

MDTools® 965

What's New

Power-to-Design Manifolds



MDTools® 965 What's New

Through Bolt Hole Depths are Automatically Updated

O-ring Groove ID's can be made Independent of the Parent Cavity

New Machining ID Naming Scheme: A1, A2, B1, B2, B3...

Group Machining ID option for Identical Cavities

Separate Columns for Cavity X and Y Location Coordinates

Decimal Separator options for Machining Chart

New Visual Interface for Auto Dimensioning

Easy Import and Export of MDTools Settings across Versions or Computers

Fast and Secure Cloud-based License Activation

Move Multiple Cavities using Scroll Bars

Improved Display for Terminated/Blocked Ports

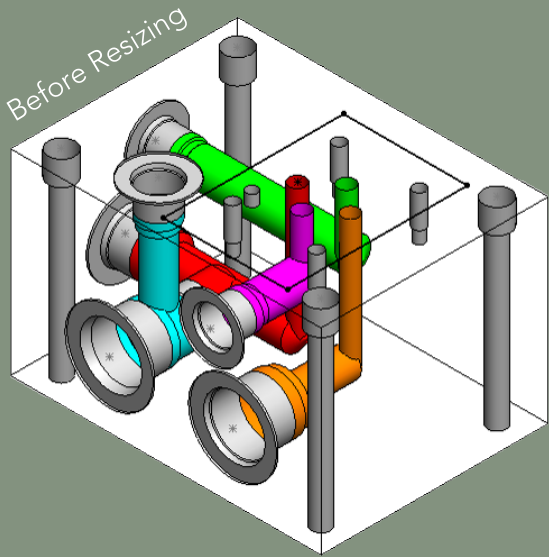
"0" Depth Precision option for Machining Chart

Use . (dot) or , (comma) Decimal Separator Interchangeably

MDTools Help: Online and Offline

Progress Status bar displays during Import of 'mbxml' Files

NEW Through Bolt Hole Depths are Automatically Updated



Resize Block

Update Drill Depth option selected

Resize Block

Height
 ΔH 0.000 Add Remove
Cutting Plane Location 0

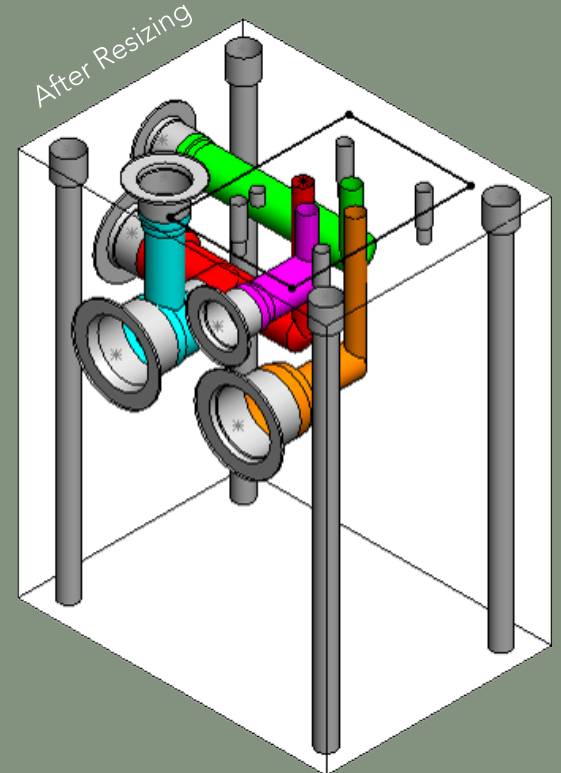
Length
 ΔL 0.000 Add Remove
Cutting Plane Location 0

Width
 ΔW 1.000 Add Remove
Cutting Plane Location 0

Dimension Increment 0.010

Update Drill Depth

OK Cancel >>



Through hole bolt depth auto updated when manifold resized

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



O-ring Groove IDs can be made Independent of Parent Cavity

MTools Settings

O-ring Groove ID

Independent of Parent ID

Option selected*

Edit O-ring Groove

Component ID: 2B O-ring

Machining ID: 2C

Groove Counter bore

Dash #	ID	OD	Width
-028	1-3/8	1-1/2	1/16
-029	1-1/2	1-5/8	1/16
-030	1-5/8	1-3/4	1/16

Show All

Operation	Diameter	Depth	Remarks
O-RING GROOVE	\$STEP	\$STEP	REFER DET.

OK Cancel

Edit O-ring Groove ID

Option selected

Name	Operation	Diameter	Depth
2B	DRILL	1.344	2.00
2C	O-RING GROOVE	1.625	0.050

O-ring groove machining sequence listed as a separate item

Option deselected

Name	Operation	Diameter	Depth
2B	DRILL	1.344	2.00
	O-RING GROOVE	1.625	0.050

O-ring groove machining sequence included with the parent cavity

* Mandatory O- ring grooves (part of the footprint) do not have a separate Groove ID option



New Machining ID Naming Scheme: A1, A2, B1, B2, B3...

