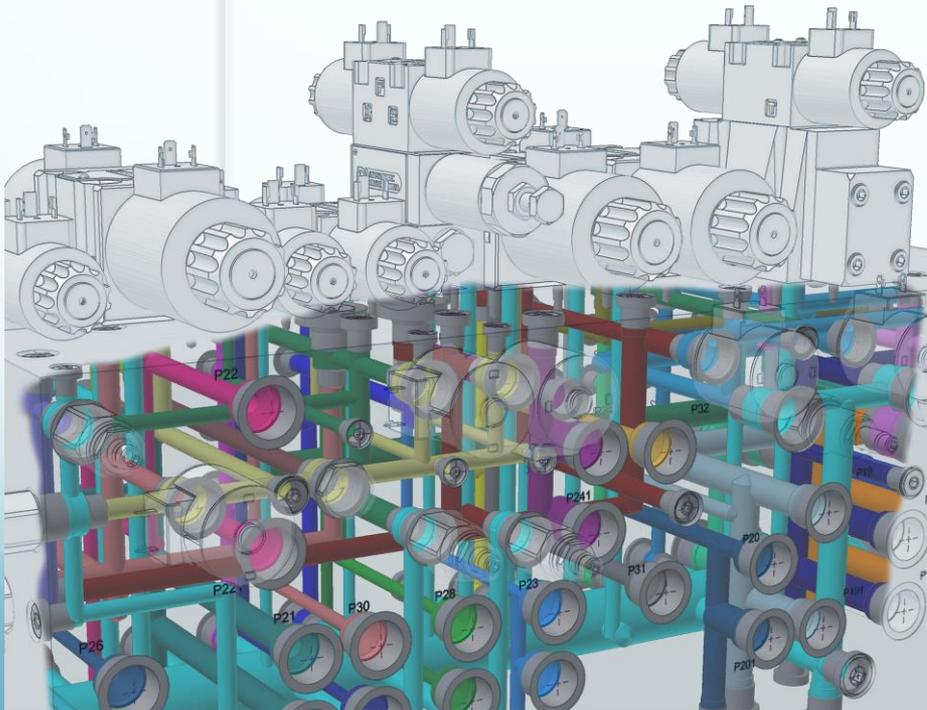


“Power-to-Design” Manifolds

MDTools® 760

What's New



MDTools 760 What's New?

Improved User Interface

- Show and Hide MDTools Mini-Toolbars
- Improved Auto Dimension Interface
- Group Cavities by Face & Show Engraved Text in MDTools Browser

Compare Manifolds

- Compare Two Manifolds and List the Difference

Pressure Rating

- Validate Construction Port Pressure Rating per Net Operating Pressure

Machining Drawing

- Automatic Machining Drawing (AutoCAD .dwg support)
- Placement of Machining IDs without overlapping cavities & Control Text Height

2D Views

- New Drawing Layout Option

Undercuts

- Show/Hide Undercuts in Drawing

Machining Chart

- Enhanced Machining Chart Interface
- Machining Charts created as Inventor Table

Machining Callout

- Machining Callout Position Retained

Autodesk Vault Server

- Assign CAD Models from Autodesk Vault Server

Miscellaneous

- Select Drill Depths in Settings
- Control Text Height of Annotations in a Drawing
- Modify Component ID of Parent Cavity while inserting Orifice Plug

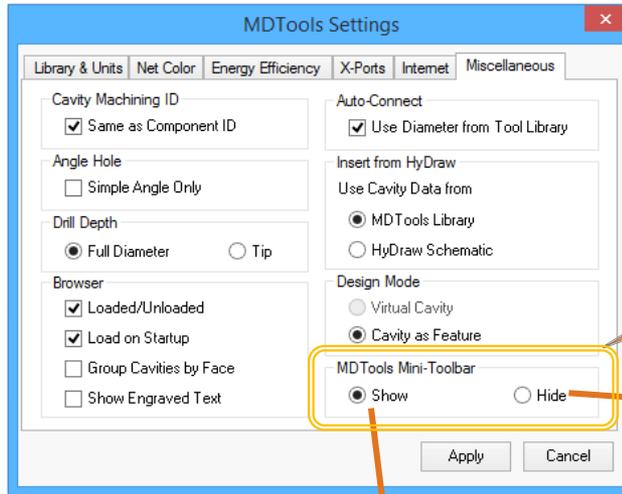
Recap

Contact Us

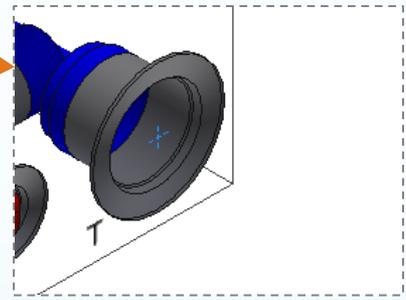
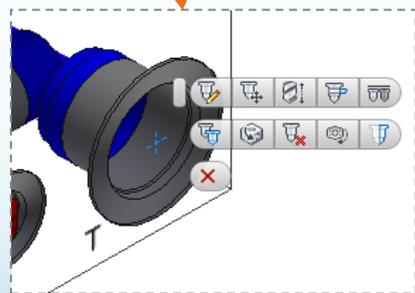
Improved User Interface



