

# MDTools® 735

## What's New



# MDTools® ...more power

New, Enhanced and Extra Functionality

NEW

1	MDTools Compatible with 64-Bit Operating System
2	Automated Machining Drawing (Simultaneous)

## MDTools 735 Extras

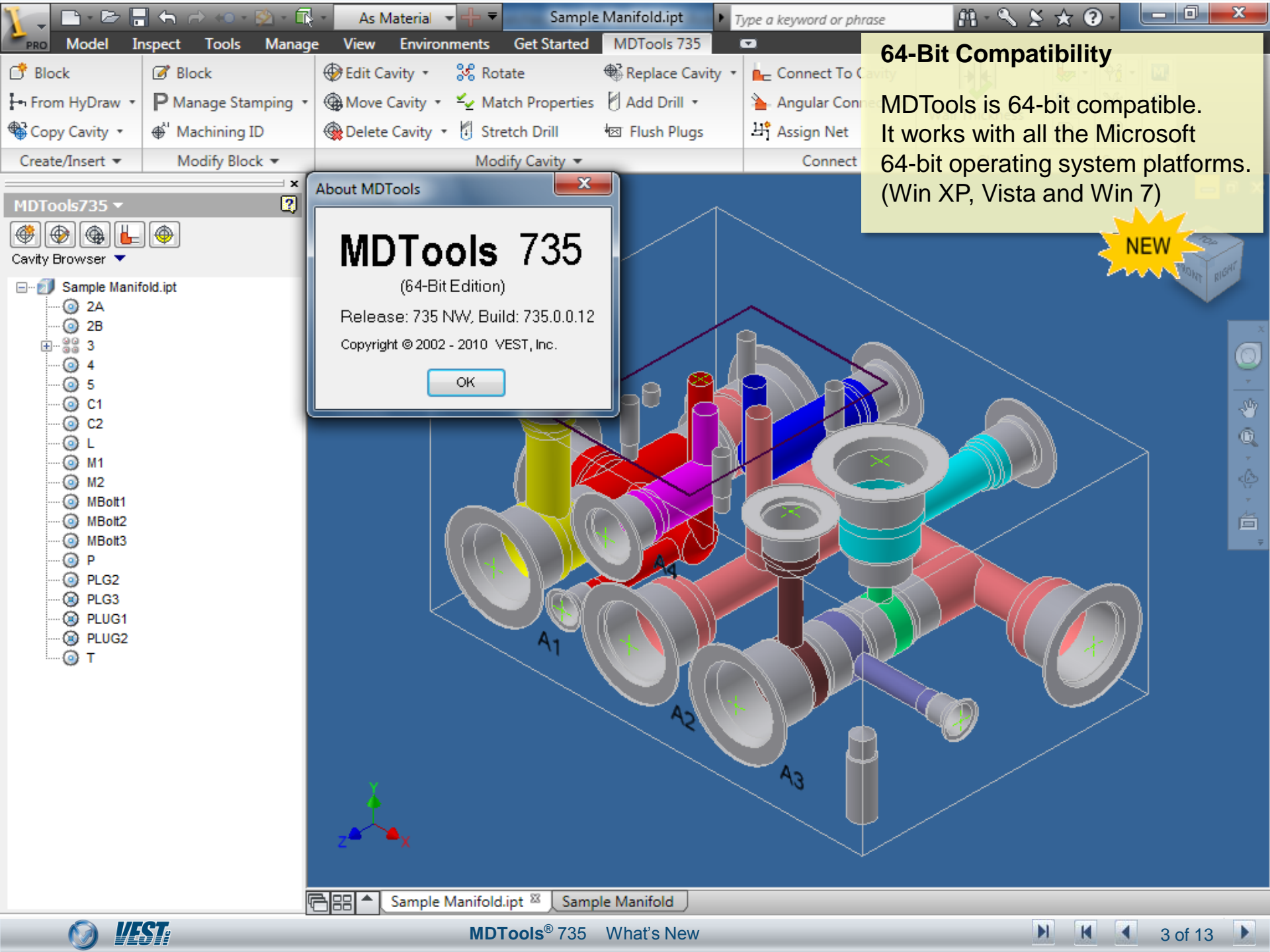
1	Resize Manifold
2	Show Internal Details

ENHANCED

1	Improved Angular Connection
2	Improved GUI for Edit Cavity
3	Insert Cavity from HyDraw XML Schematic File
4	Display Center Marks in the Create View Command
5	Automatic Jogging of Dimensions during Auto-Dimensioning
6	Configure Face Origin in the 2D Drawing



Editing Part



## 64-Bit Compatibility

MDTools is 64-bit compatible. It works with all the Microsoft 64-bit operating system platforms. (Win XP, Vista and Win 7)