New Machining ID Naming Scheme

Generate Machining ID [X]

Naming Scheme

- 1, 2A, 2B, 3, 4...
- 1A, 1B, 2A1, 2A2, 2B...
- AA, AB1, AB2, BA, BB...
- 101, 102, 201, 202, 203...
- A1, A2, B1, B2, B3...**

Change Face Name

Identical Cavities

Group Cavities

Sort by

Diameter Distance

Text

Upper Case Lower Case

Keep Existing Machining ID

Cavity Machining ID

A 1

Index - Numeric Cavity Name

Alphabetic Face Name

OK Cancel



Group Machining ID for Identical Cavities

Group Cavities option available for all Machining ID naming schemes

Generate Machining ID

Naming Scheme

- 1, 2A, 2B, 3, 4...
- 1A, 1B, 2A1, 2A2, 2B...
- AA, AB1, AB2, BA, BB...
- 101, 102, 201, 202, 203...
- A1, A2, B1, B2, B3...

Change Face Name

Identical Cavities

- Group Cavities

Sort by

- Diameter
- Distance

Text

- Upper Case
- Lower Case

Keep Existing Machining ID

Cavity Machining ID

A 1

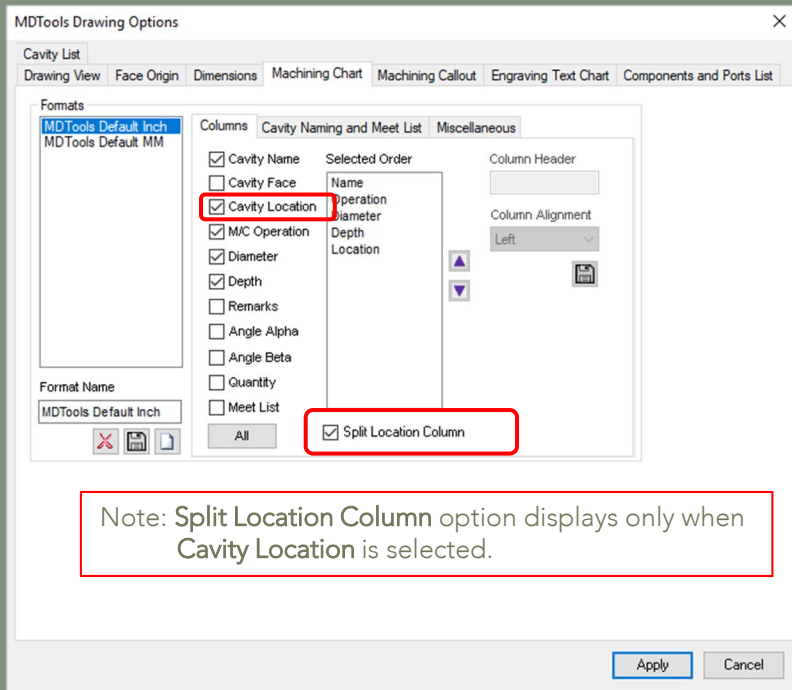
Index - Numeric Cavity Name

Alphabetic Face Name

Note: In MDTools 960 Group Identical Cavities option was available only for naming scheme 101, 102, 201, 202, 203, ...



Separate Columns for Cavity X and Y Location Coordinates



Option selected

Name	Operation	Diameter	Depth	Location X	Location Y
2A	DRILL	5/8	2.667	0.875	2.000
	C10-2	1.344	0.031		
2B	DRILL	0.250	2.000	4.250	1.999
	C10-2	1.344	0.031		
4	DRILL	0.625	2.667	0.875	2.000
	C10-2	1.344	0.031		
5	DRILL	0.625	3.214	4.250	2.000
	C10-4	1.344	0.031		

