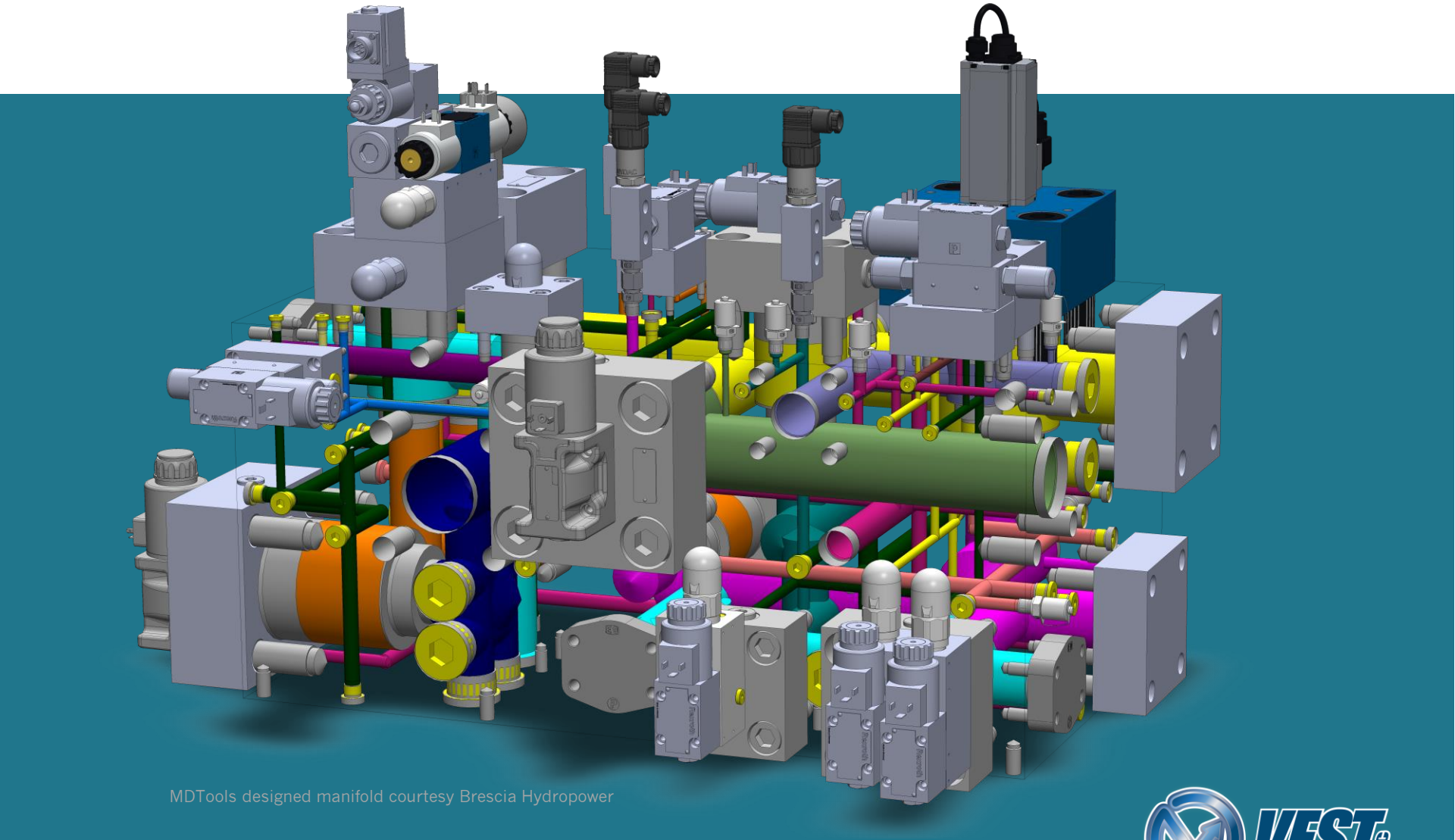
MDTools® 770 What's New



MDTools designed manifold courtesy Brescia Hydropower

MDTools® 770 What's New

Design Checks

Locate Connection Problems
Locate Wall Thickness Errors
Locate Broken Nets
Check Wall Thickness around Undercuts and Slots

Resize Block

Through Bolt Holes depth updates automatically

Move

Move Cavity with reference to another Cavity

O-ring Groove

O-ring Groove ID independent of the Parent

Machining ID

New Machining ID Format i.e. A1, A2, B1, B2, B3…

Machining Chart

Set Precision for Diameter
Display Cavities Location coordinates (X,Y) in separate columns
Specify Decimal Separator for Machining chart

