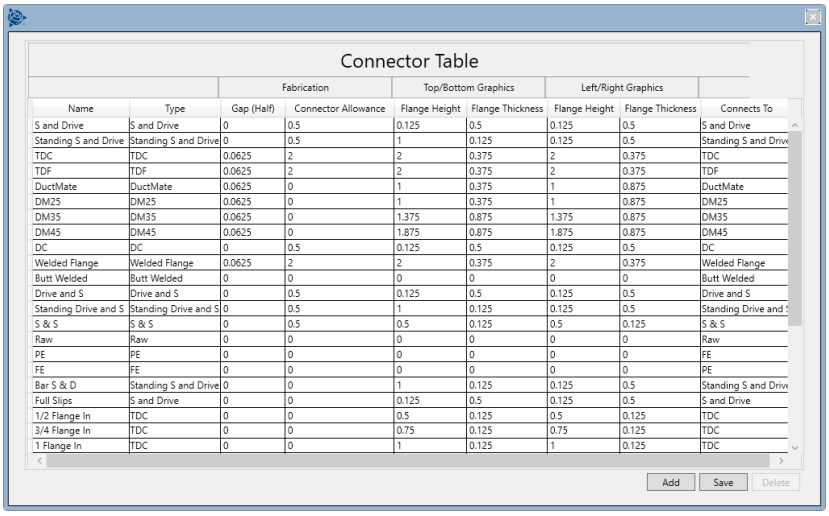
- Updated Mechanical Joint (MJ) fittings, connectivity, connection types, new connectors, graphics, new gasket user interface make for a completely updated MJ Pipe experience.
    - Mechanical Joint pipe is applicable to:
        - Underground, pressure pipe system
        - Allows for deflection while maintaining seal
        - Often larger diameter
        - New method works with the Megalug as well
    - PE x PE (Plain End x Plain End)
        - Utilizes sleeve for pipe-to-pipe connections
        - Improved connectivity and fittings needed for this connection type
    - PE x Hub
        - Allows for a Plain End to mate with the bell end of the pipe

	■ Improved connectivity and fittings needed for this connection type ○ Gasket Thickness ■ New UI allows for configuring gasket thickness based on the diameter of the pipe it is being placed on ○ Gland Adjustment ■ New parameter allows for Gland set-back adjustment ● Flange Pipe Connectivity ○ Gasket to minimum value thickness ■ A gasket that is too thick in a flange joint will increase the surface area resistance against the fluid pressure. Potential failures may appear. For this reason, as a general rule: the thinner the gasket the better. Gasket thickness is available down to 1/32” now. ■ Simply modify the gasket family to allot the proper gasket thickness and model with this new value ○ Pipe to edge of flange(0” setback) ■ 8.0 Offers a modifiable setback that allows for a setback value of 0” now. The pipe will model all the way to the end of the flange allowing for accurate pipe lengths. ○ Raised Face and Flat Face options ■ UI addition to designate where you want to draw with a Raised Face vs. Flat Face flange Please visit the Trimble Community for more information on Piping for SysQue and the Trimble MEP YouTube Channel for all the latest SysQue Piping product videos.

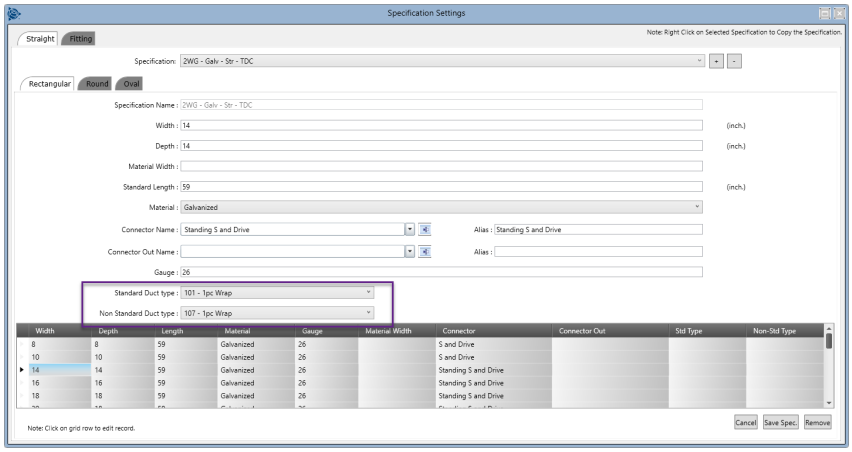
Duct

The following improvements have been made to the Duct application:

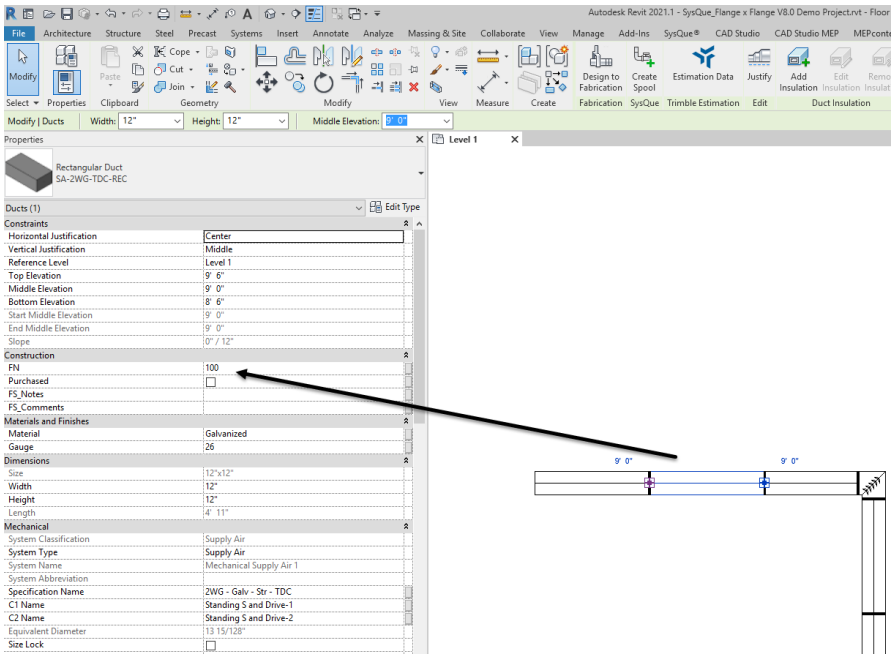
- New Graphic Duct Connectors - Allows for a more accurate representation of connectors in your model for improved 3D coordination.
    - Connector Table
        - Configure custom connector table to designate material take up allowance and graphics for connectors
        - Spec your metal size and allow connector allowance to determine the full duct lengths.
        - Unlimited number of defined connectors with unlimited options for graphic representation



- FN (Fitting Number) # application
    - New spec settings allow for the application of direct FN # to match up directly with Fab Shop values.
    - Ability to create a schedule of duct staraights for fabrication.



    - Automatic is still available as an option, if needed.