X and Y coordinates in separate columns

Option deselected

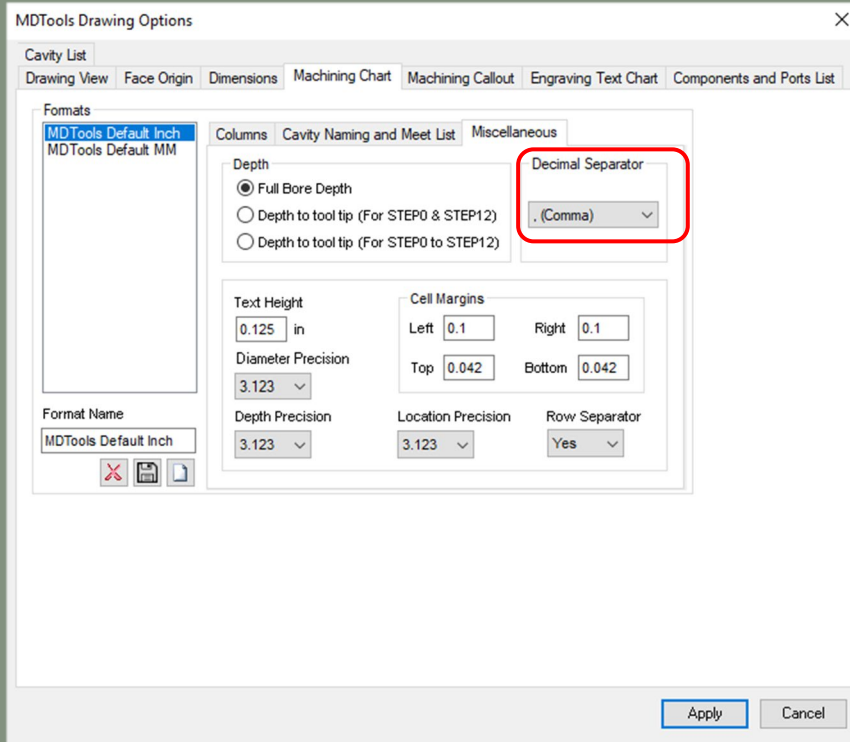
Name	Operation	Diameter	Depth	Location
2A	DRILL	5/8	2.667	(0.875/2.000)
	C10-2	1.344	0.031	
2B	DRILL	0.250	2.000	(4.250/1.999)
	C10-2	1.344	0.031	
4	DRILL	0.625	2.667	(0.875/2.000)
	C10-2	1.344	0.031	
5	DRILL	0.625	3.214	(4.250/2.000)
	C10-4	1.344	0.031	

X and Y coordinates in a single column





Decimal Separator options for Machining Chart



Decimal Separator options:
 System default
 , (Comma)
 . (Period)

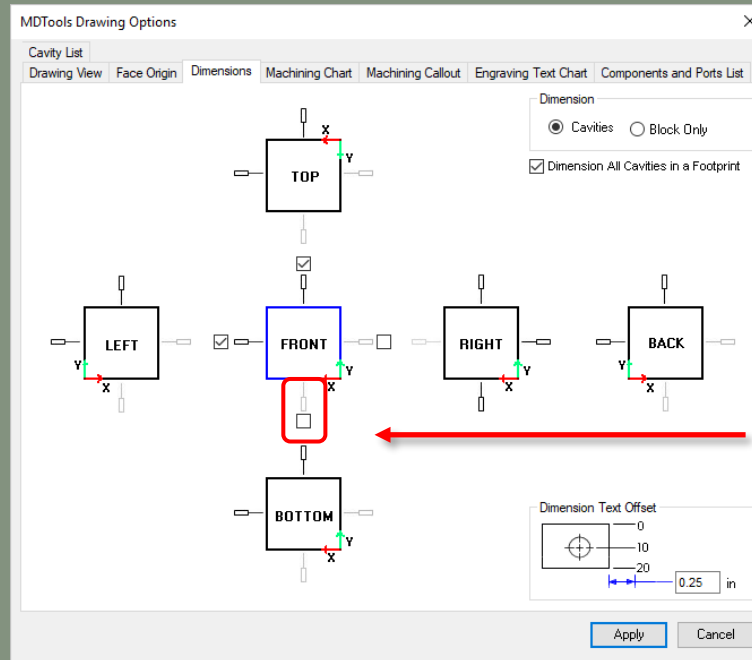
Name	Operation	Diameter	Depth	Location
2A	DRILL	5/8	2,667	(0,875/2,000)
	C10-2	1,344	0,031	
2B	DRILL	0,250	2,000	(4,250/1,999)
	C10-2	1,344	0,031	
4	DRILL	0,625	2,667	(0,875/2,000)
	C10-2	1,344	0,031	
5	DRILL	0,625	3,214	(4,250/2,000)
	C10-4	1,344	0,031	

Comma Decimal Separator



New Visual Interface for Auto Dimensioning

Dimensions are placed on the sides having black dimension icon (not gray)



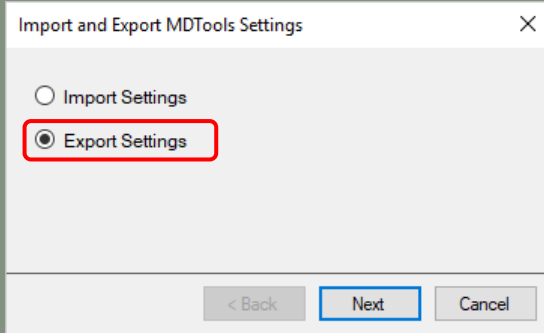
Select a view to set face sides available for dimensioning