Orifice Plugs

Import Orifice Plugs from HyDraw
Assemble Orifice Plugs
Assemble Orifice Discs

Assemble Component

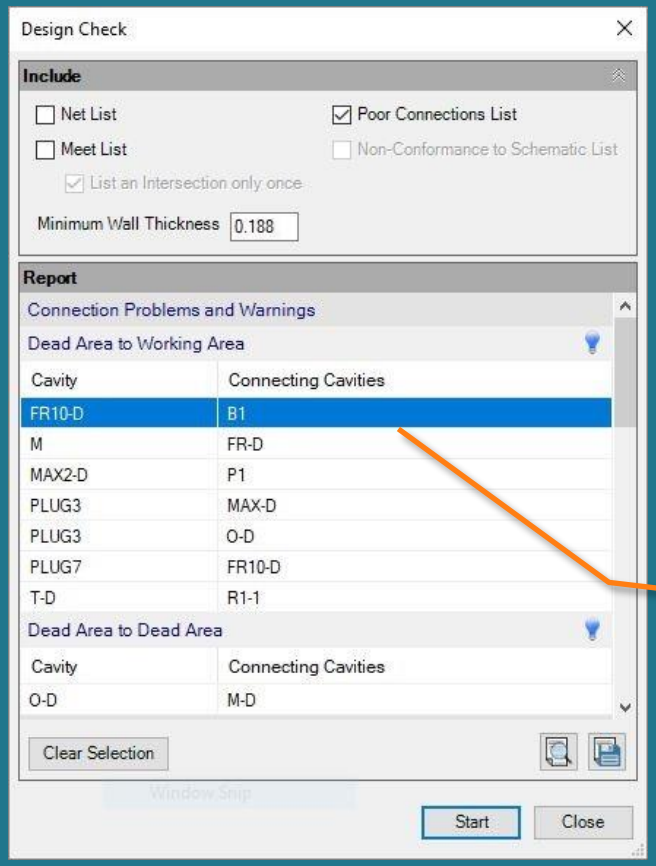
Autodesk Vault 2018 Compatible

Miscellaneous

Preview while Adding Drill to a Cavity
Move Multiple Cavities using Scroll Bars

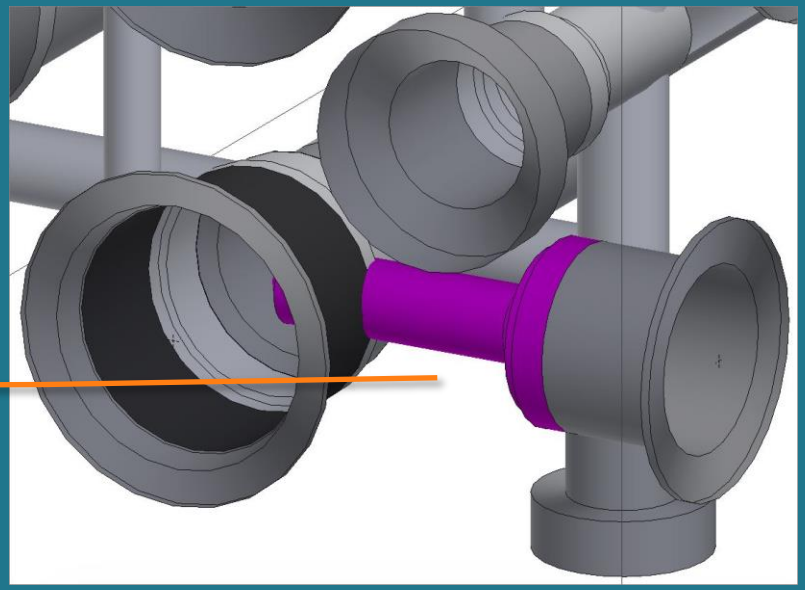
Locate Connection Problems

Option selected*



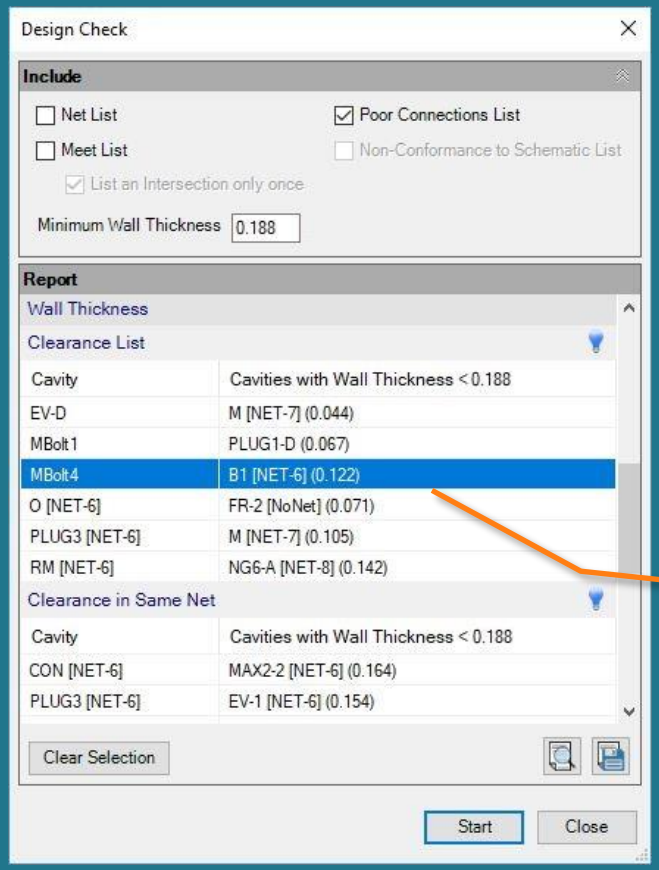
On a single click, MDTools colors the selected issue.

On double click, MDTools zooms into selected issue

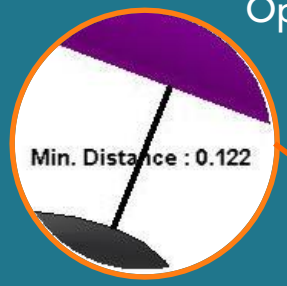


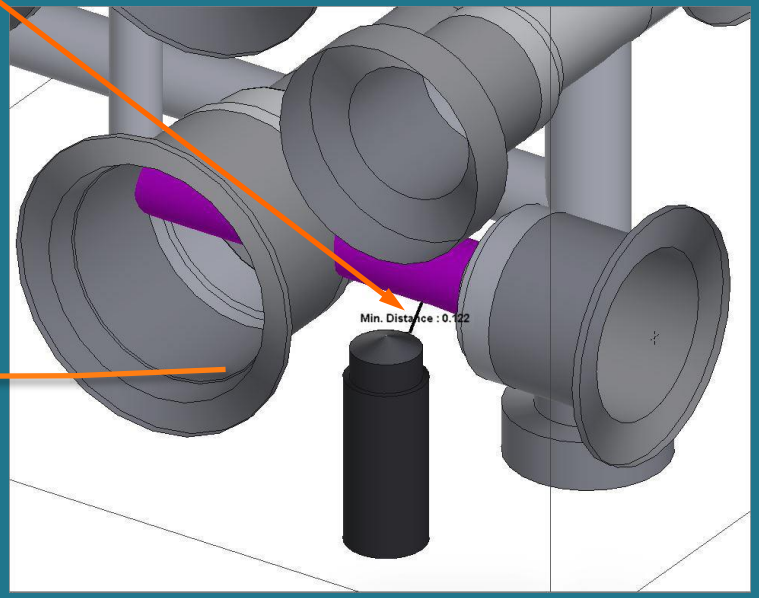
* Default Design Error option is 'Highlight Selected Cavities'
WARNING: Option shown here can be time consuming to process for large manifolds.

Locate Wall Thickness Errors



Option selected*





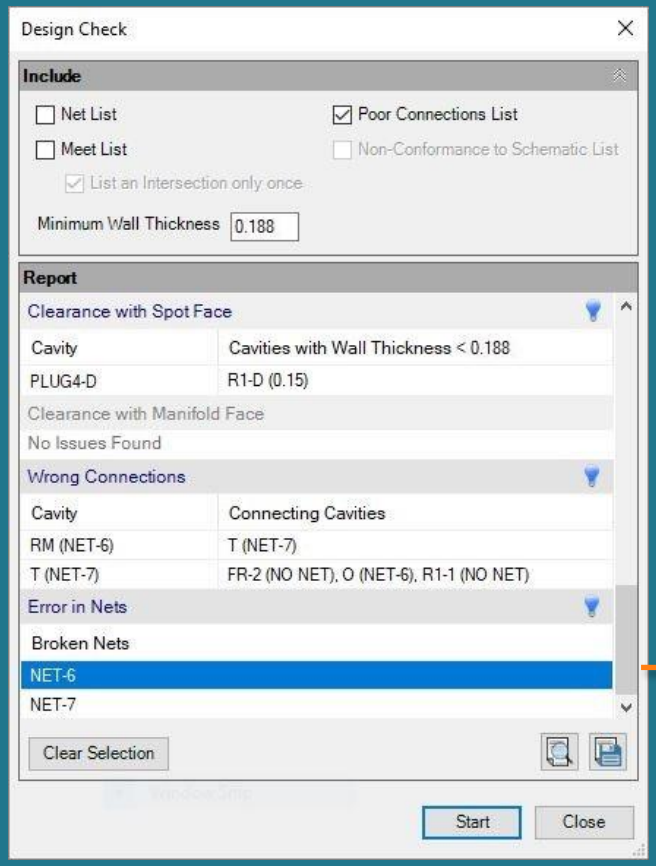
On a single click, MDTools colors the selected issue

On double click, MDTools zooms into selected issue

* Default Design Error option is 'Highlight Selected Cavities'
WARNING: Option shown here can be time consuming to process for large manifolds.