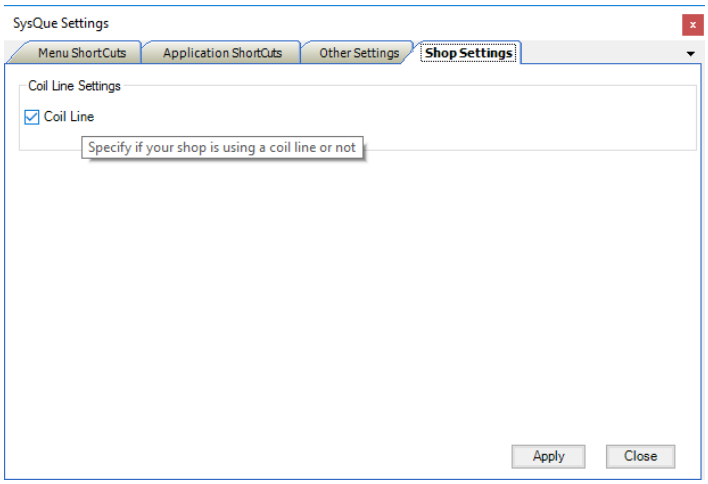
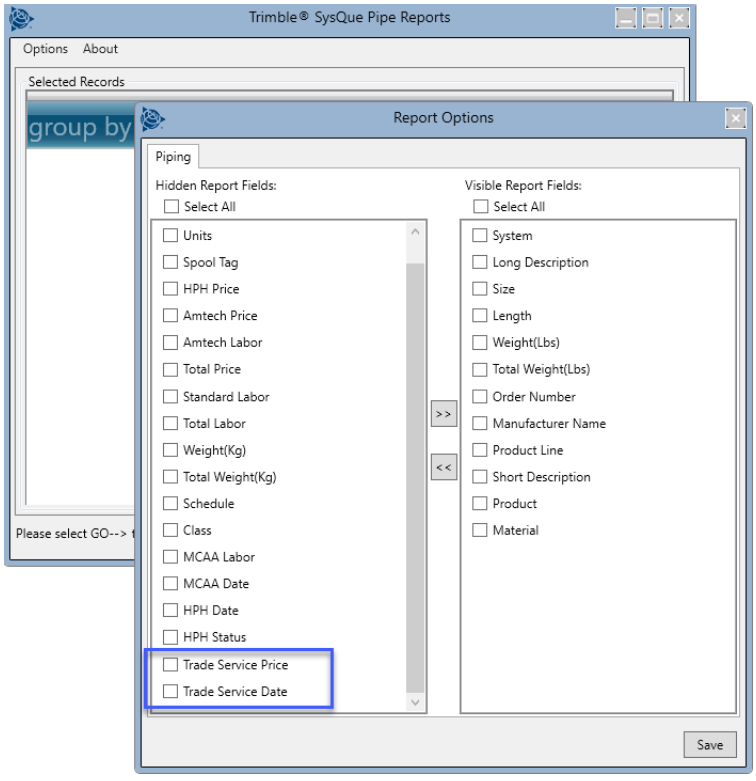
- 5 new User Scopes added to the SysQue Duct to allow for improved label creation within Fab Shop.
    - FS_Notes
    - FS_Comments
    - FS_System
    - FS_Floor
    - FS_Drawing

Please visit the Trimble Community for more information on Duct for SysQue and the Trimble MEP YouTube Channel for all the latest SysQue Duct product videos.

PAC

The following improvements have been made to the PAC application for improved coordination with your fabricator.

- Improved transparency to display the actual Duct type that is being sent to Fab Shop. Now you will know what you're sending, before you send it.
- Coil Line shop setting
    - Standard vs. Non Standard Duct options allow you to send your items to a shop with, or without a coil line.
        - If no coil line table is available for fabrication with Fab Shop, then this option will send all duct straights to the cut table FN values.

	
BOM	The following improvements have been made to the BOM (Bill of Material) application: ● Addition of Trade Service pricing to the SysQue Bill of Material for more pricing and procurement options in your BOM and real-time pricing. 

Installation Notes:

- MEPcontent apps for Revit 2021 are limited to *Openings for MEP* and *Productivity Tools* at this time.
    - Please check the MEPcontent Store for the availability of *Excel Import & Export* Revit 2021 version availability.
    - *Electrical Schematics* app has been discontinued for Revit 2021 and onward. For more information, please email doug_elliott@trimble.com.
    - All four apps are included in the SysQue v8.0 install for Revit 2019 and Revit 2020.

Defect Fixes of Note:

- Spooling 2.0 was released in SysQue v7.3 and has had any known defects resolved in SysQue v8.0.
    - Reducers are properly assembled
    - Nipples and unions are properly spooled
    - Issue of spools missing from PreFab manager is resolved
    - "Everything Off" filter issue is resolved fixing an issue with visibility in some spools
    - 10’ lengths of conduit are only tagged once in a spool.
    - Support for additional special characters: - Dash, _ underscore, " Quote, ' Single Quote.
- (Duct) Auto tag for duct properly uses corner nodes when tagging duct fittings.
- Electrical Discipline
    - Calculate Hanger Rod no longer changes tray rung spacing
    - Push parameters through conduit runs works as expected when:
        - Manually adding couplings
        - Using the place couplings tool
        - Using the trim/extend command
        - Upon modifying a run
- Multiple Discipline
    - "Layer" parameter is now getting applied to custom families with "User Defined Point.rfa" inserted.
    - Custom content properly populates point data in the Point Manager.
    - Arranging tiles on the pipe, duct and electrical palettes is fully supported.

Legal Notices

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Release Notice

This is the September 2020 release of the Release Notes. It applies to version 8.0 of the SysQue software.

It pertains to the release noted elsewhere in this document. The topics within this document are subject to change without notice. Screenshots included may not be exactly as in the software application.