Show/Hide MDTools Mini-Toolbars

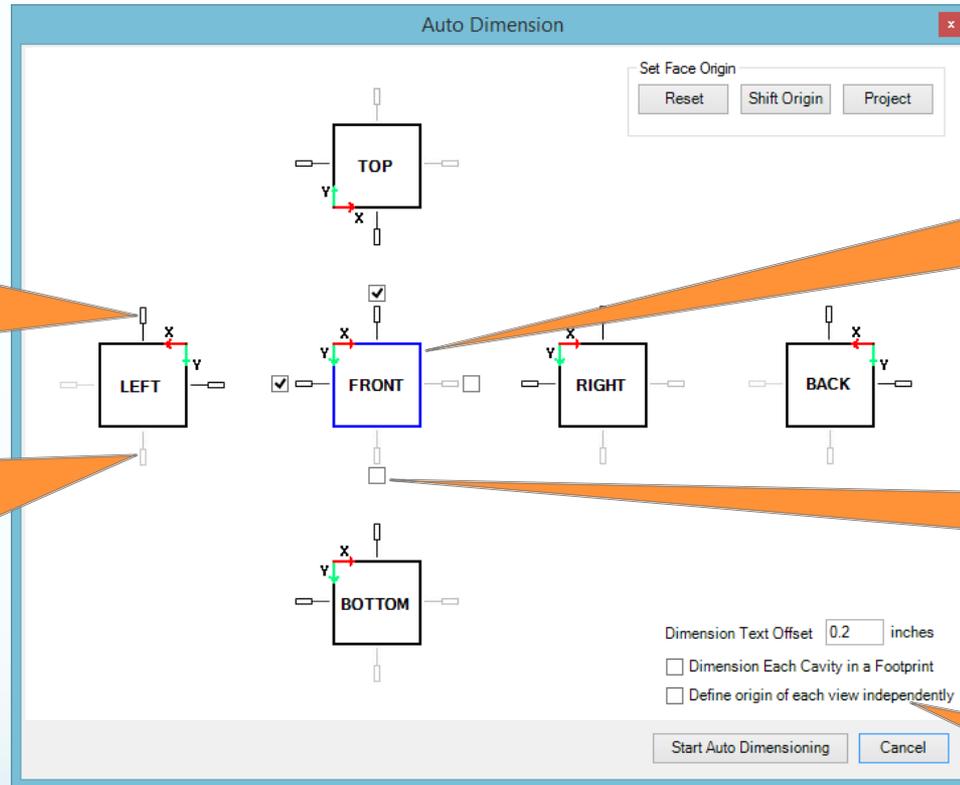


Control visibility of MDTools Mini-Toolbars





Improved Auto Dimension Interface



Dimensions may be placed on side with black dimension icon

Dimensions may not be placed on side with grayed out dimension icon

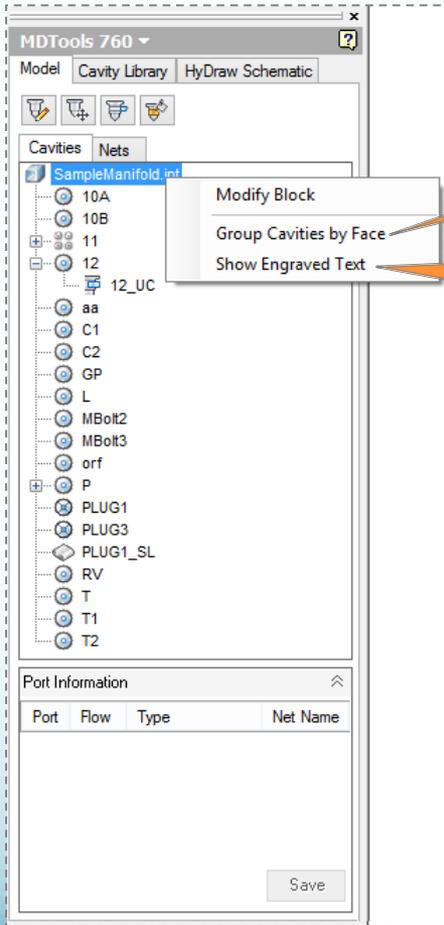
Select a view to set Face Origin and sides available for dimensioning

Choose where dimensions may be placed

Option to define face origin for each view independently

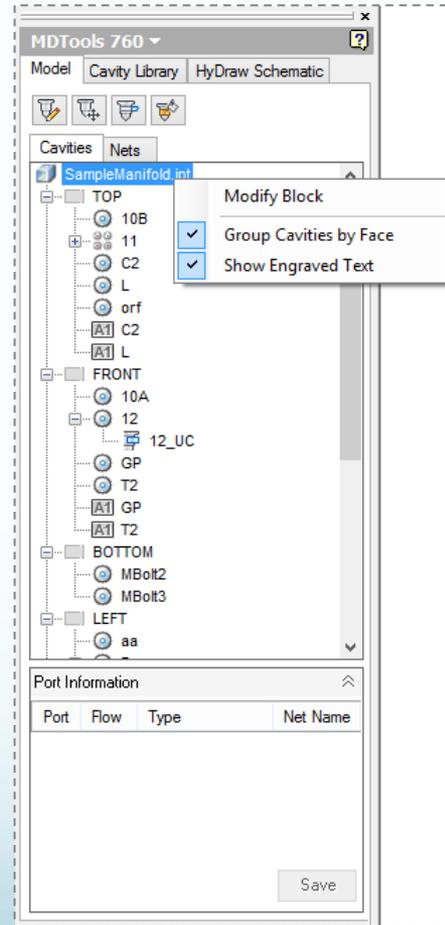


Group Cavities by Face & Show Engraved Text in MDTools Browser



Option to group cavities by face

Option to show engraved text in MDTools browser



Note: Same options is already available in **Miscellaneous** tab of MDTools Settings.