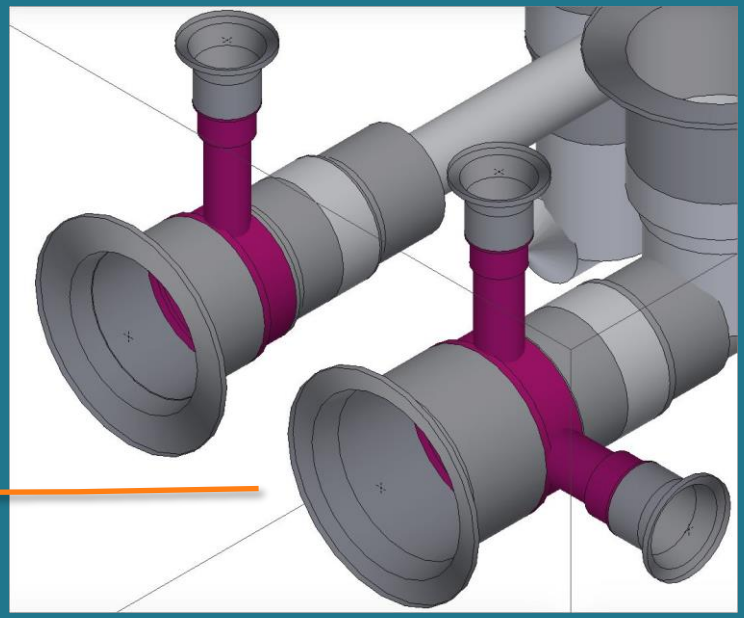
Locate Broken Nets

Option selected*



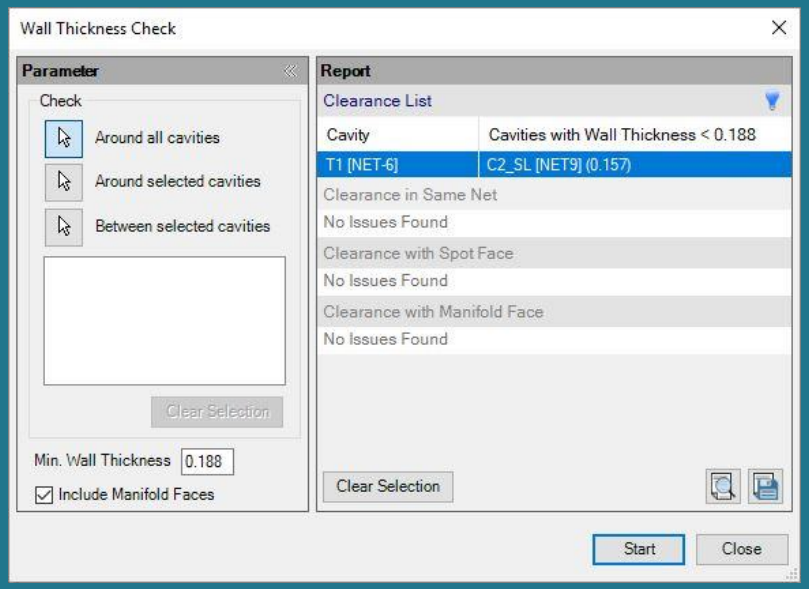
On a single click, MDTools colors the selected issue

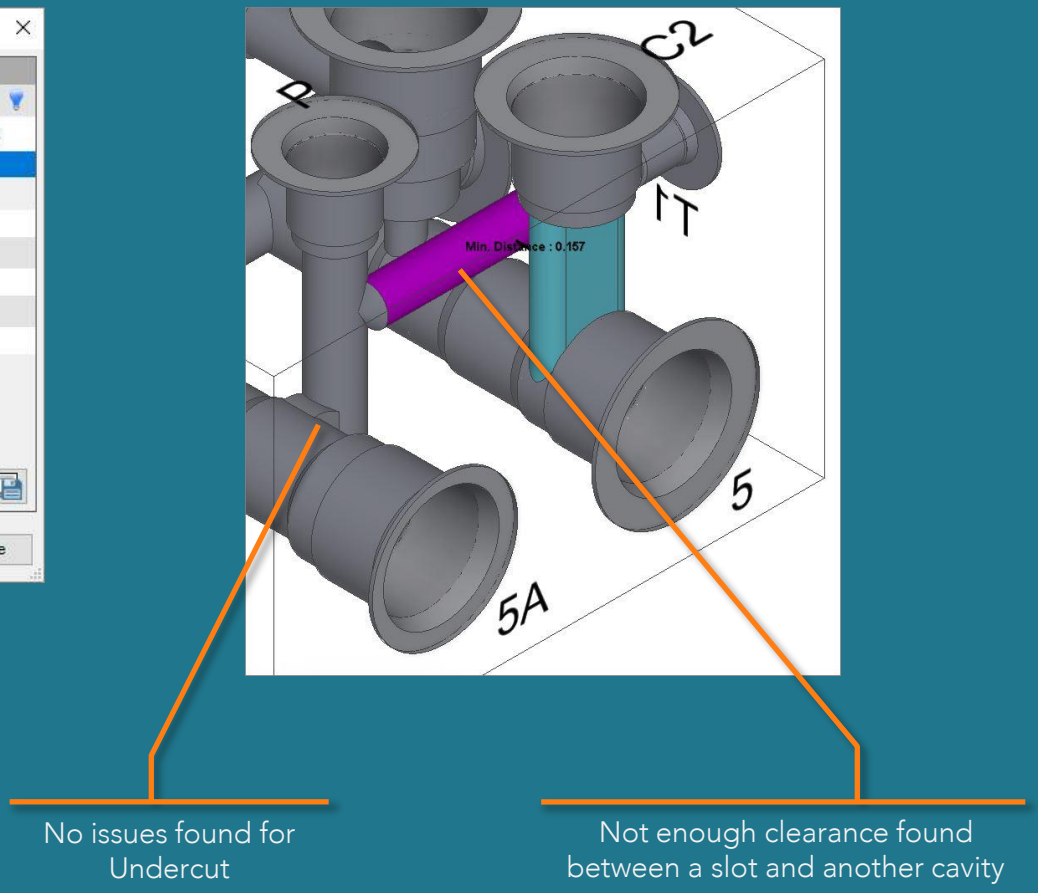
On double click, MDTools zooms into selected issue



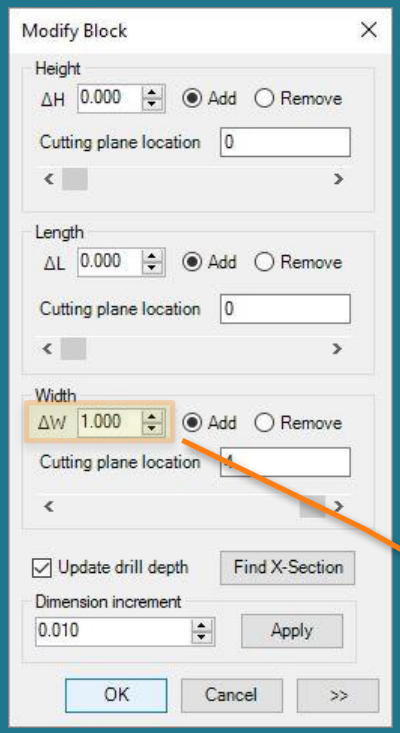
* Default Design Error option is 'Highlight Selected Cavities'
WARNING: Option shown here can be time consuming to process for large manifolds.