About MDTools

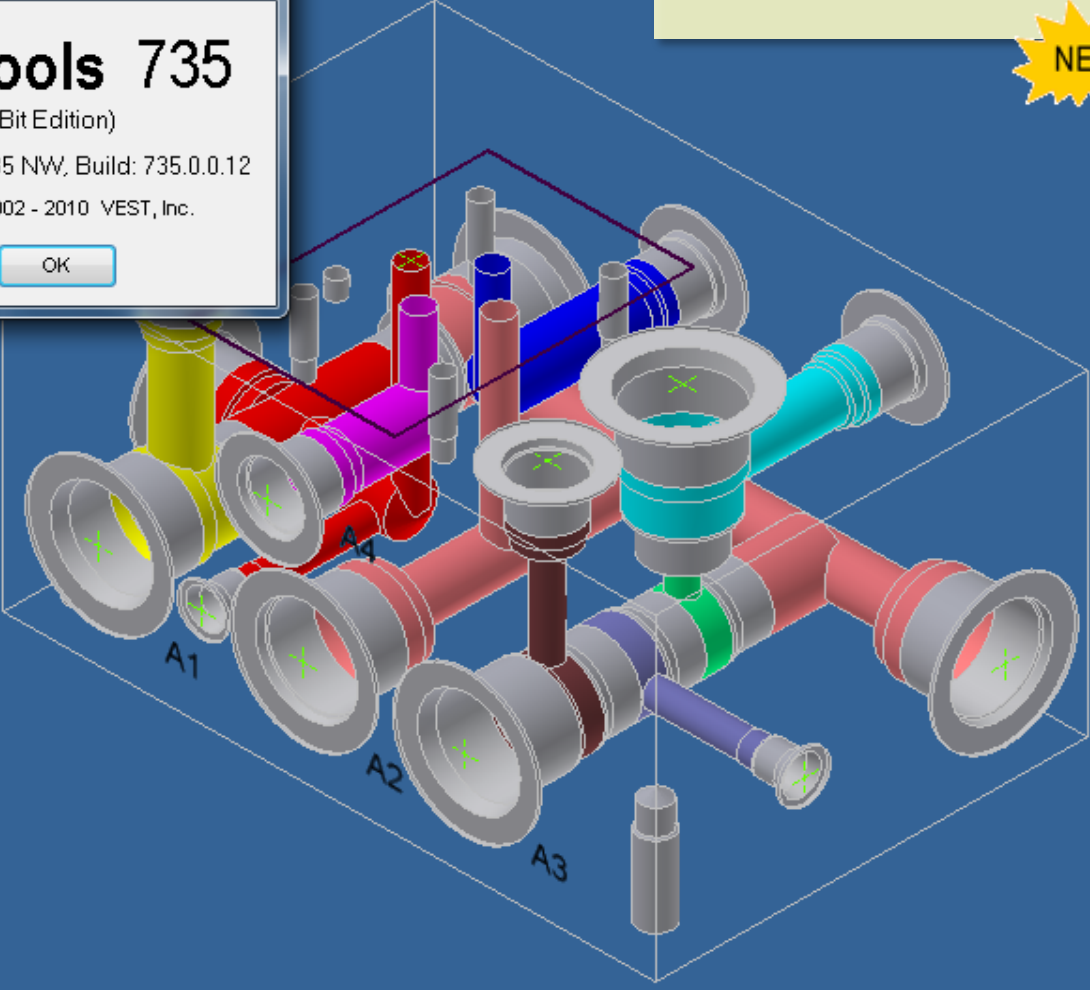
# MDTools 735

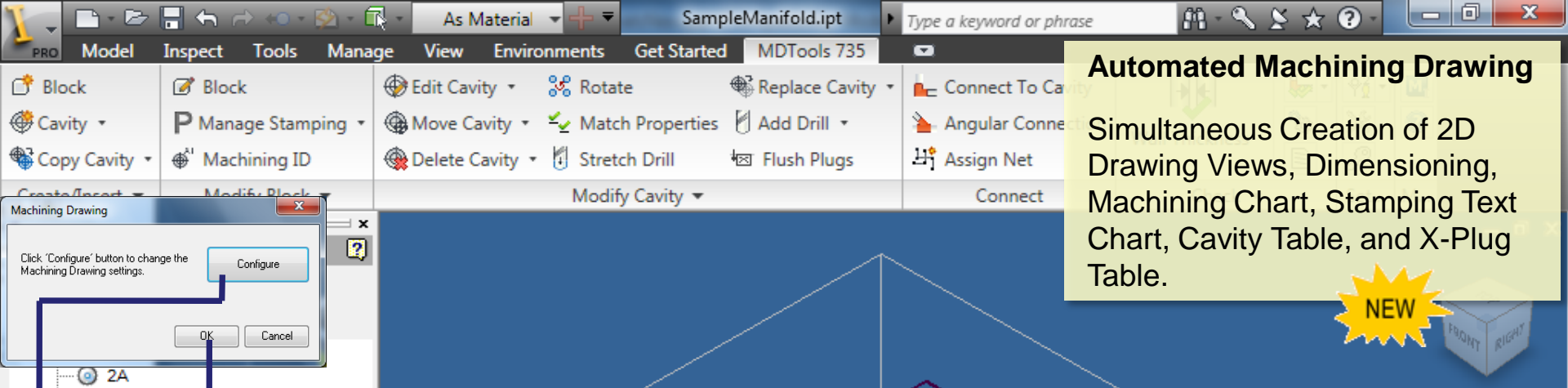
(64-Bit Edition)