Allow dimensions to be pulled to an edge



Easy Import and Export of MDTTools Settings across Versions or Computers

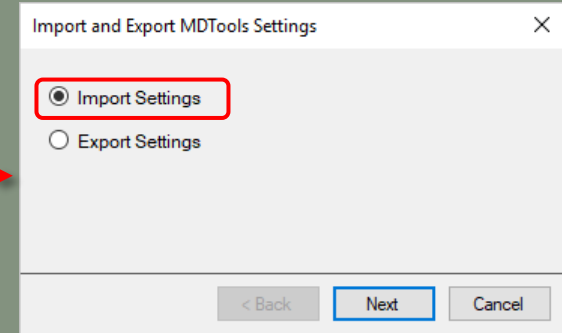
MDTools 960*



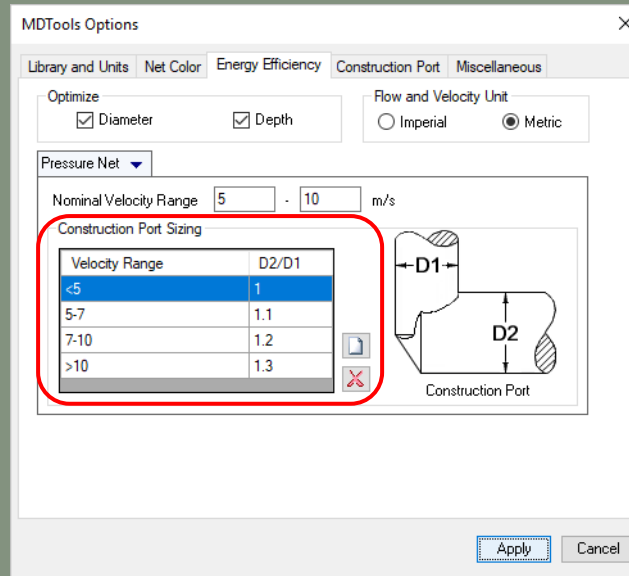
XML file containing
MDTools Settings



MDTools 965



Energy Efficiency settings
exported from MDTTools 960,
imported into MDTTools 965



- Use MDTTools 965's Import and Export MDTTools Settings utility to export MDTTools 960 settings.
(Windows Start menu > VEST folder > MDTTools 965 Import and Export Settings)



Fast and Secure Cloud-based License Activation

Two cloud-based license options available

License Options

License Type _____

Network, Cloud

Network, Local

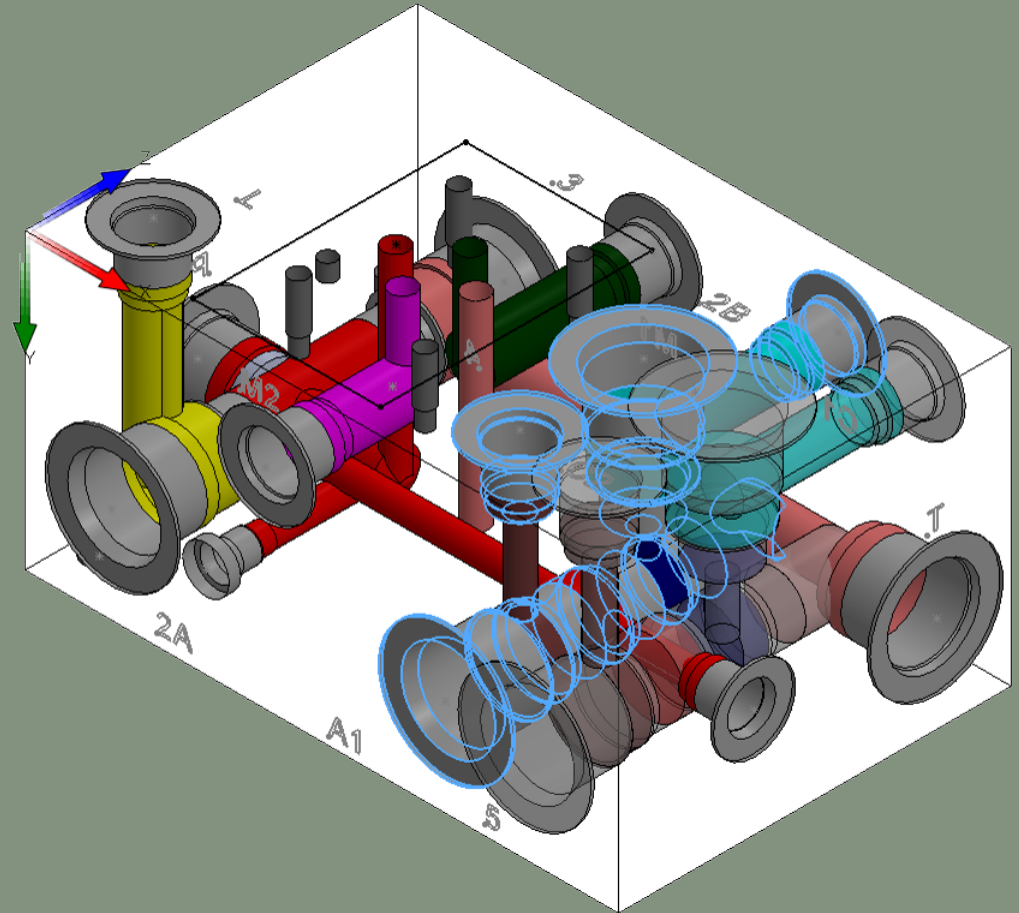
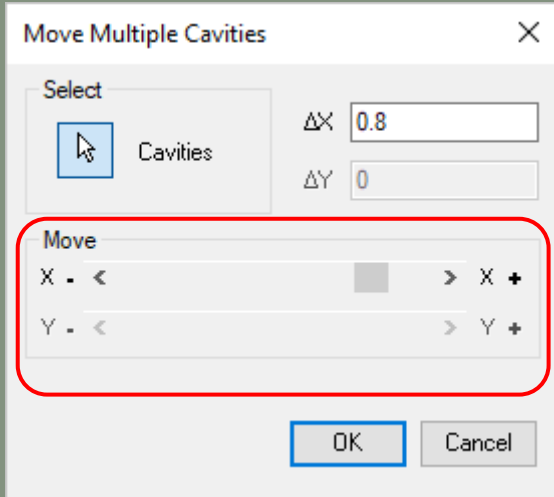
Next Close

