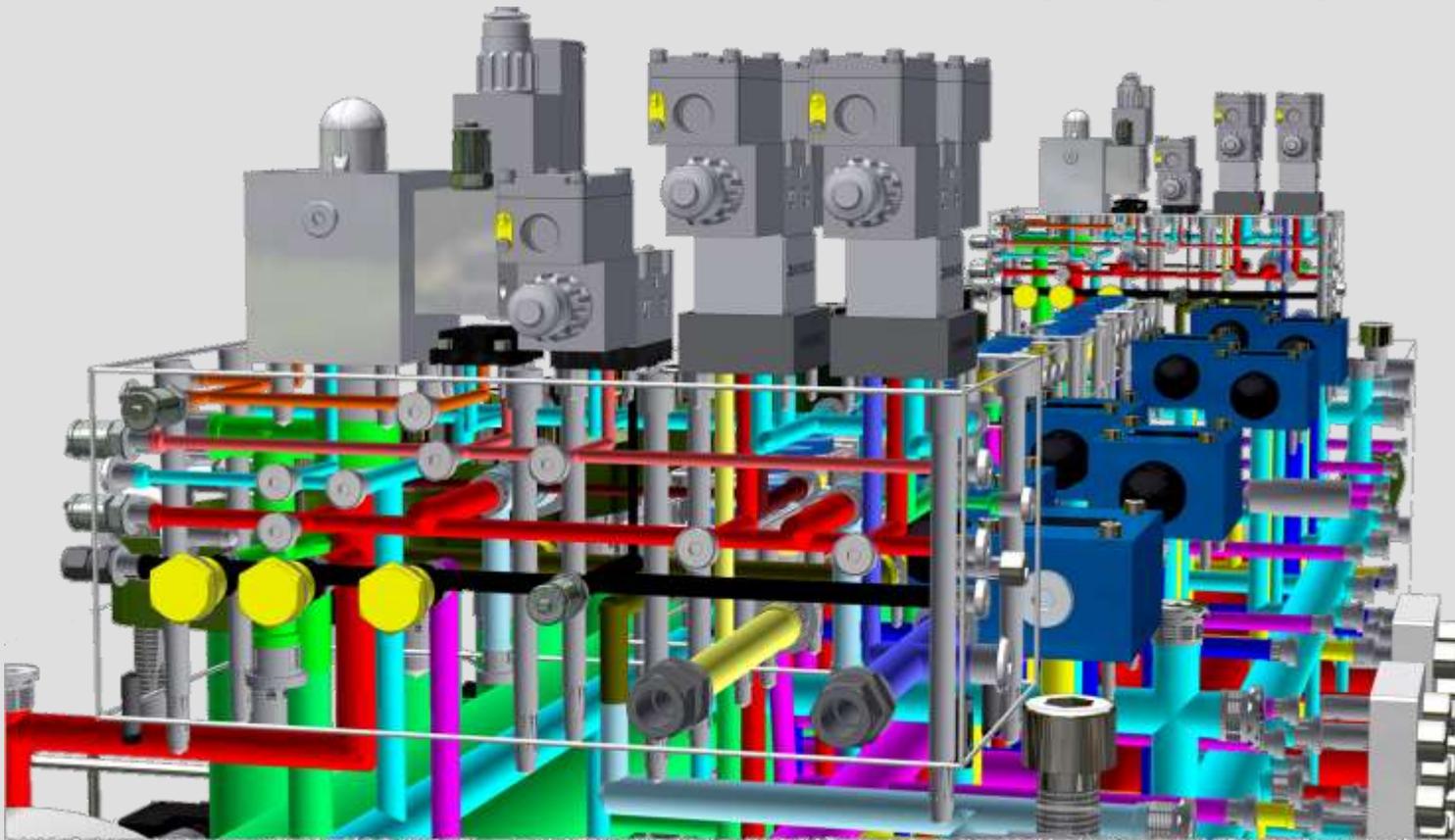


# MDTools® 980

## What's New



\* Manifold Assembly designed with MDTools, courtesy Duplomatic MS SpA.