Check Wall Thickness around Undercuts and Slots

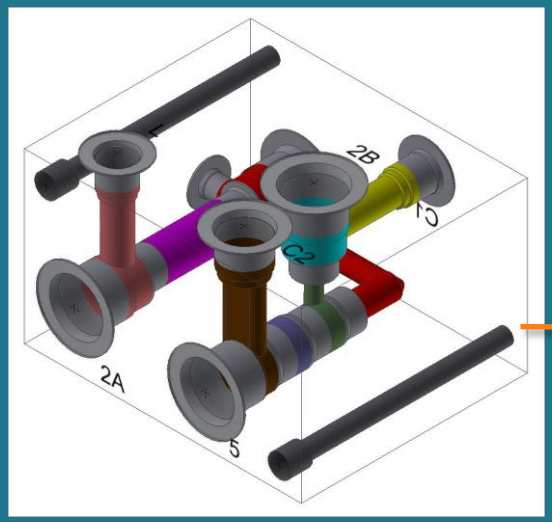




Through Bolt Holes depth updates automatically

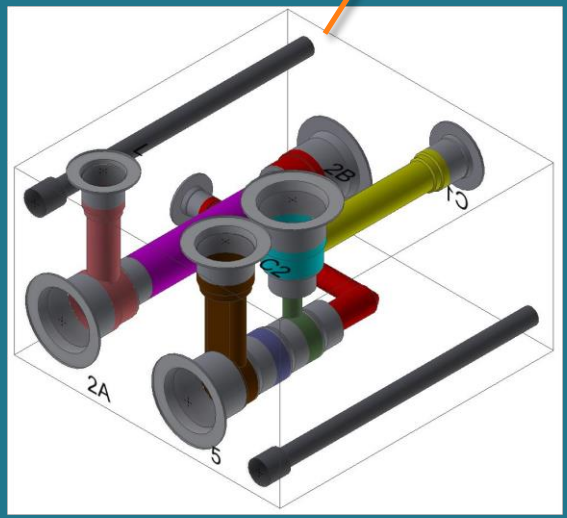


Resize Manifold Width



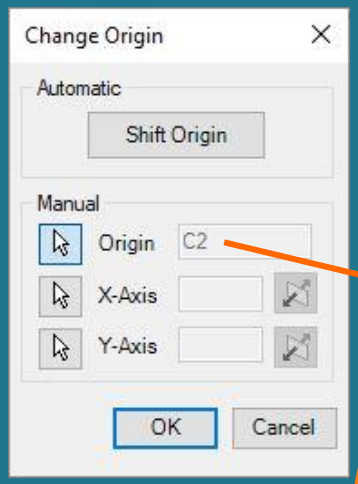
Before Resizing

After Resizing

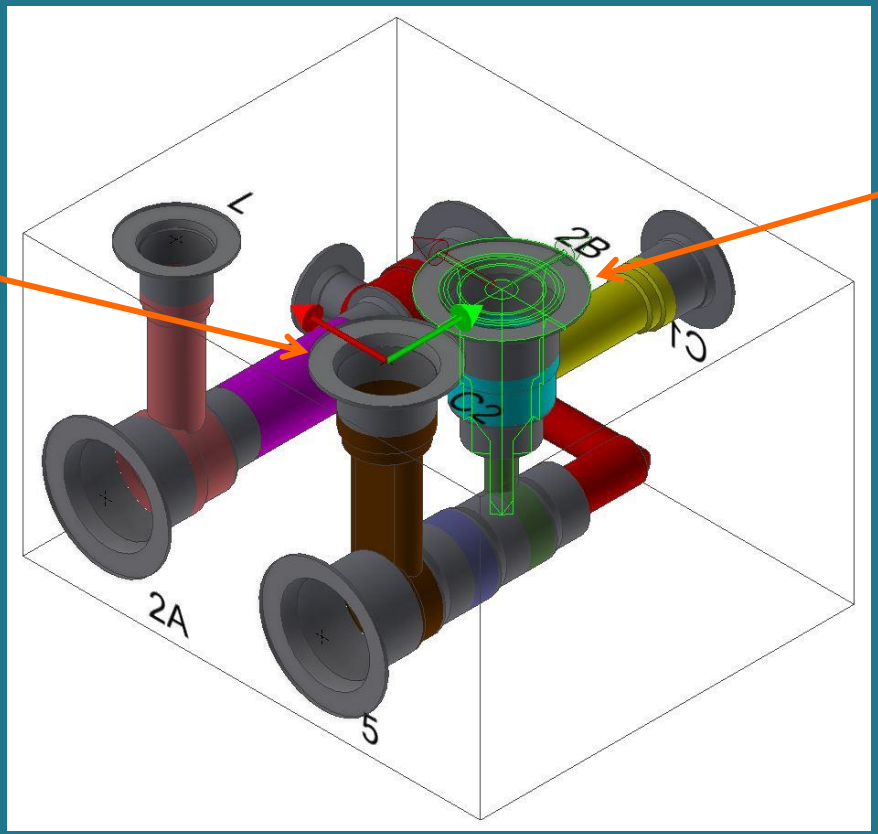


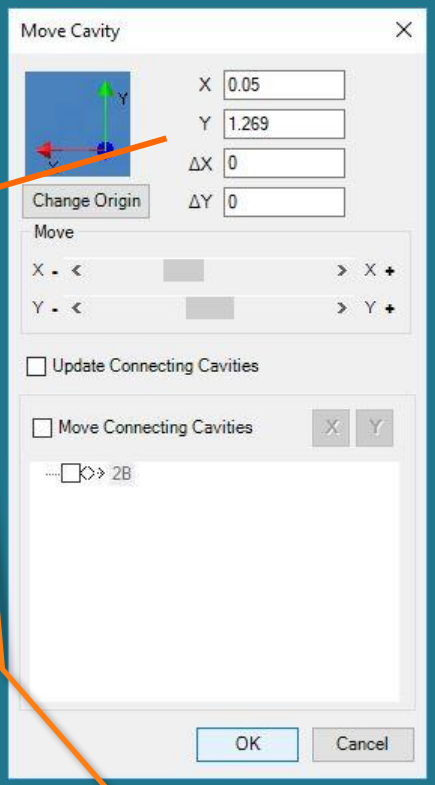
Note: Through Cavities depth also updates automatically after resizing the manifold.

Move Cavity with reference to another Cavity



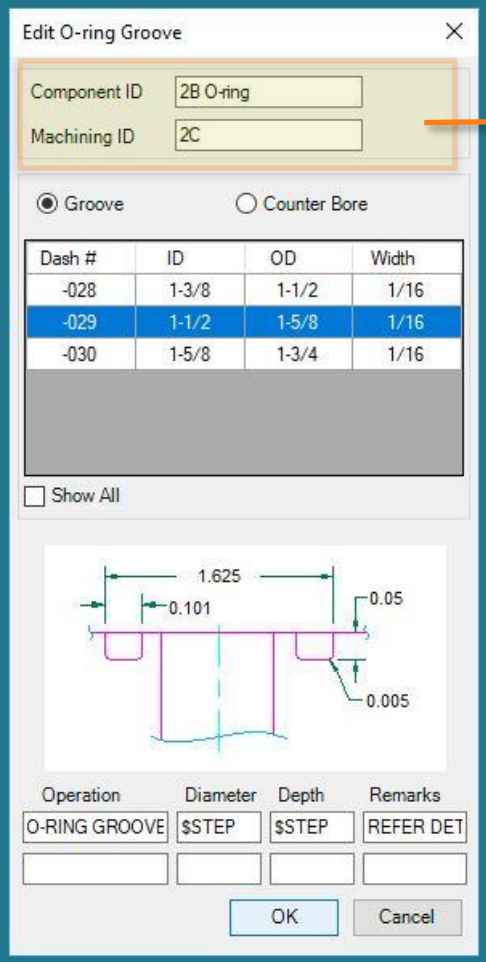
Change Origin by Selecting a Cavity





Move Cavity with reference to Selected Cavity

O-ring Groove ID independent of the Parent



Edit O-ring Groove ID

Option selected*

Name	Operation	Diameter	Depth
2B	DRILL	0.250	2.000
	C10-2	1.344	0.031
	O-RING GROOVE	1.625	0.050

If option is **unselected:**
O-ring Groove machining sequence merges with the parent cavity

Name	Operation	Diameter	Depth
2B	DRILL	0.250	2.000
	C10-2	1.344	0.031
2C	O-RING GROOVE	1.625	0.050