Release: 735 NW, Build: 735.0.0.12

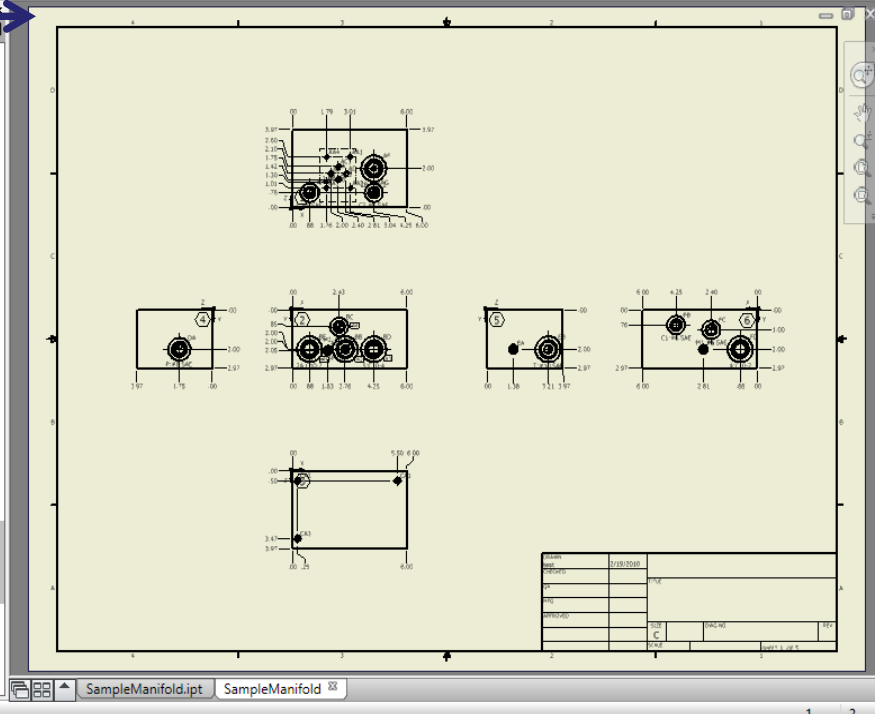
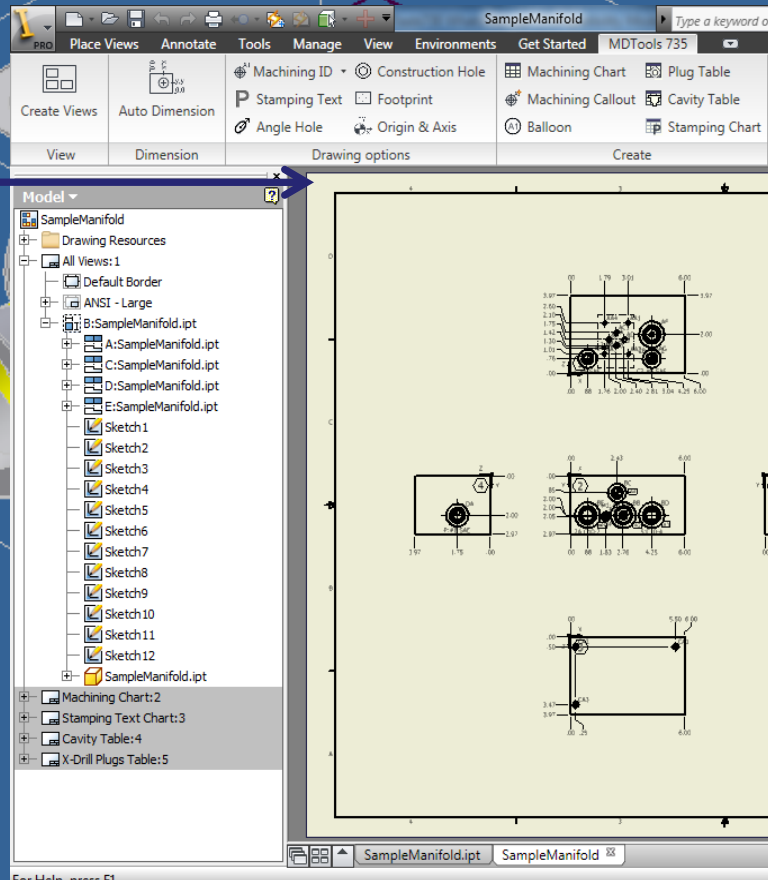
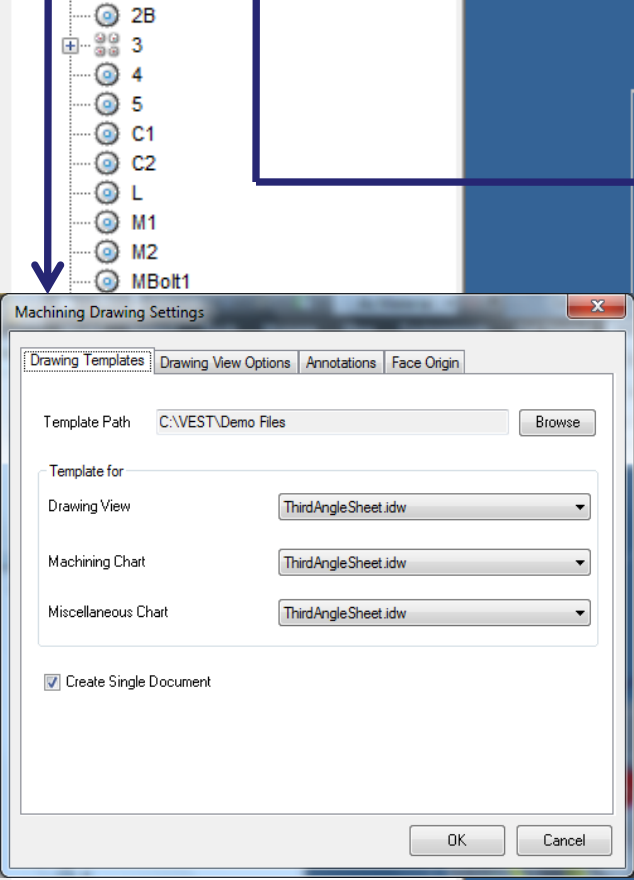
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OK





**Automated Machining Drawing**  
Simultaneous Creation of 2D Drawing Views, Dimensioning, Machining Chart, Stamping Text Chart, Cavity Table, and X-Plug Table.



MDTools735

Cavity Browser

- SampleManifold.ipt
  - 2A
  - 2B
  - 3
  - 4
  - 5
  - C1
  - C2
  - L
  - M1
  - M2
  - MBolt1
  - MBolt2
  - MBolt3
  - P
  - PLG2
  - PLG3
  - PLUG1
  - PLUG2
  - T