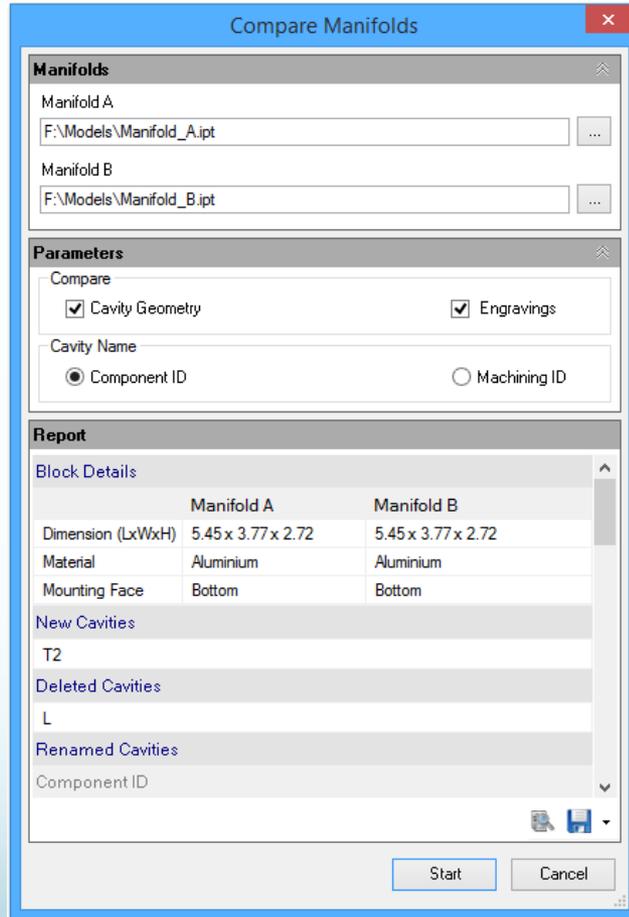
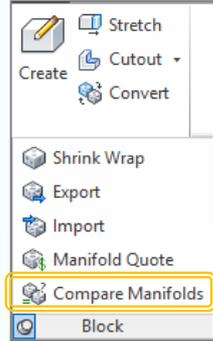


Compare Manifolds

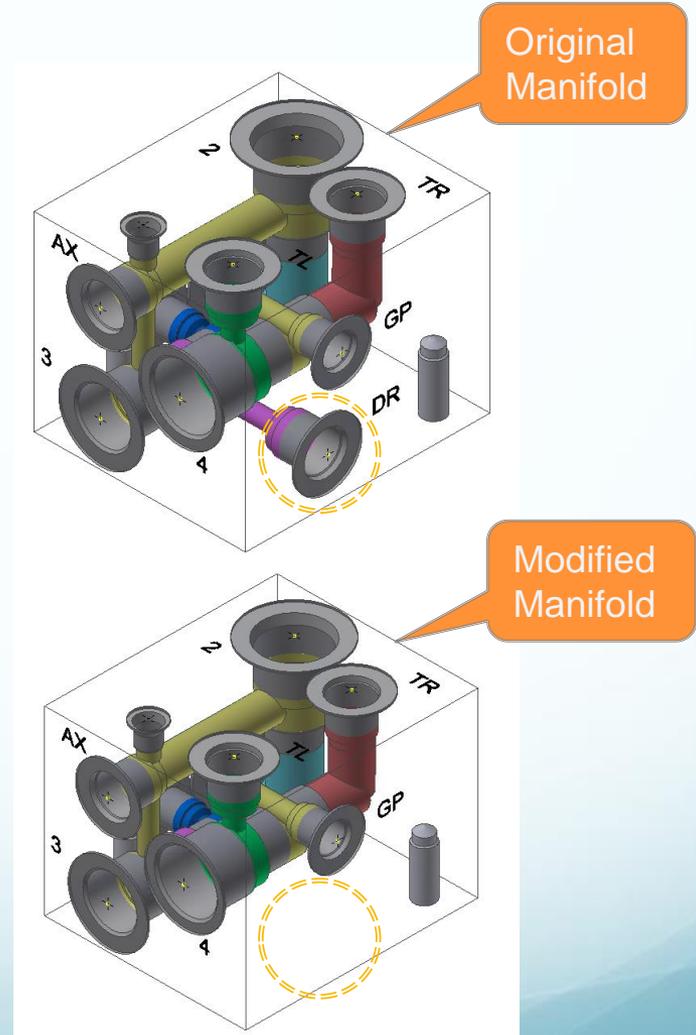


Compare Two Manifolds and List the Difference

Location In MDTools Ribbon



Differences are listed in the Report

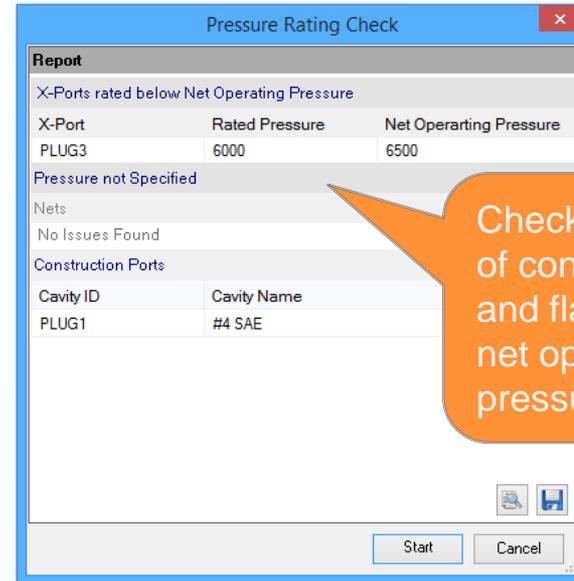
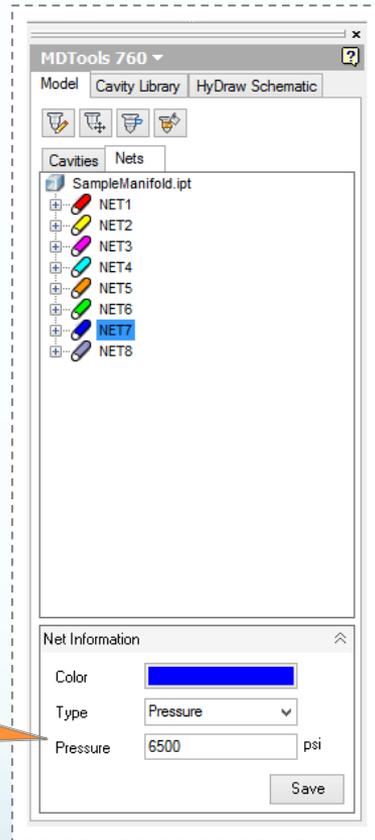
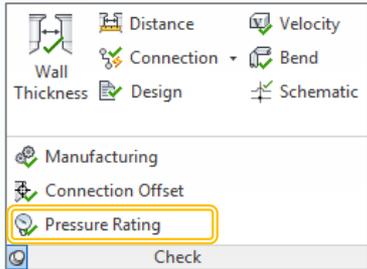