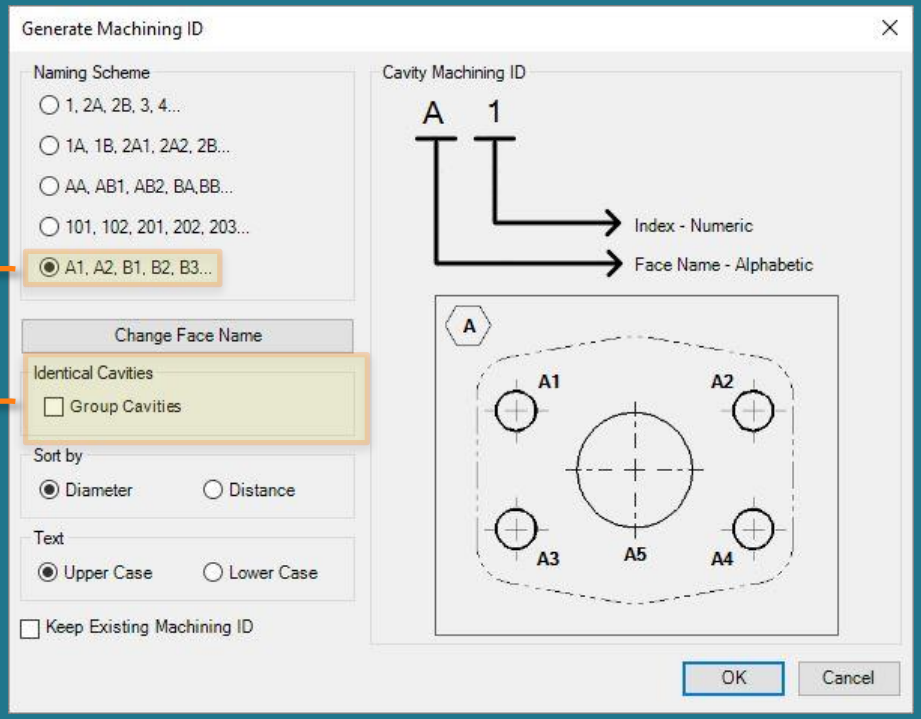
If option is **selected:**
MDTools lists O-ring Groove as a separate item in machining chart

* You can select O-ring Groove ID option from MDTools Settings

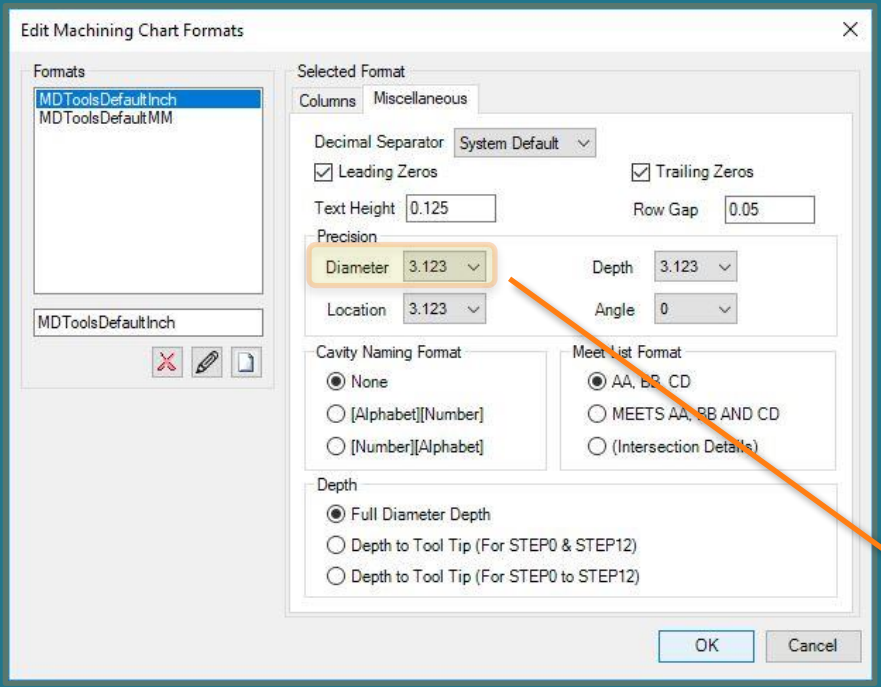
New Machining ID Format
i.e. A1, A2, B1, B2, B3...

New Machining ID Format

Group Cavities option added for all naming schemes



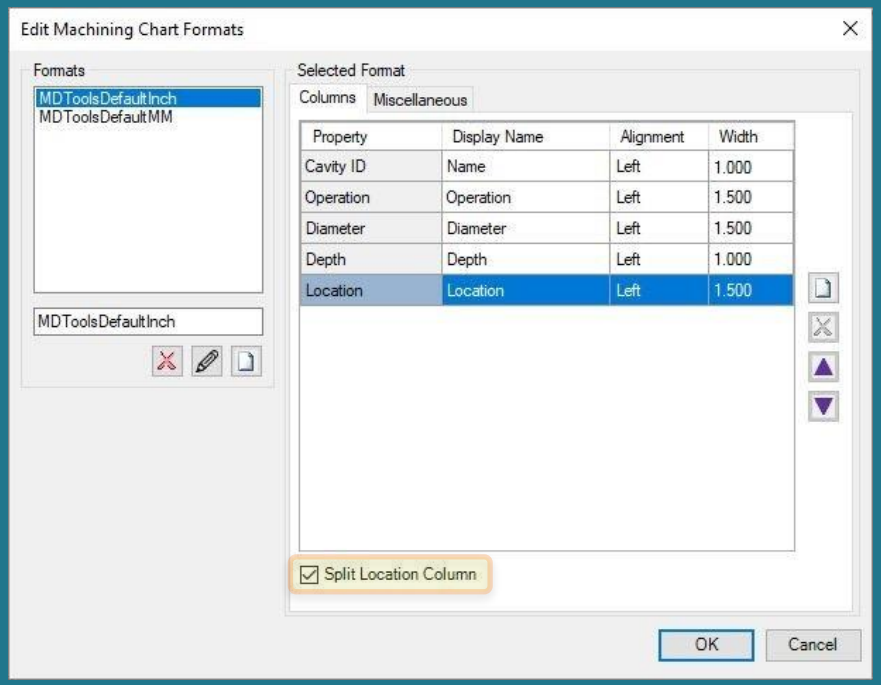
Set Precision for Diameter



Machining Chart				
Name	Operation	Diameter	Depth	Location
2A	DRILL	0.630	2.667	(5.125/ 2.000)
	C10-2	1.344	0.031	
2B	DRILL	0.250	2.000	(1.750/ 1.971)
	C10-2	1.344	0.031	
3-A	DRILL	0.300	1.000	(3.600/ 1.870)
3-B	DRILL	0.300	1.000	(3.600/ 2.550)
3-P	DRILL	0.250	2.000	(4.000/ 2.220)
4	DRILL	0.625	2.667	(5.125/ 0.970)
	C10-2	1.344	0.031	
C1	DRILL	0.438	1.971	(1.750/ 2.214)
	FORM PORT	#6 SAE	0.031	
	TAP	9/16-18	0.531	

Decimal Precision for Diameter set to three decimal places

Display Cavities Location coordinates (X and Y) in separate columns



Name	Operation	Diameter	Depth	Location
2A	DRILL	5/8	2.667	(5.125/ 2.000)
	C10-2	1.344	0.031	
2B	DRILL	0.250	2.000	(1.750/ 1.971)
	C10-2	1.344	0.031	
4	DRILL	0.625	2.667	(5.125/ 0.970)
	C10-2	1.344	0.031	
5	DRILL	0.625	3.214	(1.750/ 2.000)
	C10-4	1.344	0.031	