Resize Manifold

Specify Change in Dimension

Dimension to Edit: Length

Current length= 6     $\Delta L$  0.5

Add Material     Remove Material

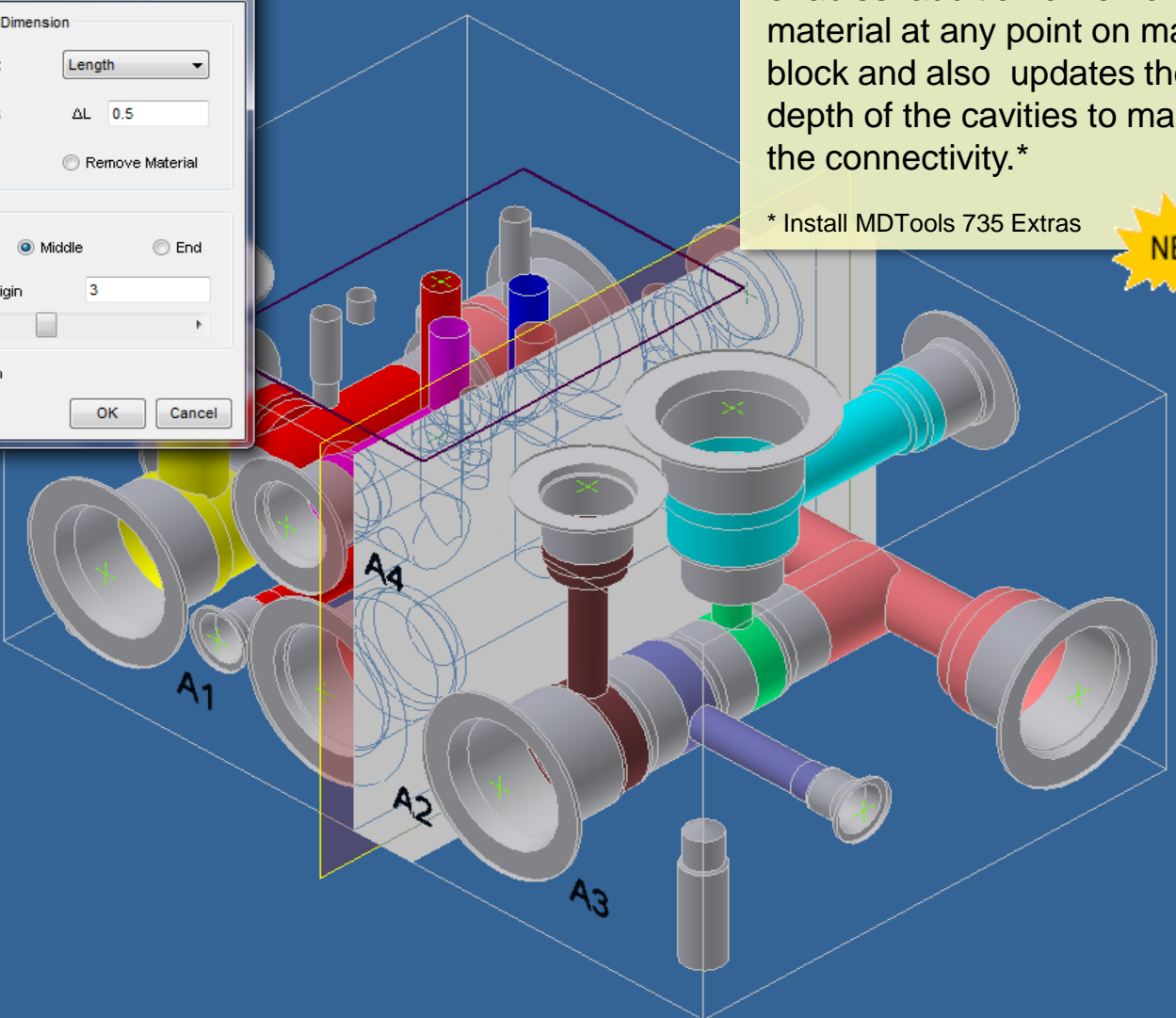
Specify position

Start     Middle     End

Distance from Origin: 3

Update Drill Depth

OK Cancel



### Resize Manifold

Resize Manifold command enables addition or removal of material at any point on manifold block and also updates the drill depth of the cavities to maintain the connectivity.\*


\* Install MDTools 735 Extras

**NEW**

### Show Internal Details

Displays the internal details for the Drawing views created in the 2D drawing.