Pressure Rating



Validate Construction Ports Pressure Rating per Net Operating Pressure

Location In MDTools Ribbon



Check rated pressure of construction ports and flanges against net operating pressure

Change net operating pressure

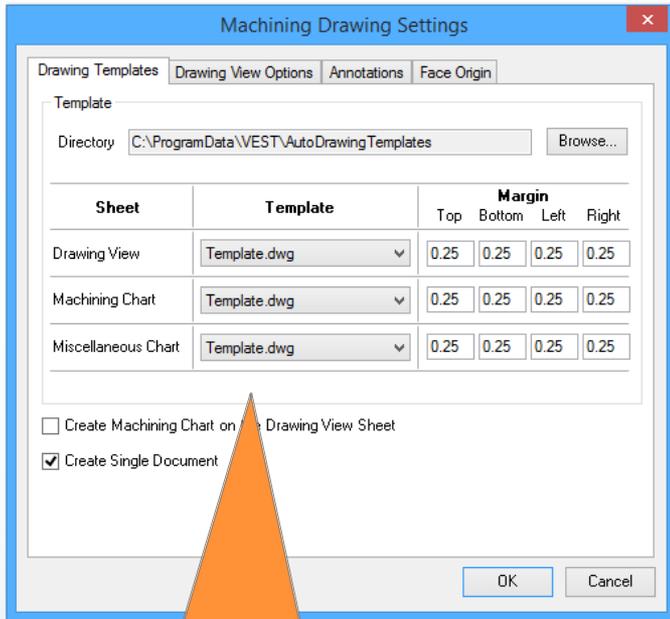
Note: 1. MDTools will also validate construction ports at the time of connection.

2. Change construction port pressure in the MDTools *Edit Cavity* command and Net operating pressure in MDTools Connectivity browser.

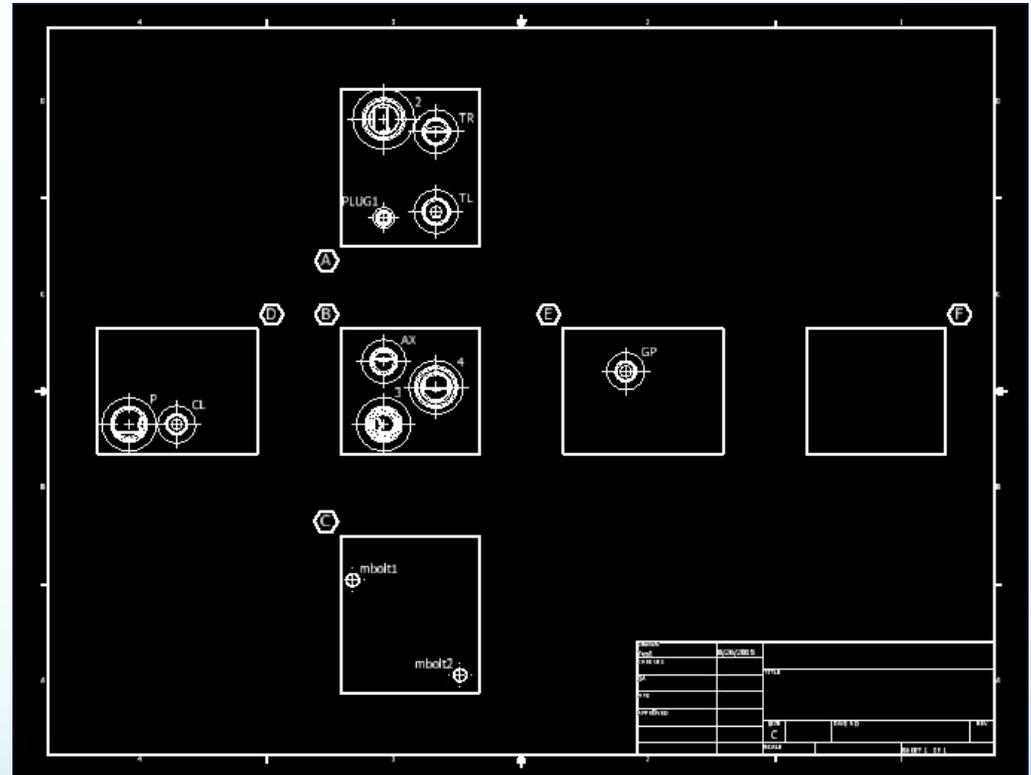
Machining Drawing



Automatic Machining Drawing (AutoCAD .dwg support)