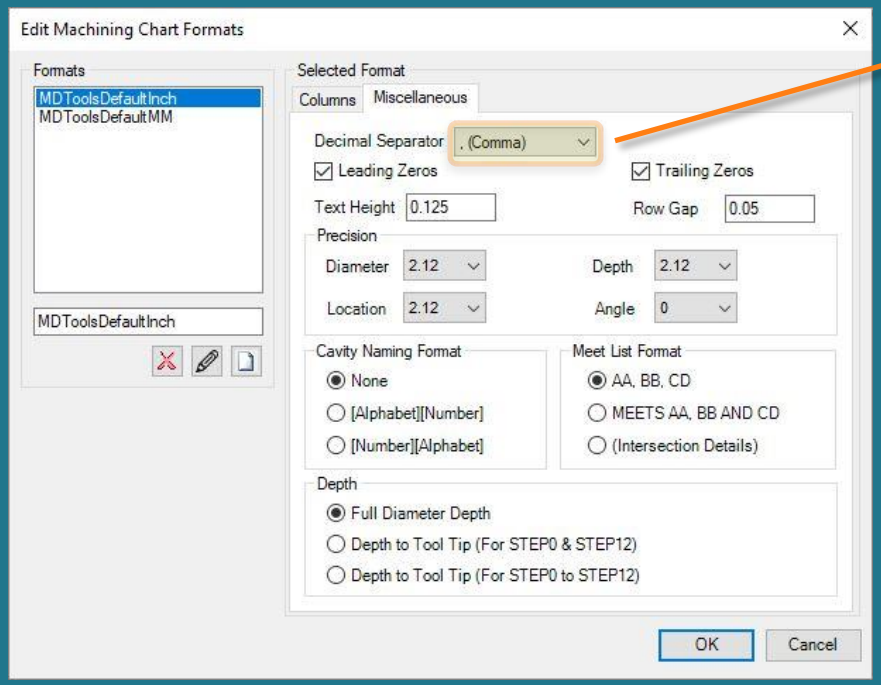
Split Location Column is Unselected

Split Location Column is Selected

Name	Operation	Diameter	Depth	Location X	Location Y
2A	DRILL	5/8	2.667	5.125	2.000
	C10-2	1.344	0.031		
2B	DRILL	0.250	2.000	1.750	1.971
	C10-2	1.344	0.031		
4	DRILL	0.625	2.667	5.125	0.970
	C10-2	1.344	0.031		
5	DRILL	0.625	3.214	1.750	2.000
	C10-4	1.344	0.031		

Note: **Split Location Column** option appears only when **Location** column is selected in the Machining chart format.

Specify Decimal Separator for Machining Chart

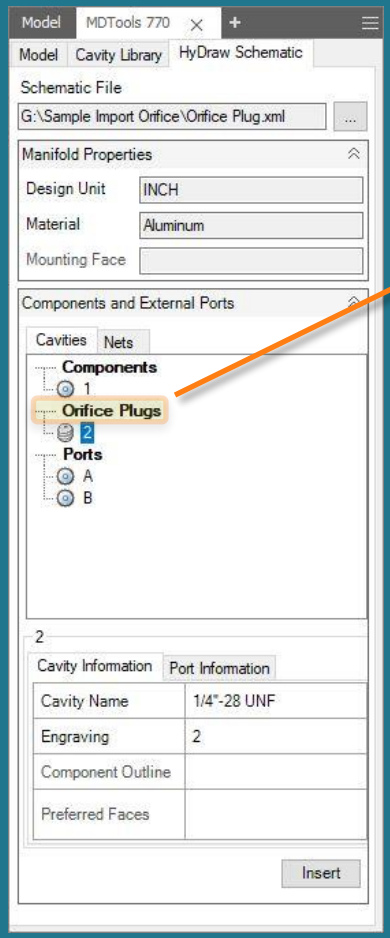


Decimal Separator

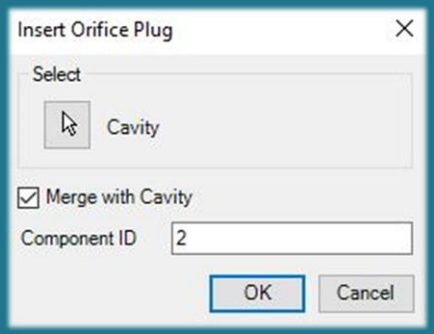
Name	Operation	Diameter	Depth	Location
2A	DRILL	5/8	2,667	(5,125/ 2,000)
	C10-2	1,344	0,031	
2B	DRILL	0,250	2,000	(1,750/ 1,971)
	C10-2	1,344	0,031	
4	DRILL	0,625	2,667	(5,125/ 0,970)
	C10-2	1,344	0,031	
5	DRILL	0,625	3,214	(1,750/ 2,000)
	C10-4	1,344	0,031	

Note: Three options available in the **Decimal Separator** dropdown:
System Default
,(Comma)
.(Period)

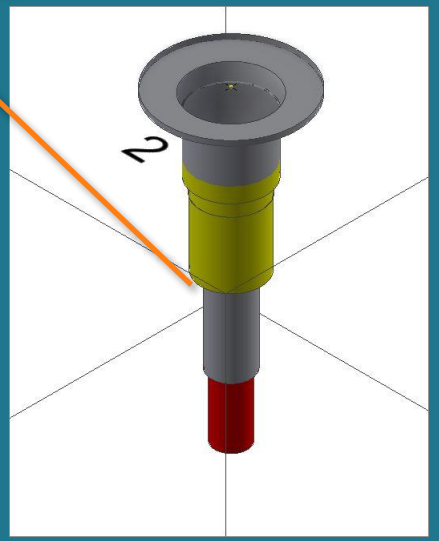
Import Orifice Plugs from HyDraw



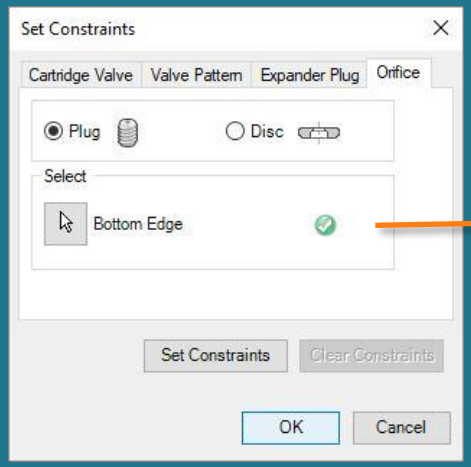
MDTools lists Orifice Plugs separately



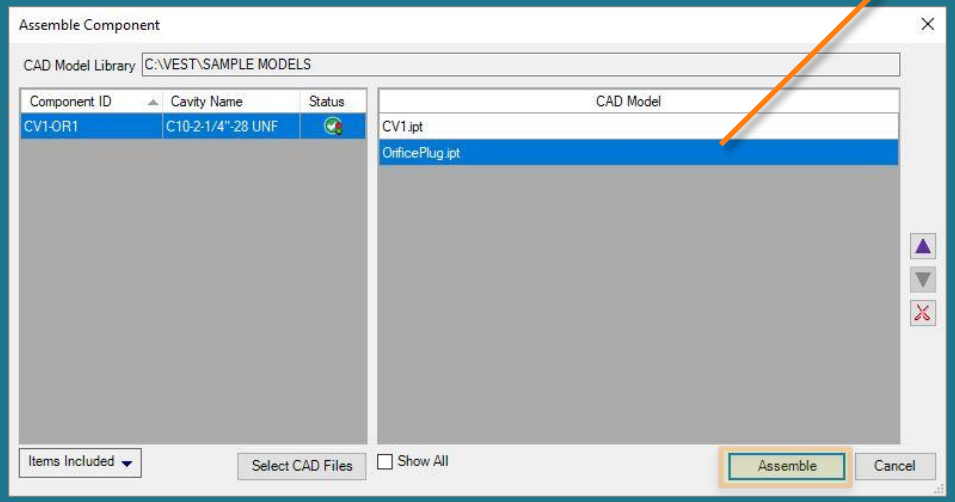
Orifice Plug inserted into selected cavity