Cool features of Cloud licensing:

- Fast and Secure Online Activation
- Access License from anywhere, anytime via Internet
- No need to use a USB dongle



Move Multiple Cavities using Scroll Bars

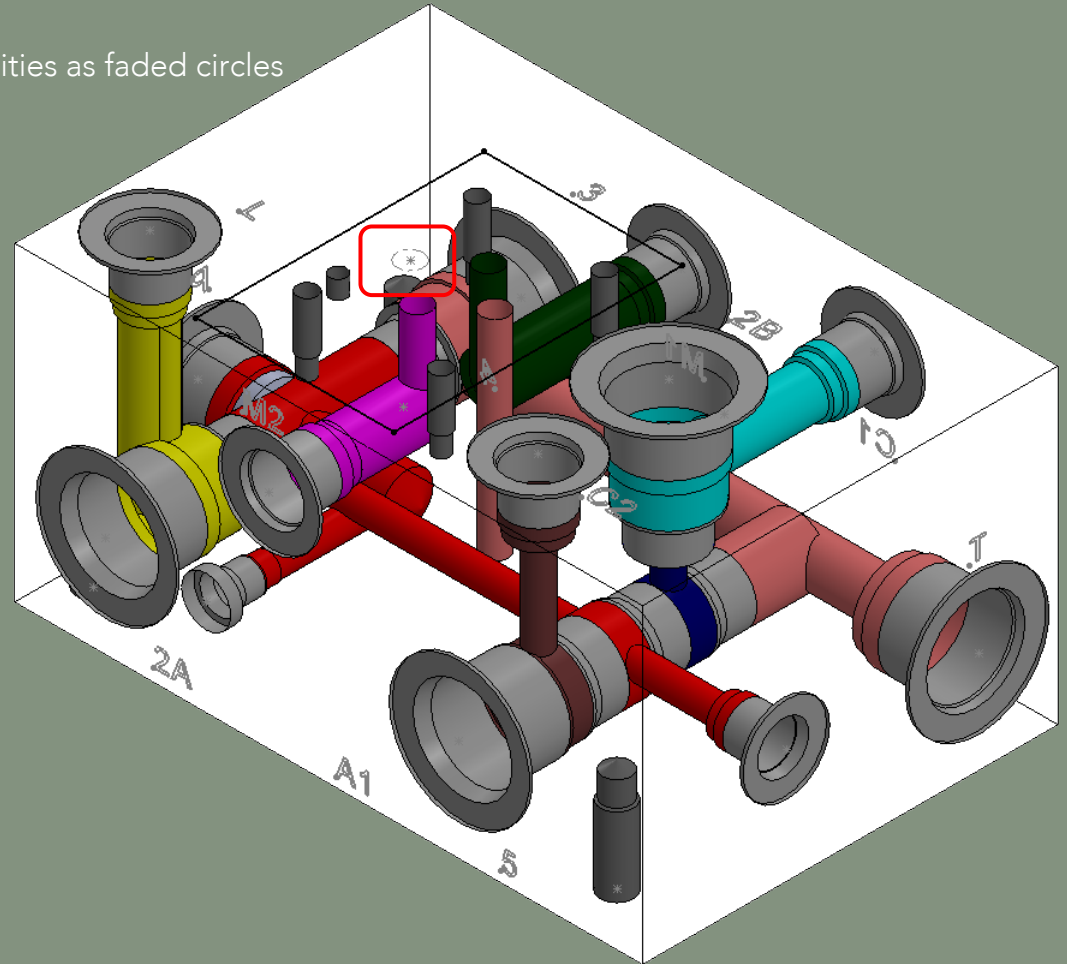
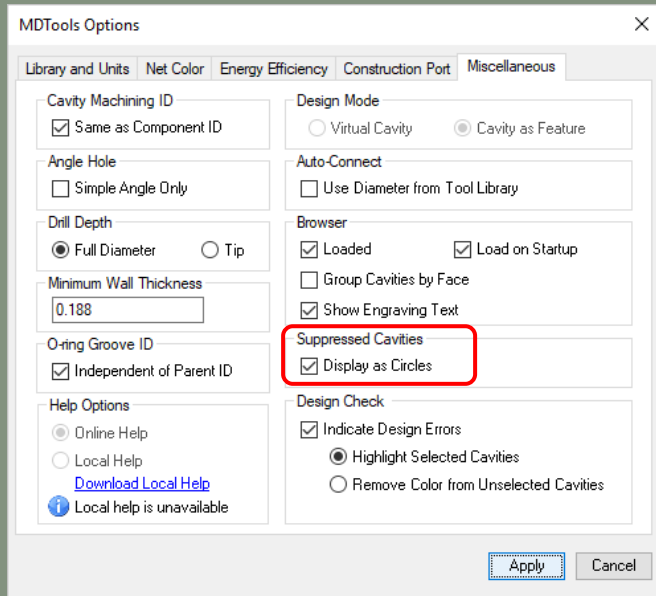