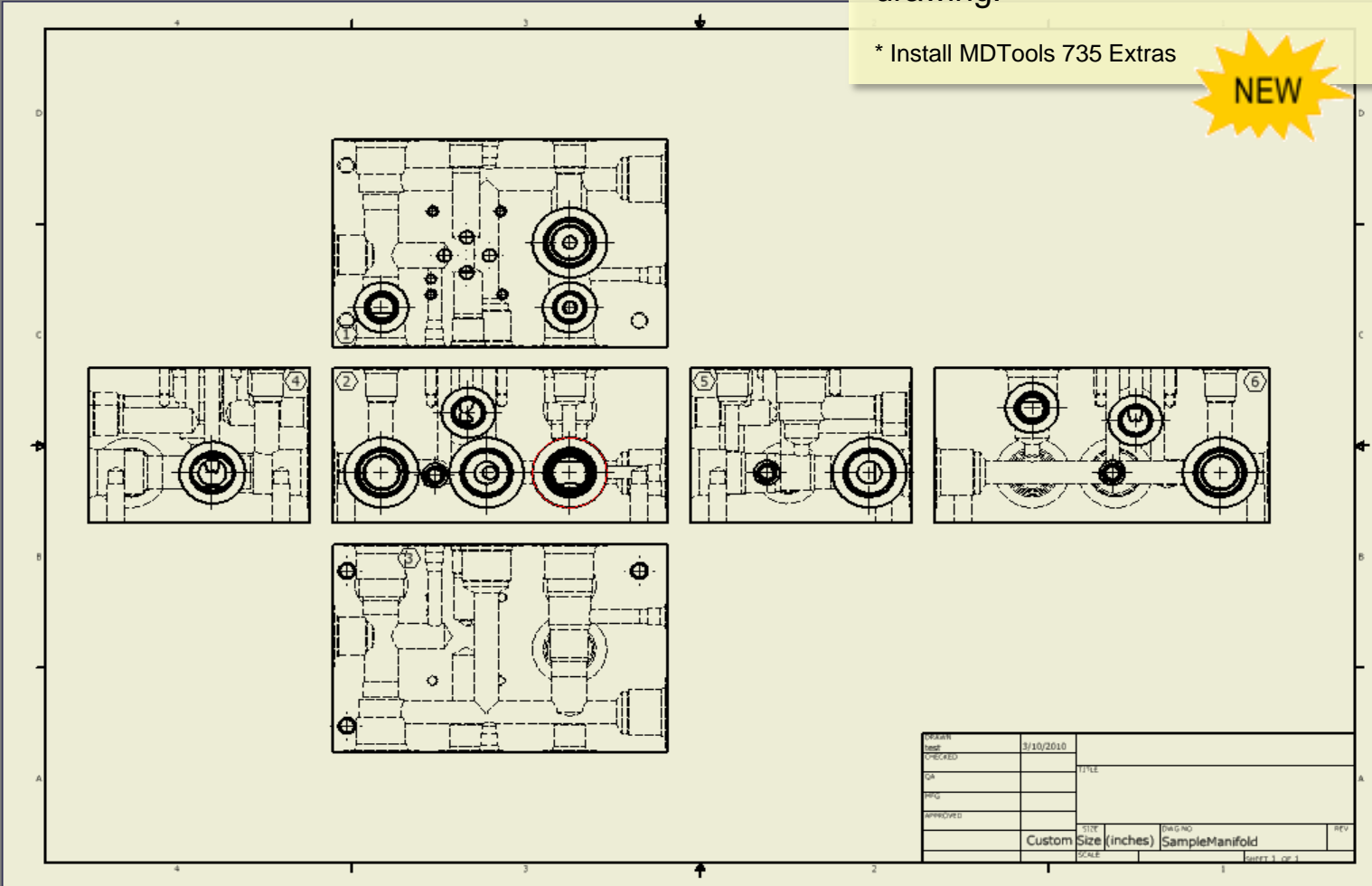
\* Install MDTools 735 Extras



Show Internal Details Hide Internal Details

Model

- SampleManifold.idw
  - Drawing Resources
    - Sheet: 1
      - Default Border
      - ANSI - Large
      - B:SampleManifold.ipt
        - B\_Internal:SampleManifold\_Internal
        - A\_Internal:SampleManifold\_Internal
        - C\_Internal:SampleManifold\_Internal
        - D\_Internal:SampleManifold\_Internal
        - E\_Internal:SampleManifold\_Internal
        - F\_Internal:SampleManifold\_Internal



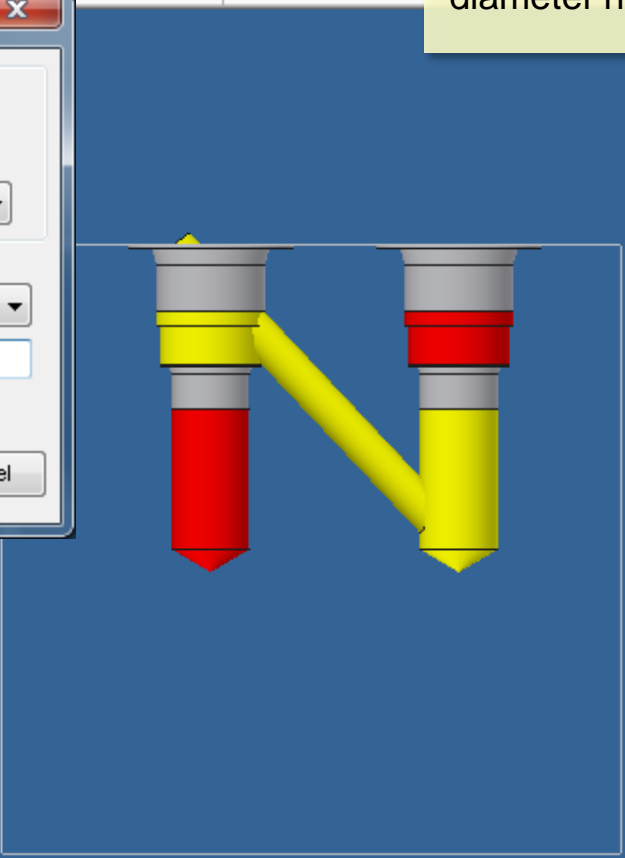
Block Block Edit Cavity Rotate Replace Cavity Connect To Cavity  
Cavity Manage Stamping Move Cavity Match Properties Add Drill Angular Connection  
Copy Cavity Machining ID Delete Cavity Stretch Drill Flush Plugs Assign Net  
Create/Insert Modify Block Modify Cavity Connect

**Improved Angular Connection**  
Works more efficiently and connects cavities with the largest diameter hole.



**Angular Connection**

First Cavity	Second Cavity
Port 2	Port 1
Angle Hole ID: A1	Angle Precision: 0.00
Expected Diameter: 0	
<input type="checkbox"/> No Compound Angle Hole	
Create Hole Cancel	



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Cavity Browser

- Part2
  - A1
  - C10-2
  - C10-2-1

Model Inspect Tools Manage View Environments Get Started MDTools 735

Block Block Edit Cavity Rotate Replace Cavity Connect To Cavity  
 From HyDraw Manage Stamping Move Cavity Match Properties Add Drill  
 Copy Cavity Machining ID Delete Cavity Stretch Drill Flush Plugs Assign Net  
 Create/Insert Modify Block Modify Cavity Connect