Assemble Orifice Plugs

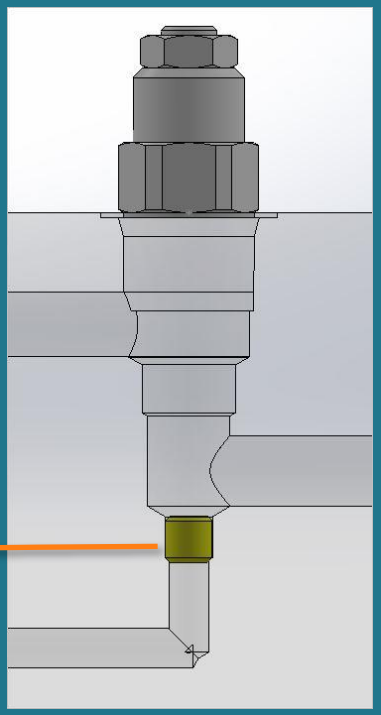


Set constraints for Orifice plug CAD model

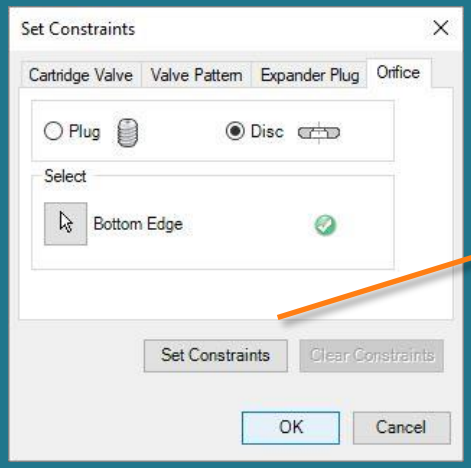


Select and Assemble Orifice plug CAD Model in Assembly Interface

MDTools automatically assembles orifice plug CAD model

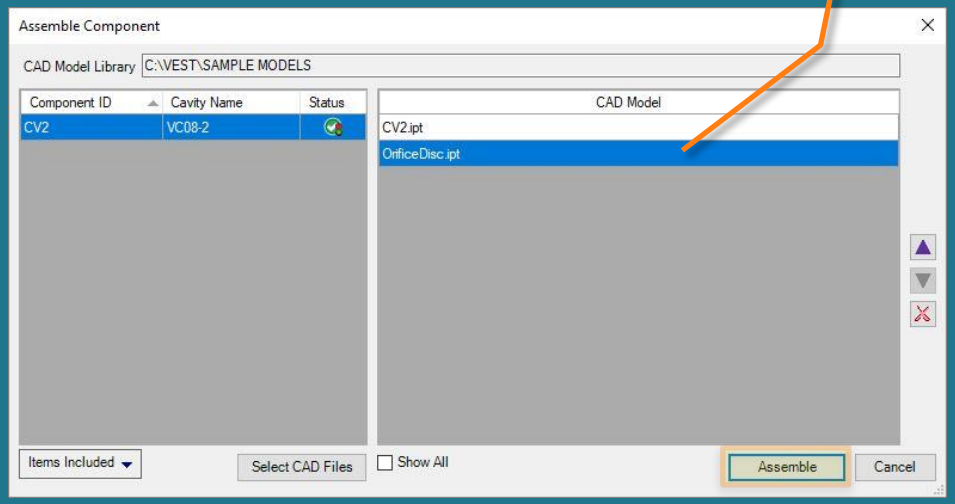


Assemble Orifice Discs

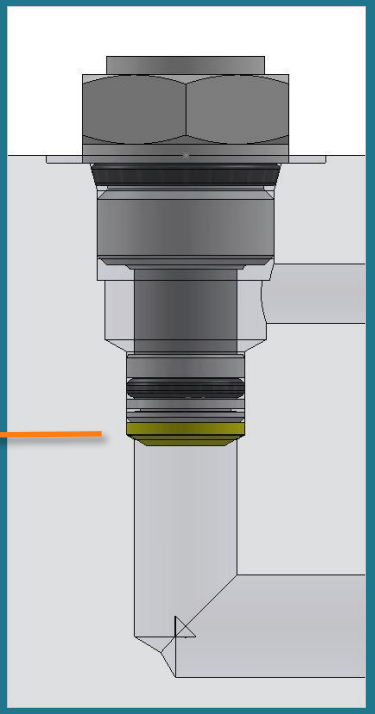


Set constraints for orifice disc CAD model

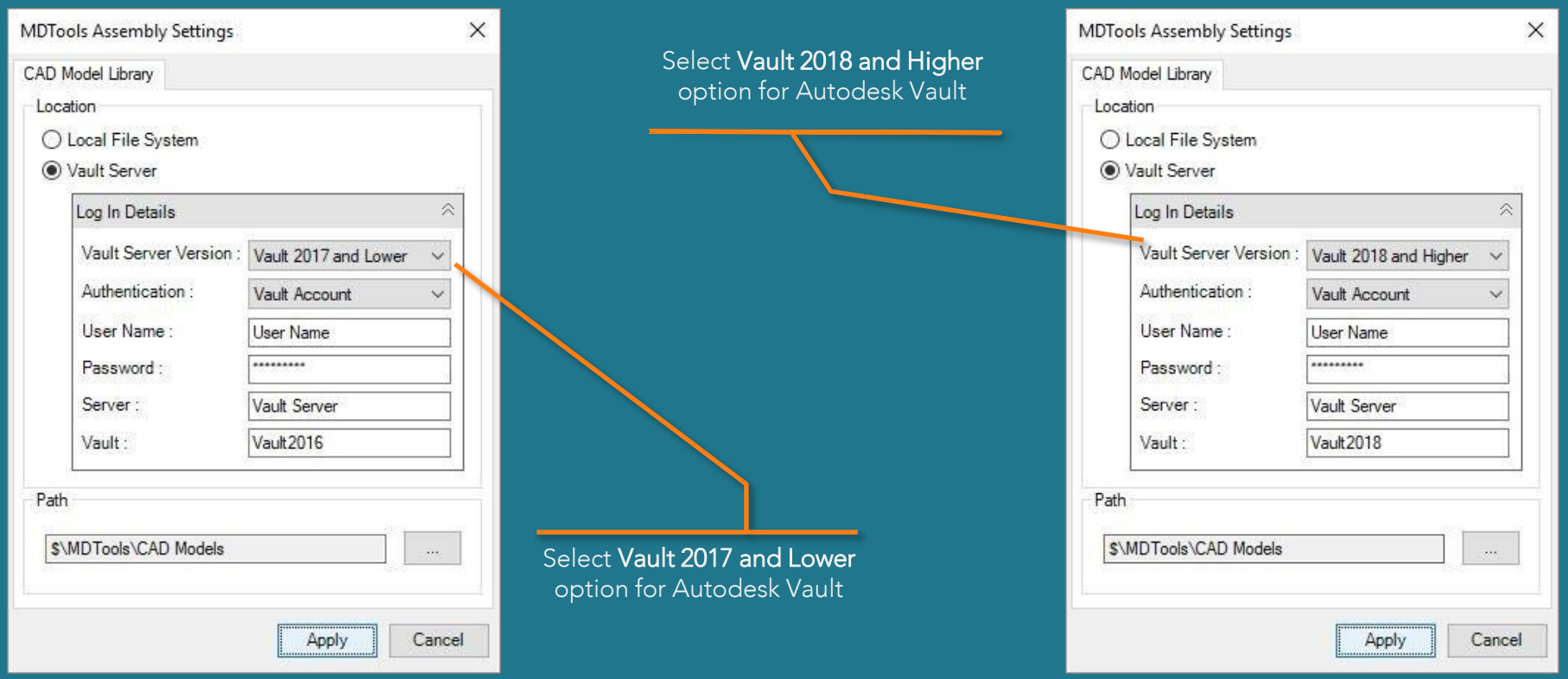
Select and Assemble orifice disc CAD model in Assembly Interface