Use AutoCAD drawing files (.dwg) as templates for Automatic Machining Drawing



2D Views

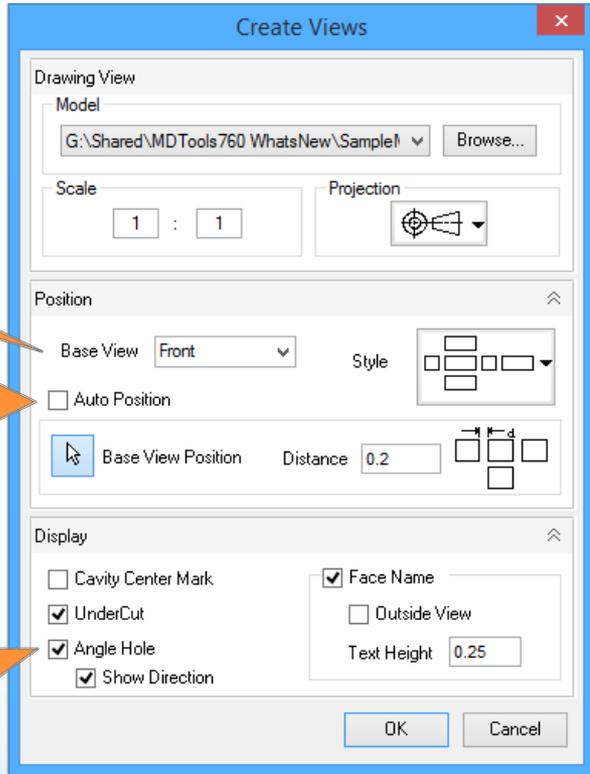


New Drawing Layout Option

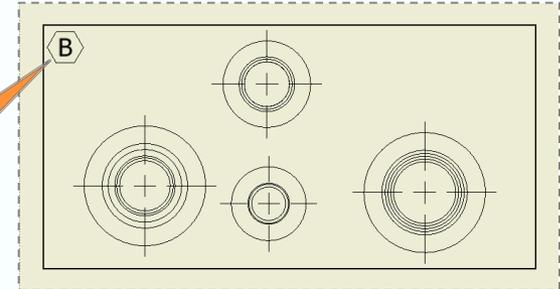
Select any view as Base View

Define position of base view manually

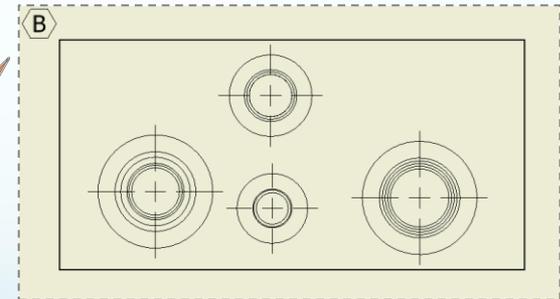
Display UnderCut and Angle Hole



Face Name inside of the view



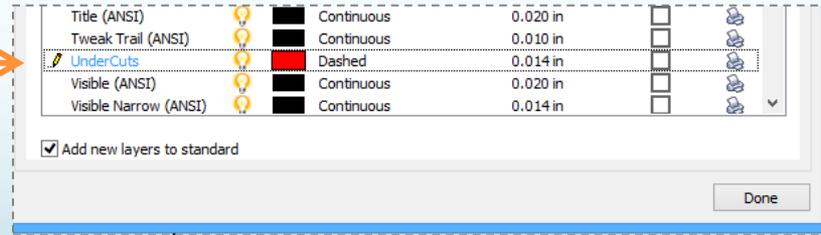
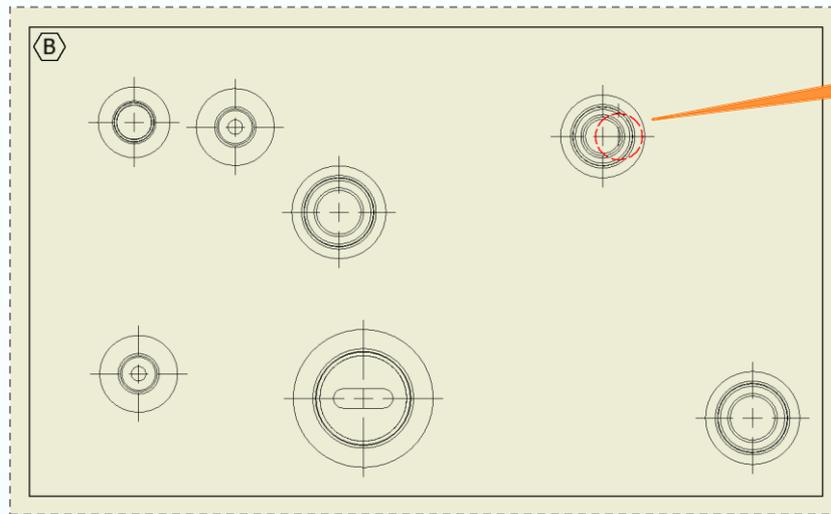
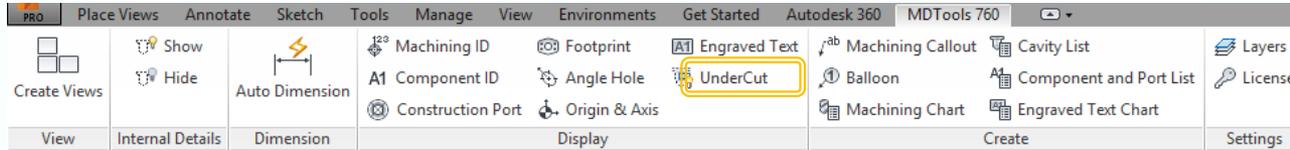
Face Name outside of the view



Undercuts



Show/Hide Undercuts in Drawing



Note: Undercuts will be placed on a separate layer.



Machining Chart



Enhanced Machining Chart Interface

Create Machining Chart

Format

MDToolsDefaultInch

Cavity ID

Machining ID Component ID

Title

Range

Face: All

Items: All (Number of Items : 25) Items to

Export

Edit Machining Chart Formats

Formats

MDToolsDefaultInch
MDToolsDefaultMM

Selected Format: MDToolsDefaultInch

Columns | Miscellaneous

Property	Display Name	Alignment	Width
Cavity ID	Name	Left	1.500
Operation	Operation	Left	1.500
Diameter	Diameter	Left	1.500
Depth	Depth	Left	1.500
Face	Face	Left	1.500
Meet List : Cavity	Meet List : Cavity	Left	1.500

OK

Control column width

Edit Machining Chart Formats

Formats

MDToolsDefaultInch
MDToolsDefaultMM

Selected Format: MDToolsDefaultInch

Columns | Miscellaneous

Text Height: 0.125 Leading Zeros

Row Gap: 0.05 Trailing Zeros

Precision

Depth: 3.123 Location: 3.123 Angle: 0

Cavity Naming Format

None [Alphabet][Number] [Number][Alphabet]

Meet List Format

AA, BB, CD MEETS AA, BB AND CD (Intersection Details)

Depth

Full Diameter Depth Depth to Tool Tip (For STEP0 & STEP12) Depth to Tool Tip (For STEP0 to STEP12)