**Improved GUI of Edit Cavity**

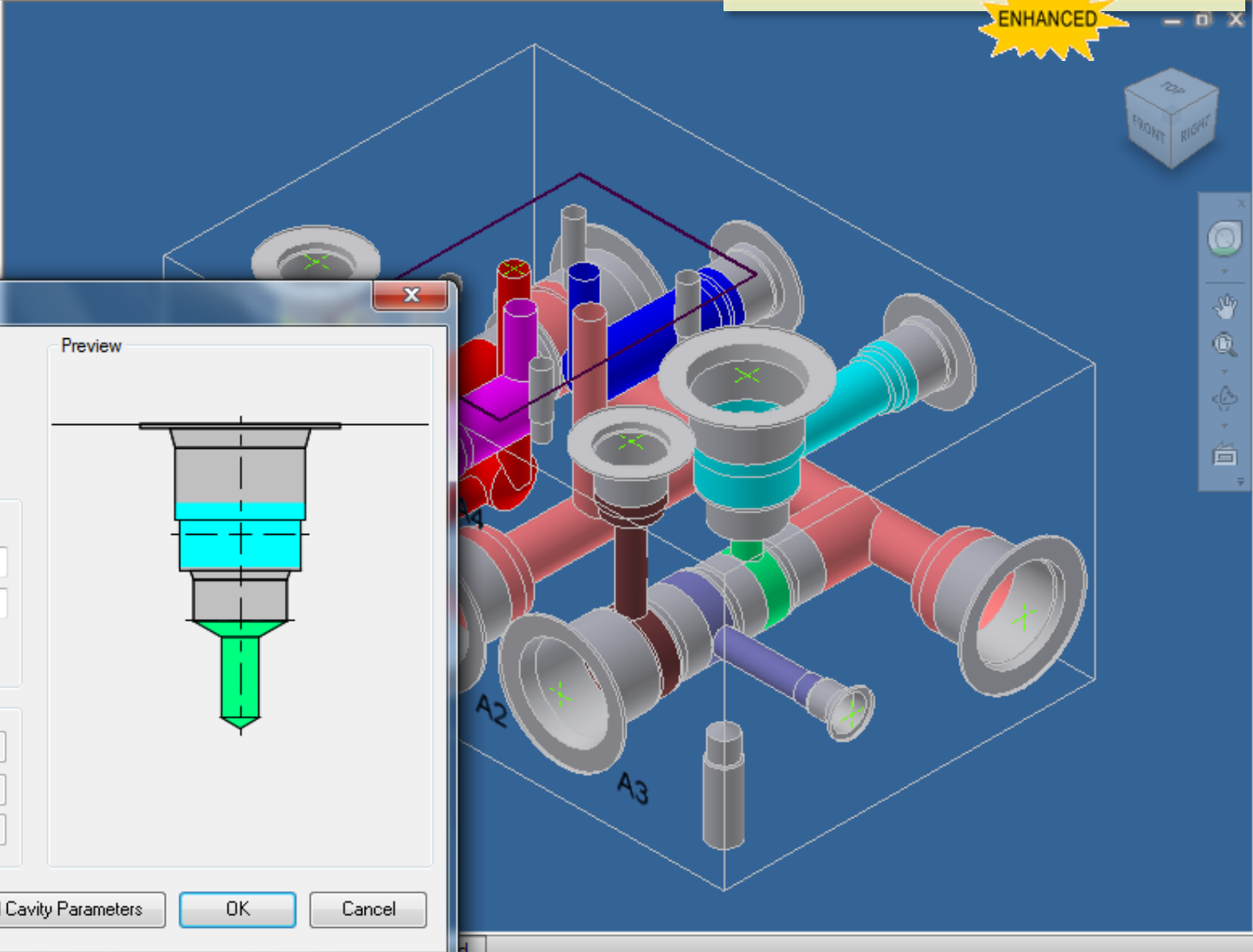
Improved GUI of the Edit Cavity command.



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Cavity Browser

- SampleManifold.ipt
  - 2A
  - 2B
  - 3
  - 4
  - 5



**Edit Cavity**

Component ID : 2B  
 Machining ID : AF  
 Footprint Name : Parker C10-2

Cavity Dimensions

Step	Diameter	Depth	Angle
0	1.344	0.031	90
12	0.25	2	59

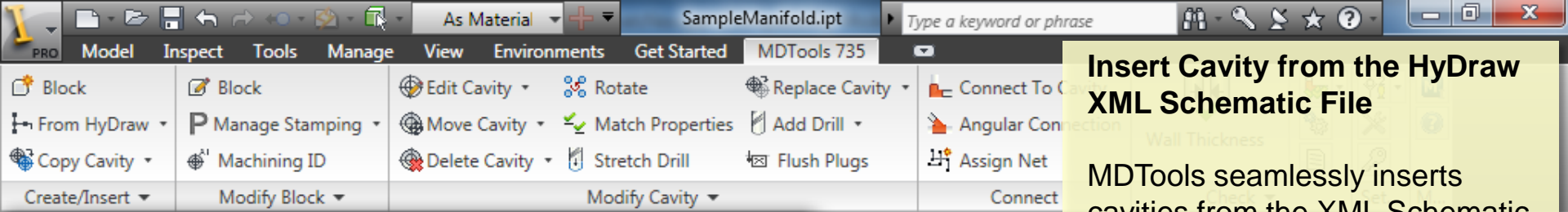
Depth to Tip  
 Maximum Drill Diameter: 0.627

Net Name

Port1	NET3	Port4	
Port2	NET4	Port5	
Port3		Port6	

Preview

Change Cavity Inclination Edit All Cavity Parameters OK Cancel



## Insert Cavity from the HyDraw XML Schematic File

MDTools seamlessly inserts cavities from the XML Schematic file exported from HyDraw.

**ENHANCED**

MDTools HyDraw Interface

C:\VEST\Demo Files\1.xml

**Cavity Browser** | Connectivity Browser

- Manifold Block
  - BR
  - CBCA-1**
  - CBCA-2
  - CSAD
  - M1
  - M2
  - RSDC
  - RSDC-2
  - T
  - V1
  - V2