Multiple cavities selected in manifold block moved using scroll bars



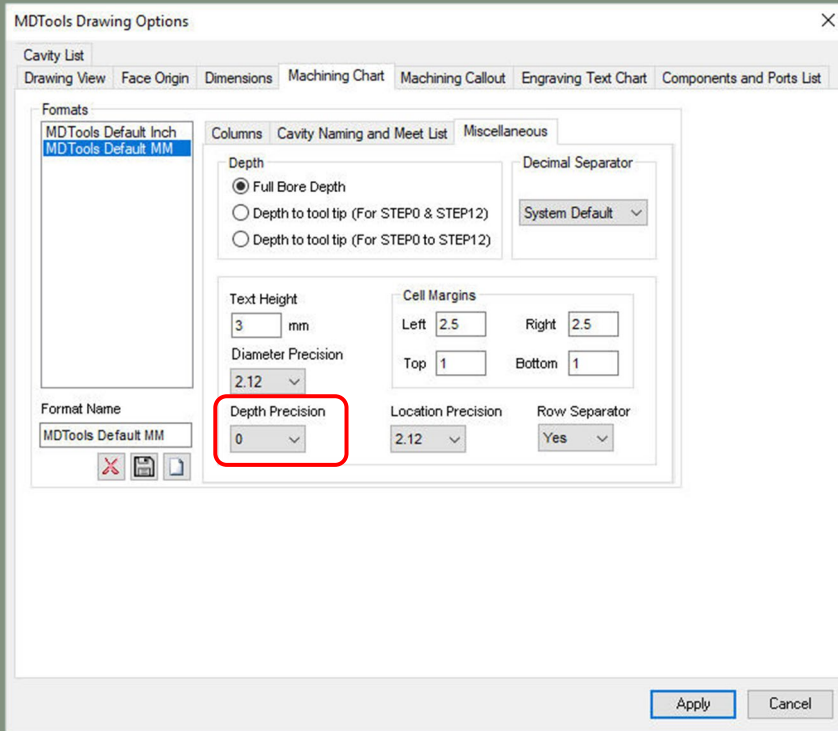
Improved Display for Terminated/Blocked Ports

Display suppressed cavities as faded circles





"0" Depth Precision option for Machining Chart



Name	Operation	Diameter	Depth	Location
G1	DRILL	5.00	43	(66.90/35.74)
	080-2	27.00	1	
G2	DRILL	11.00	63	(66.00/74.90)
	C0820	30.18	1	
H1	DRILL	8.50	66	(84.50/74.90)
	C0820	30.18	1	
C1	DRILL	17.48	57	(57.70/35.74)
	FORM PORT	#10SAE	1	
K1	TAP	7/8-14	17	
	DRILL	13.00	80	(43.10/57.70)
	SUN CAVITY	T-11A	17	
	TAP	M5X0.8	10	