MDTools automatically assembles orifice disc CAD model

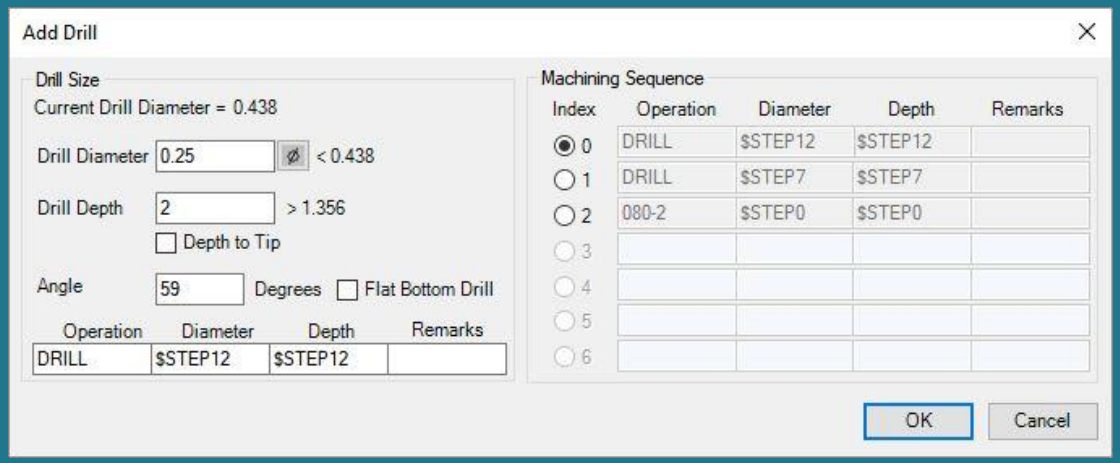


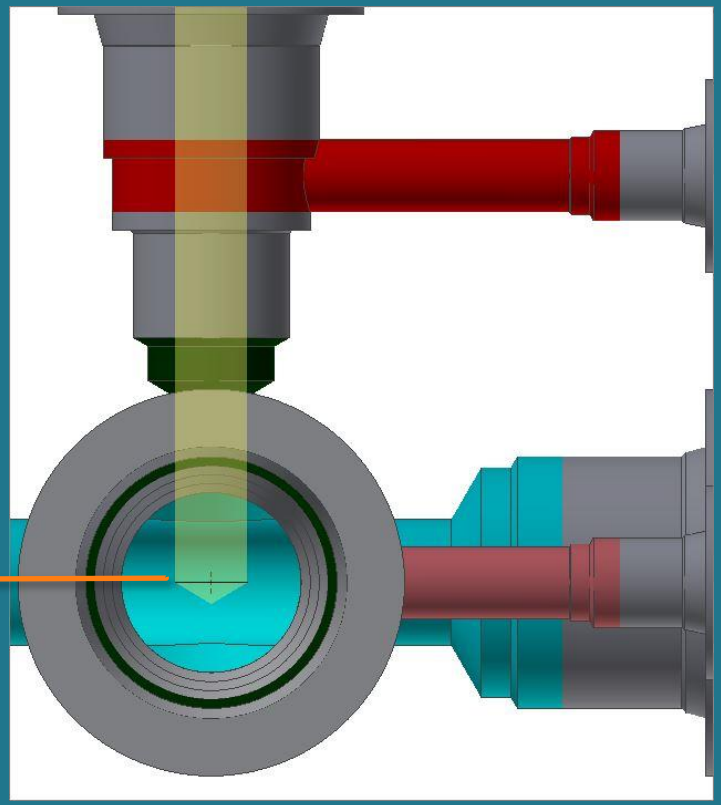
Autodesk Vault 2018 Compatible



Note: For Autodesk Vault 2018 and Higher, use MDTools Library Manager 2018 to assign CAD models for construction ports.

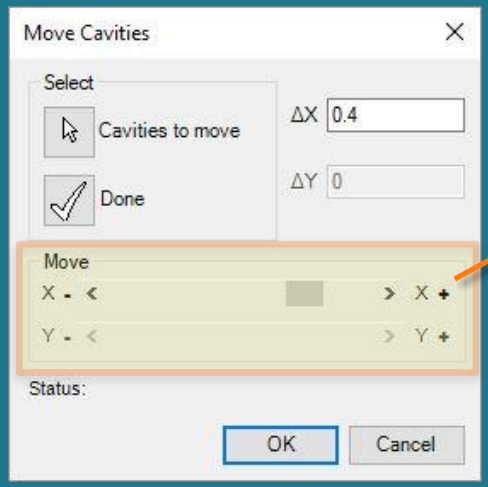
Drill Preview while Adding Drill to a Cavity



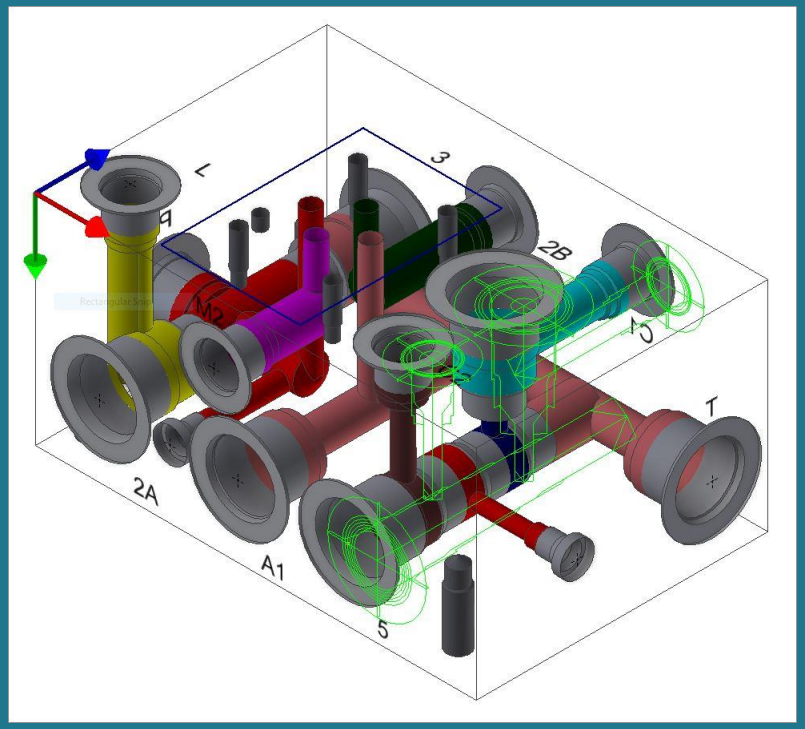


Note: Changing dimensions automatically updates the drill preview.

Move Multiple Cavities using Scroll Bars



Use Scroll Bars
to move selected cavities



Contact Us

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