**Cavity Information**

Component ID: CBCA-1

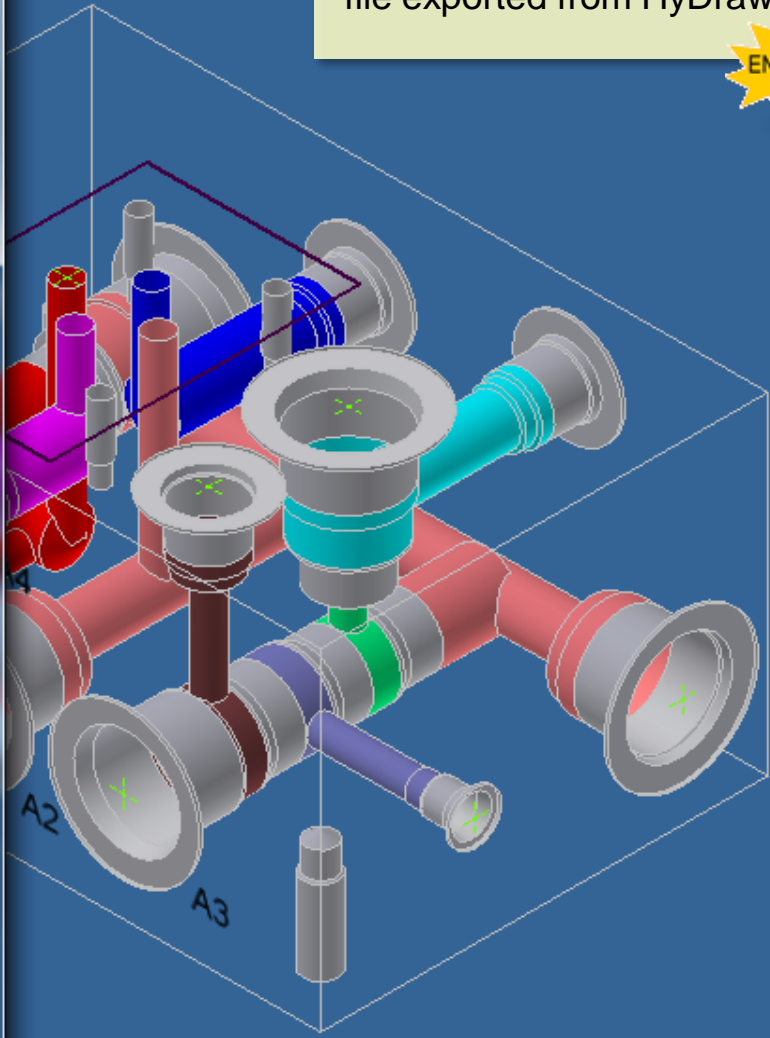
Cavity Name: T-11A

Cavity Type: Cartridge Valve Cavity

Comments:

**Net Information**

Port 1	Net Name	NET-4
Port 2	Net Name	NET-1
Port 3	Net Name	NET-2



PRO Place Views Annotate Tools Manage View Environments Get Started MDTools 735

Create Views Auto Dimension

Machining ID Construction Hole Machining Chart Plug Table  
Stamping Text Footprint Machining Callout Cavity Table  
Angle Hole Origin & Axis Balloon Stamping Chart

View Dimension Drawing options Create

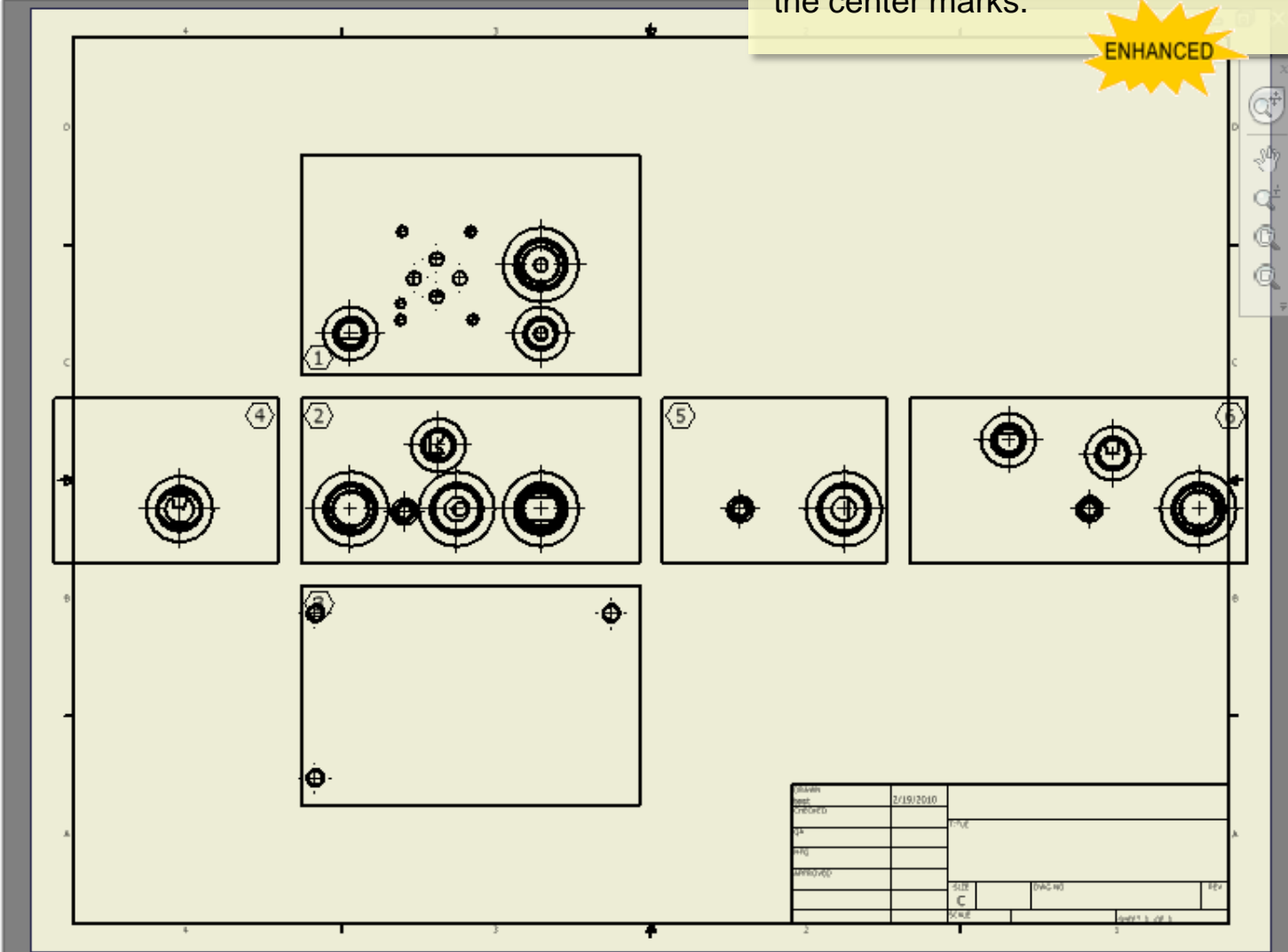
### Display Center Marks

In 2D drawing, the Create Views command automatically displays the center marks.