OK

Control row gap





Machining Chart created as Inventor Table

Machining Chart created as Inventor table for easy modification

Machining Chart					
Name	Operation	Diameter	Depth	Face	Meet List : Cavity
101A	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101B	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101C	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101D	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
102	DRILL	11/64	0.175	A	
104	DRILL	0.25	2.279	A	401
105	DRILL	0.250	1.616	A	205, 602
	C10-2	1.344	0.031		
106	DRILL	1/4	0.836	A	603
107	DRILL	1/4	0.783	A	202
108	DRILL	1/4	1.819	A	601
109	DRILL	0.438	2.331	A	203
	FORM PORT	#6 SAE	0.031		
	TAP	9/16-18	0.531		
110	DRILL	.5	0.642	A	
	FORM PORT	#6 SAE	0.031		
	TAP	9/16-18	0.531		
2		1.892	B		401, 501
		0.031			
		0.485			
2		1.520	B		107
		0.031			
2		3.014	B		105, 501, 503
		0.125			
3		0.688	C		
		0.500			
3		0.688	C		
		0.500			
4		2.640	D		104, 201, 203, 604
	FORM PORT	#8 SAE	0.031		
	TAP	3/4-16	0.593		
	O-RING GROOVE	1-7/16	0.050		
501	DRILL	0.250	3.138	E	201, 205
	FORM PORT	#4 SAE	0.031		
	TAP	7/16-20	0.485		



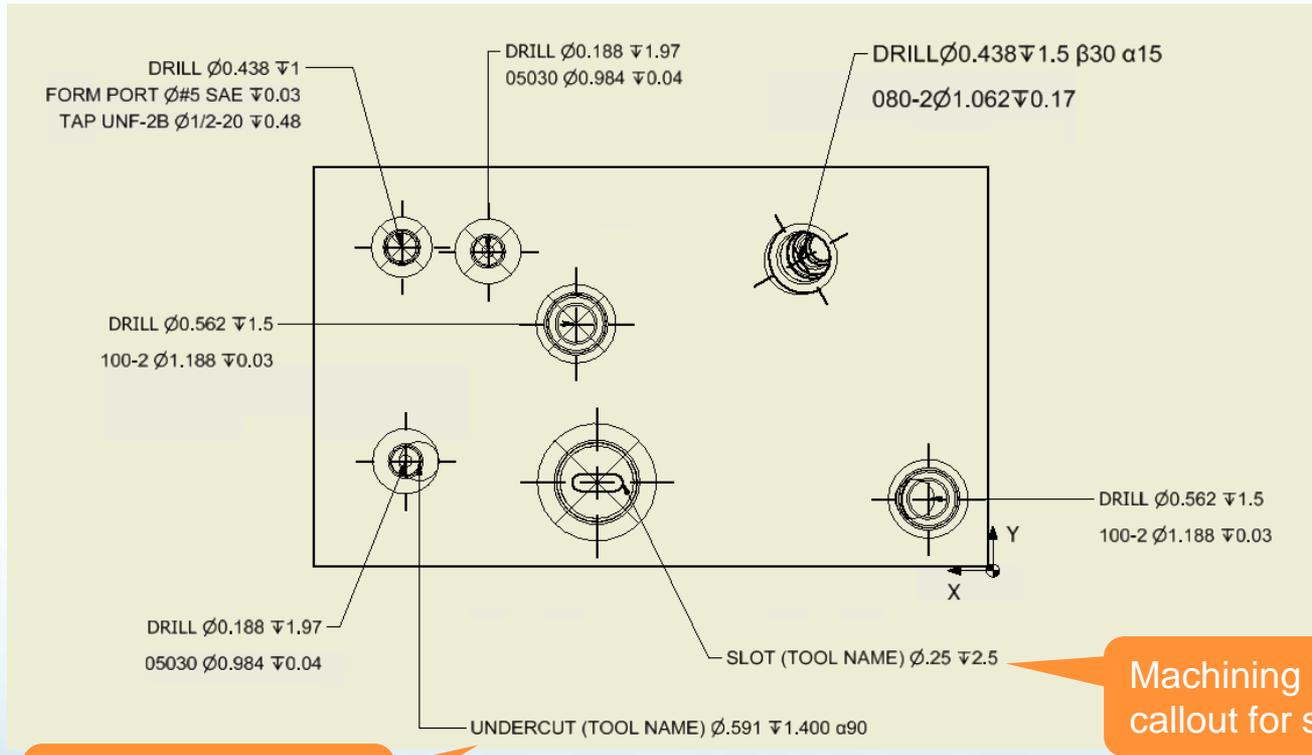
Machining Chart					
Name	Operation	Diameter	Depth	Face	Meet List : Cavity
101A	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101B	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101C	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
101D	TAP DRILL	5/32	0.700	A	
	TAP	#10-24	0.500		
102	DRILL	11/64	0.175	A	
104	DRILL	0.25	2.279	A	401
105	DRILL	0.250	1.616	A	205, 602
	C10-2	1.344	0.031		
106	DRILL	1/4	0.836	A	603
107	DRILL	1/4	0.783	A	202
108	DRILL	1/4	1.819	A	601
109	DRILL	0.438	2.331	A	203
	FORM PORT	#6 SAE	0.031		
	TAP	9/16-18	0.531		
110	DRILL	.5	0.642	A	
	FORM PORT	#6 SAE	0.031		
	TAP	9/16-18	0.531		
Machining Chart					
Name	Operation	Diameter	Depth	Face	Meet List : Cavity
201	DRILL	0.375	1.892	B	401, 501
	FORM PORT	#4 SAE	0.031		
	TAP	7/16-20	0.485		
202	DRILL	0.500	1.520	B	107
	FORM PORT	#6 SAE	0.031		
	TAP	9/16-18	0.531		
203	DRILL	9/16	1.944	B	109, 401, 604
	C10-2	1.344	0.031		
205	DRILL	0.625	3.014	B	105, 501, 503
	C10-4	1.344	0.125		
301A	TAP DRILL	0.203	0.688	C	
	TAP	1/4-20	0.500		
301B	TAP DRILL	0.203	0.688	C	
	TAP	1/4-20	0.500		
401	DRILL	0.500	2.640	D	104, 201, 203, 604
	FORM PORT	#8 SAE	0.031		
	TAP	3/4-16	0.593		
	O-RING GROOVE	1-7/16	0.050		
501	DRILL	0.250	3.138	E	201, 205
	FORM PORT	#4 SAE	0.031		
	TAP	7/16-20	0.485		