Depth Precision set to 0 decimal places



Use . (dot) or , (comma) Decimal Separator Interchangeably

Block designed with .(dot) decimal separator

Component ID: 3
Machining ID: 15A
OEM Name: Parker C10-2
 Is Construction Part

Cavity Dimensions

Step	Diameter	Depth	Angle
0	30.16	0.79	90
12	15	63.5	59

Depth To Tip
Maximum Nose Diameter: 15.47

Port Information

Port	Flow	Type	Net Name
1		Pressure	NET-1
2		Pressure	NET-2

Preview:

Buttons: Change Inclination, Edit All Parameters, OK, Cancel

Block designed with ,(comma) decimal separator

Component ID: 3
Machining ID: 15A
OEM Name: Parker C10-2
 Is Construction Part

Cavity Dimensions

Step	Diameter	Depth	Angle
0	30,16	0,79	90
12	15	63,5	59

Depth To Tip
Maximum Nose Diameter: 15,47

Port Information

Port	Flow	Type	Net Name
1		Pressure	NET-1
2		Tank	NET-2

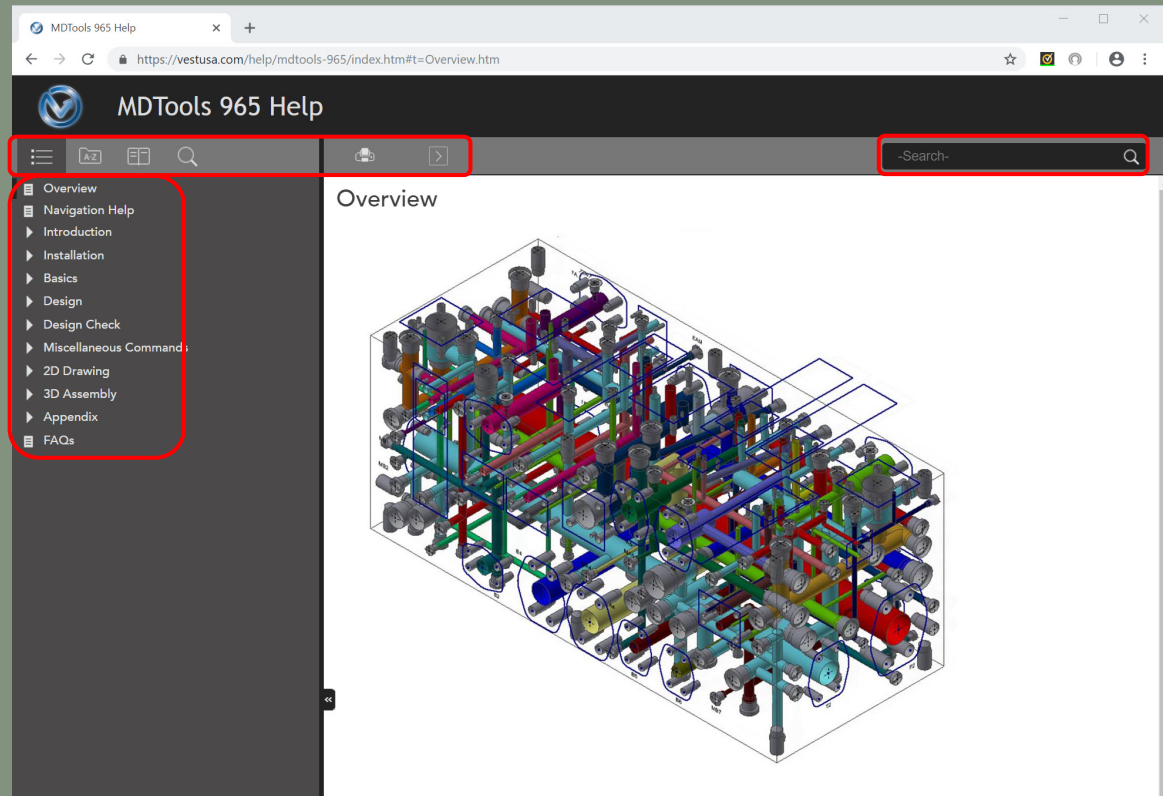
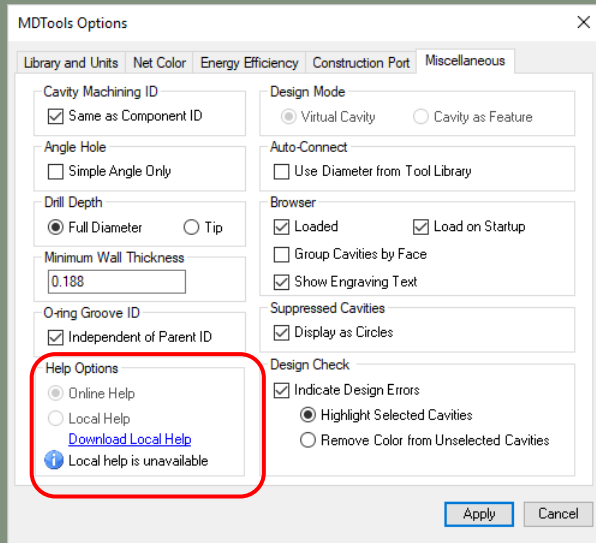
Preview:

Buttons: Change Inclination, Edit All Parameters, OK, Cancel

Blocks designed using .(dot) as the decimal separator can be opened/edited using ,(comma) as the decimal separator and vice versa.



MDTools Help: Online and Offline



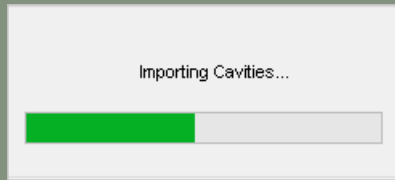
Cool features:

- Online version, always up-to-date
- Smart Search
- Glossary
- Integration with KB/FAQs
- Structured task-oriented navigation
- Index with Filter Keywords

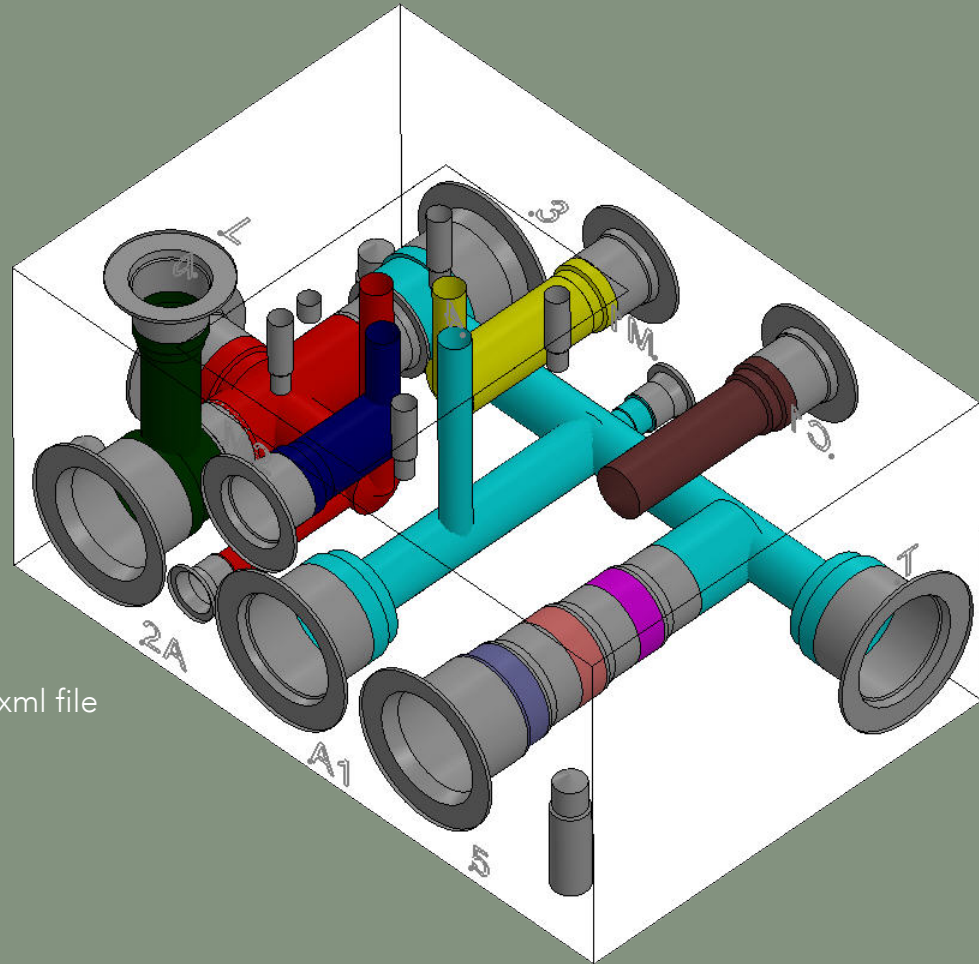
Note: Local Help can be used by downloading and installing the Local Help setup.



Progress Status Bar displays during Import of 'mbxml' Files



Status bar indicates progress of the import



Intermediate block, while importing mbxml file



Do more...

MDTools® 965

manifold design app

USA: +1 (248) 649-9550

sales@VESTusa.com

Europe: +39 328 695 70 01

carlo@VESTusa.com