**ENHANCED**

Model

- Sample Manifold
  - Drawing Resources
  - Sheet: 1
    - Default Border
    - ANSI - Large
    - B:Sample Manifold.ipt
      - Sketch 1
      - A:Sample Manifold.ipt
        - Sketch 1
      - Sample Manifold.ipt
    - C:Sample Manifold.ipt
      - Sketch 1
      - Sample Manifold.ipt
    - D:Sample Manifold.ipt
      - Sketch 1
      - Sample Manifold.ipt
    - E:Sample Manifold.ipt
      - Sketch 1
      - Sample Manifold.ipt
    - F:Sample Manifold.ipt
      - Sketch 1
      - Sample Manifold.ipt
    - Sample Manifold.ipt
    - Sample Manifold.ipt



Place Views Annotate Tools Manage View Environments Get Started MDTools 735

View	Dimension	Drawing options		Create	
Create Views	Auto Dimension	Machining ID	Construction Hole	Machining Chart	Plug Table
		Stamping Text	Footprint	Machining Callout	Cavity Table
		Angle Hole	Origin & Axis	Balloon	Stamping Chart

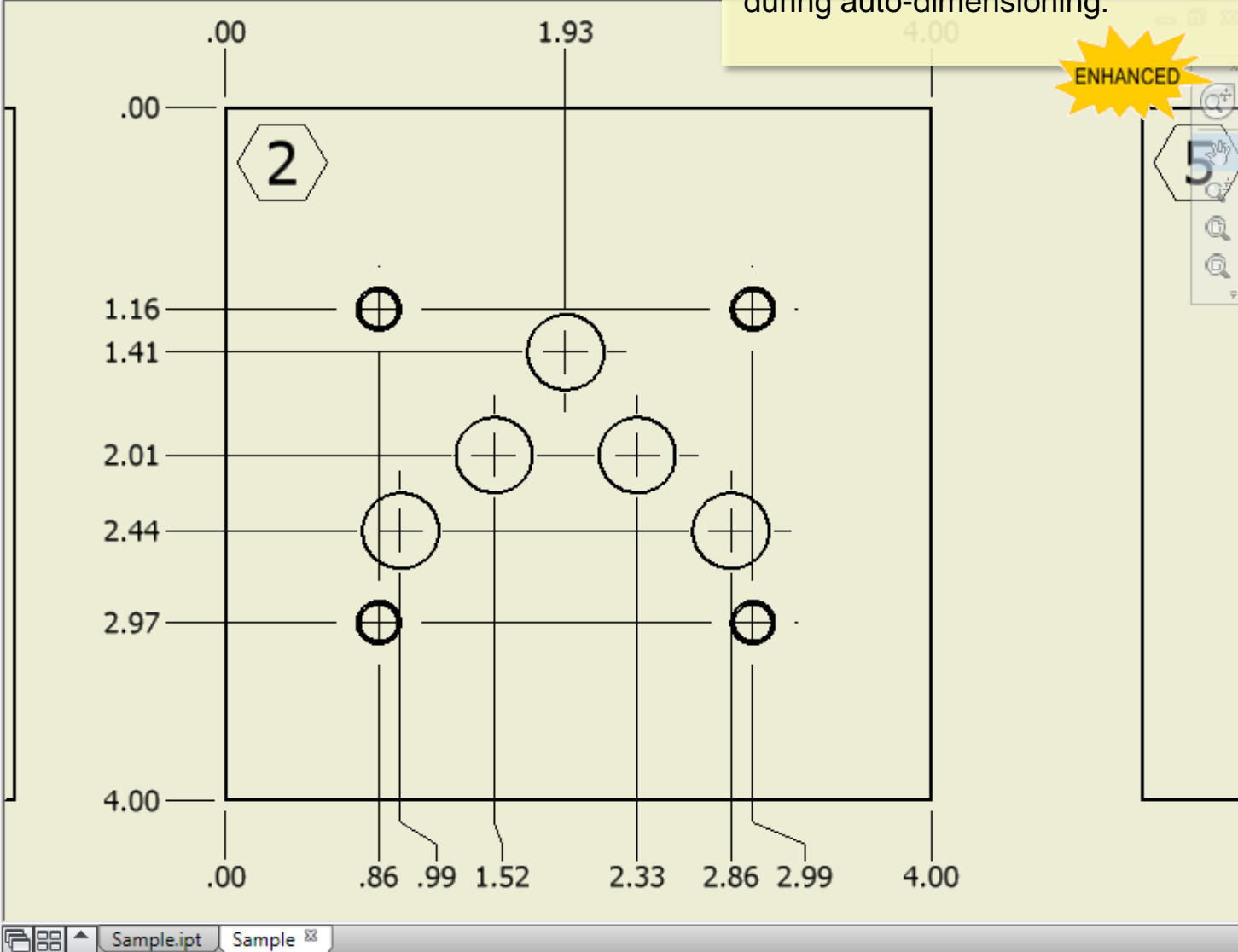
### Jogging of Dimensions

Better 2D drawing readability with dimensions automatically jogged during auto-dimensioning.

**ENHANCED**

Model

- Sample
  - Drawing Resources
  - Sheet: 1
    - Default Border
    - ANSI - Large
    - B:Sample.ipt
      - Sketch 1
      - A:Sample.ipt
        - Sketch 1
        - Sketch 2
      - Sample.ipt
      - C:Sample.ipt
        - Sketch 1
        - Sketch 2
      - Sample.ipt
      - D:Sample.ipt
        - Sketch 1
        - Sketch 2
      - Sample.ipt
      - E:Sample.ipt
        - Sketch 1
        - F:Sample.ipt
          - Sketch 1
          - Sketch 2
        - Sample.ipt
        - Sample.ipt
          - Sketch 2
        - Sample.ipt
          - Sketch 2
        - Sample.ipt
          - Sketch 2
          - Sketch 3
          - Sketch 4
          - Sketch 5



Place Views Annotate Tools Manage View Environments Get Started MDTools 735

Create Views Auto Dimension Machining ID Construction Hole Machining Chart Plug Table Stamping Text Footprint Machining Callout Cavity Table Angle Hole Origin & Axis Balloon Stamping Chart

View Dimension Drawing options Create

### Configure Face Origin

Configure face origin in the 2D drawing. Also, dimension from this origin.



#### Auto Dimension

Dimension Text Offset: 0.2  Dimension All Cavities

**Dimension Orientation**

**Top**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

**Front**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

**Bottom**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

**Left**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

**Right**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

**Back**  
X-Dimension:  Bothsides  Top  Bottom  
Y-Dimension:  Bothsides  Left  Right

Status:

#### Set Face Origin

Enhance your productivity and competitive edge with **MDTools®**

**FREE**

**MDTools® 735 Evaluation Software**

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