Machining Callout



Machining Callout Position Retained

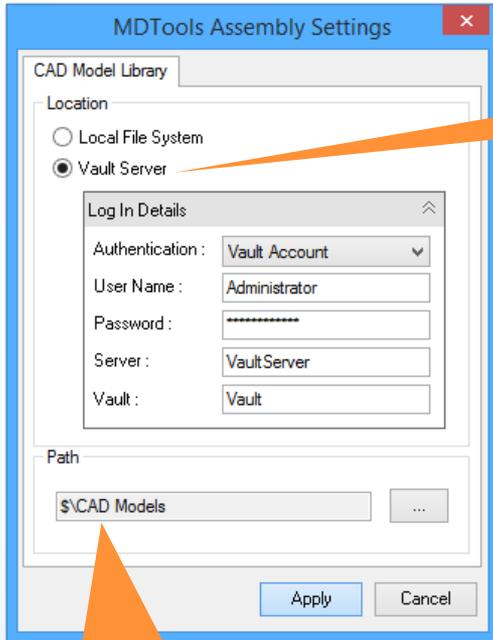
Retain the location of existing callouts when updating the machining callouts



Autodesk Vault Server

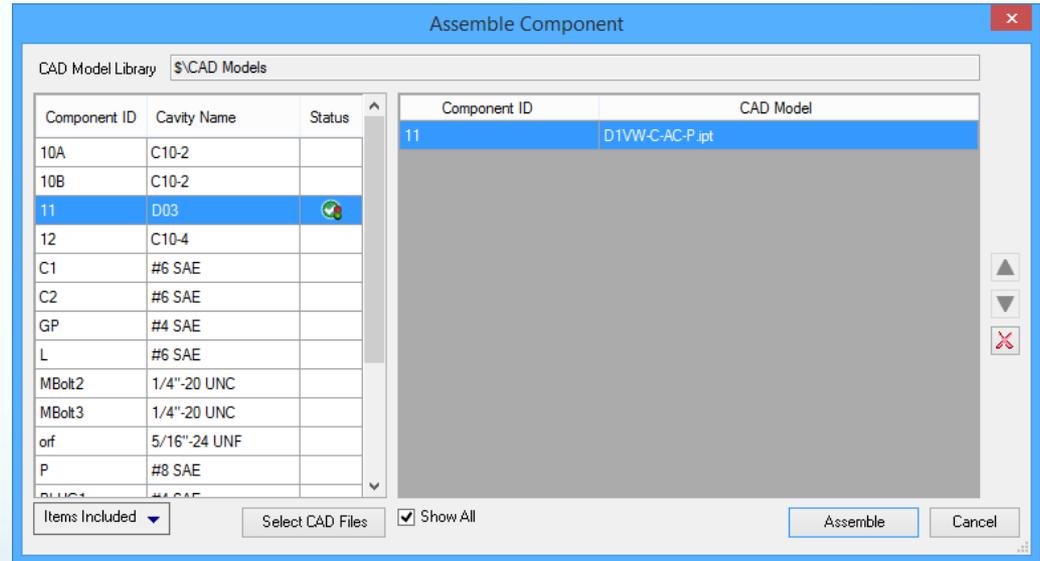


Assign CAD Models from Autodesk Vault Server



Option to use Autodesk Vault Server

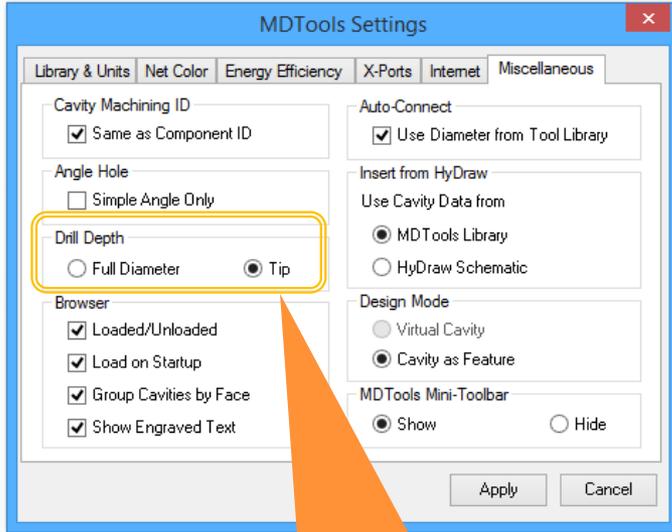
Selected CAD Model Library path



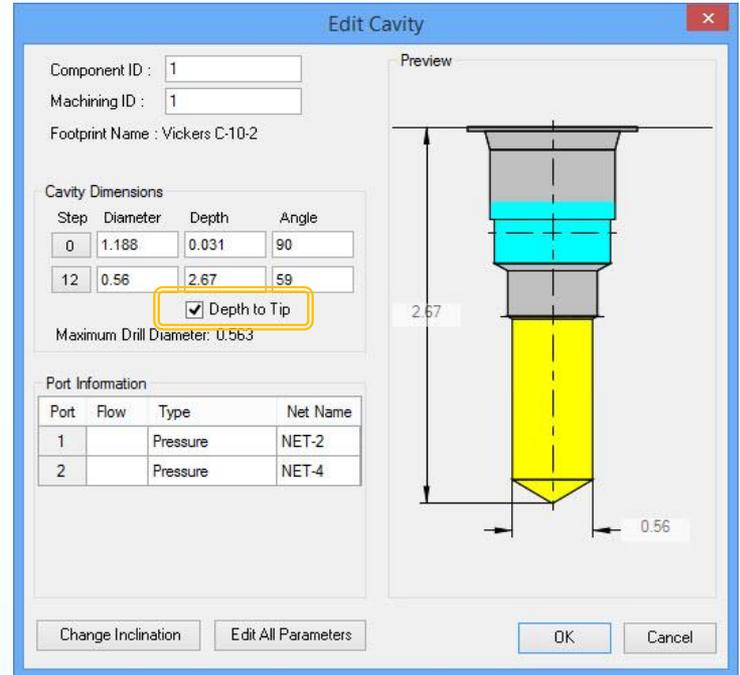
Miscellaneous



Select Drill Depths in Settings



Select Drill Depth preference in Settings

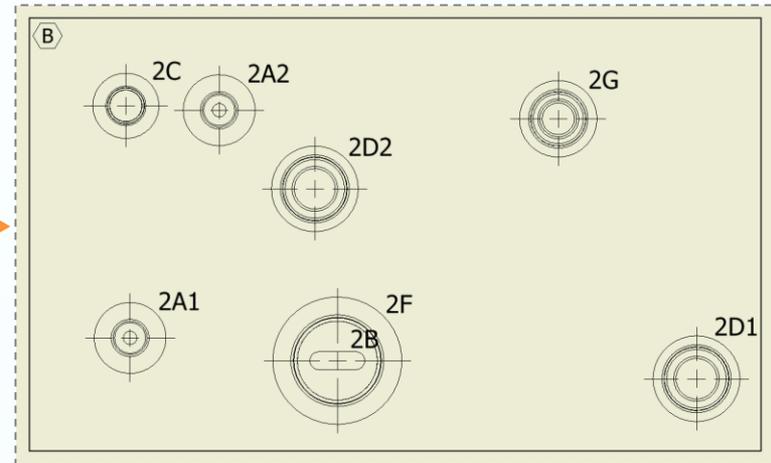
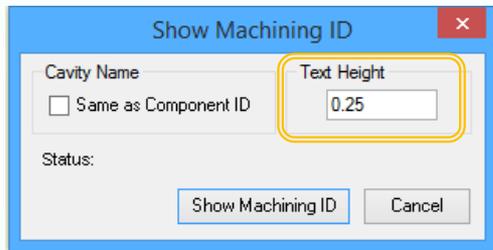


Note: You can override the Drill Depth settings locally while using the relevant commands.





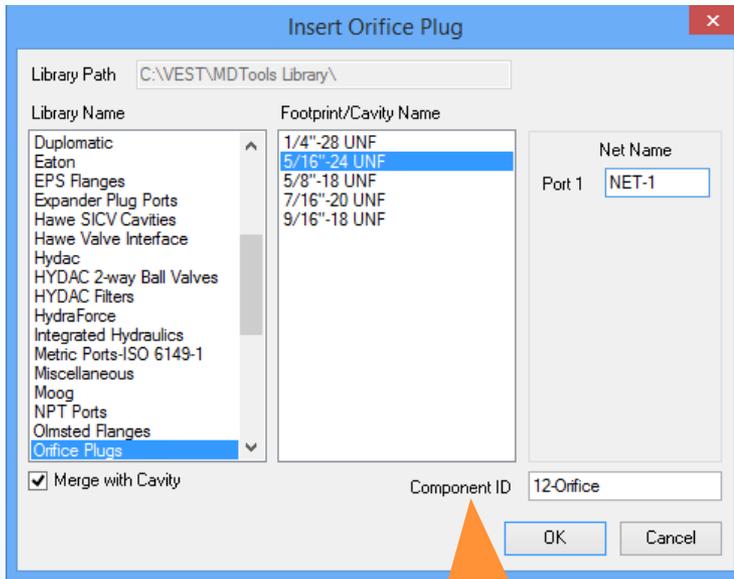
Control Text Height of Annotations in a Drawing



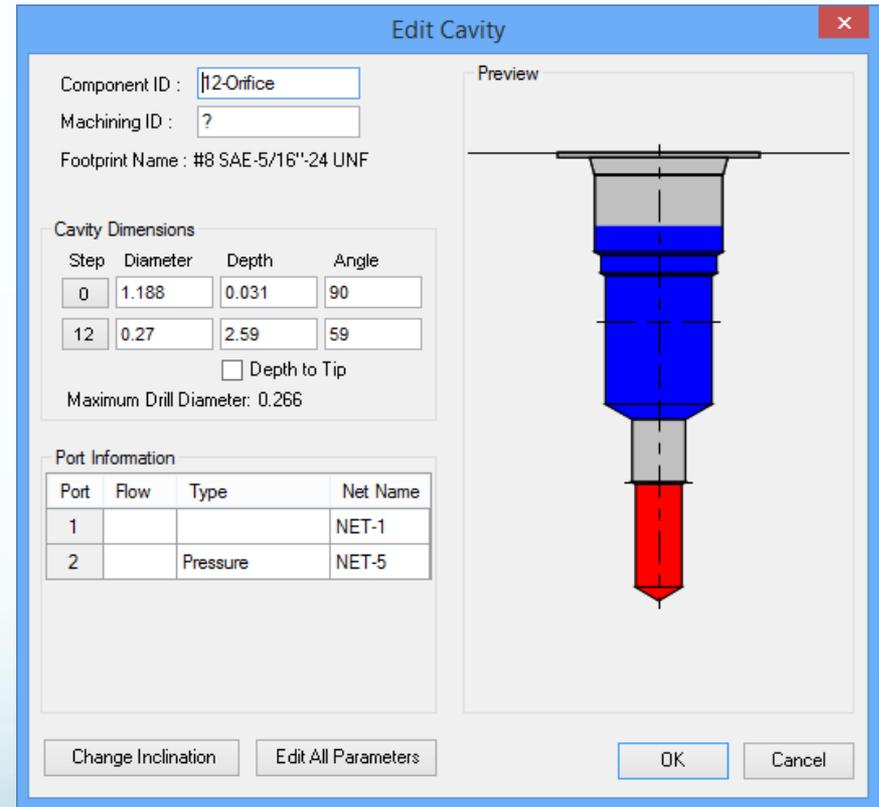
Note: Option to define text height is also available for **Show Component ID** and **Show Footprint** commands.



Modify Component ID of Parent Cavity while inserting Orifice Plug



Modify the Component ID of a parent cavity when merged with an orifice



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Recap

Contact Us

Do more...

MDTools® manifold design software



MDTools 760 Evaluation Software



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In **Europe**, please call +49 (0) 6083 95716-1, or email otto.friedrich@taunus-it.de
call +39 328 695 70 01 or email carlo.molon@fluidpower.it