# MDTools® 980 What's New

## Machining Callout Grouping

Grouping of Cavities within a Footprint

Grouping of Cavities within Similar Footprints on the Same Face

Grouping of Identical Cavities within a Face

## Updated Wall Thickness Checks

Separate Categories for Reports Regarding Wall Thickness between Spot Face and Working Area

Separate Categories for Reports Regarding Wall Thickness between Spot Face and Dead Area

## Assemble Footprints Simplified

Use of Bolt Holes for Location Constraints

Reduced Precision Requirements

## Miscellaneous

SQL Cavity Library

Integration with VEST Desktop App

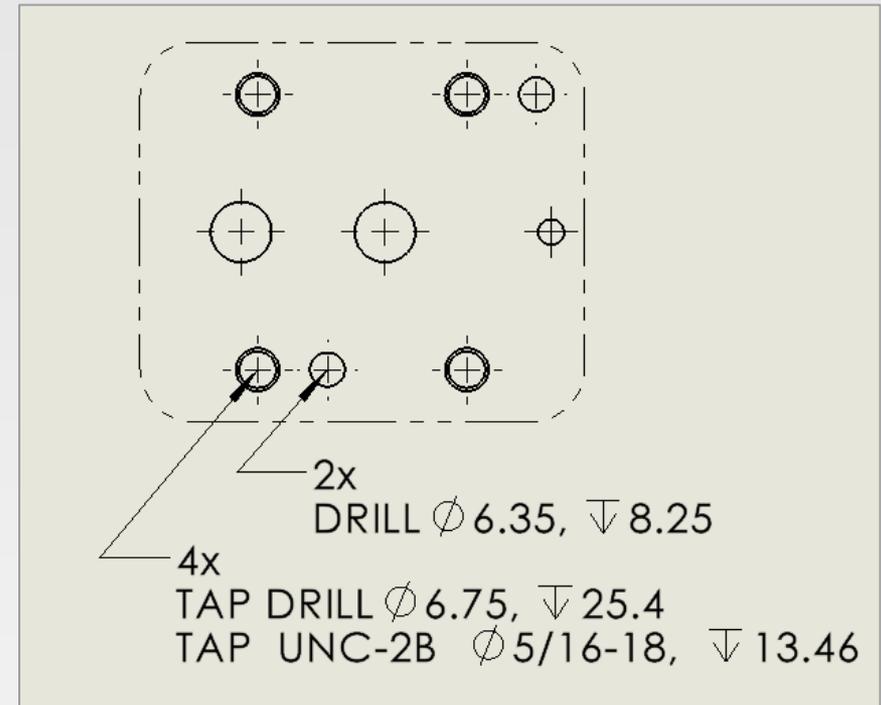
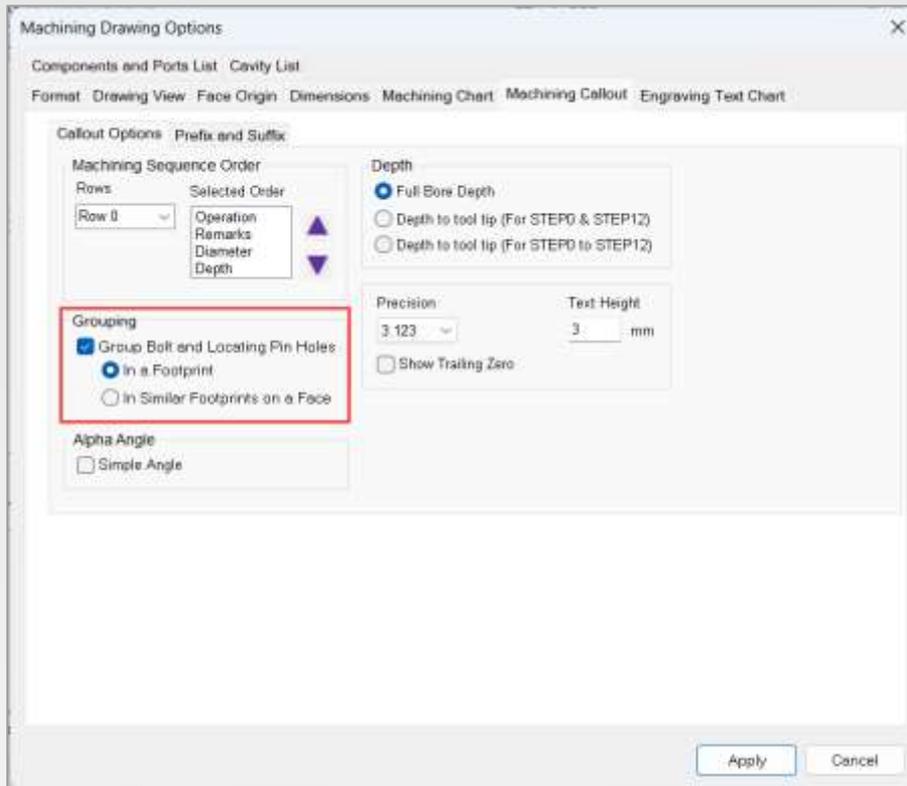
New and Improved Cavity Browser Icons

Additional MDTools Enhancements

Speed improvement

# Grouping of Cavities within a Footprint

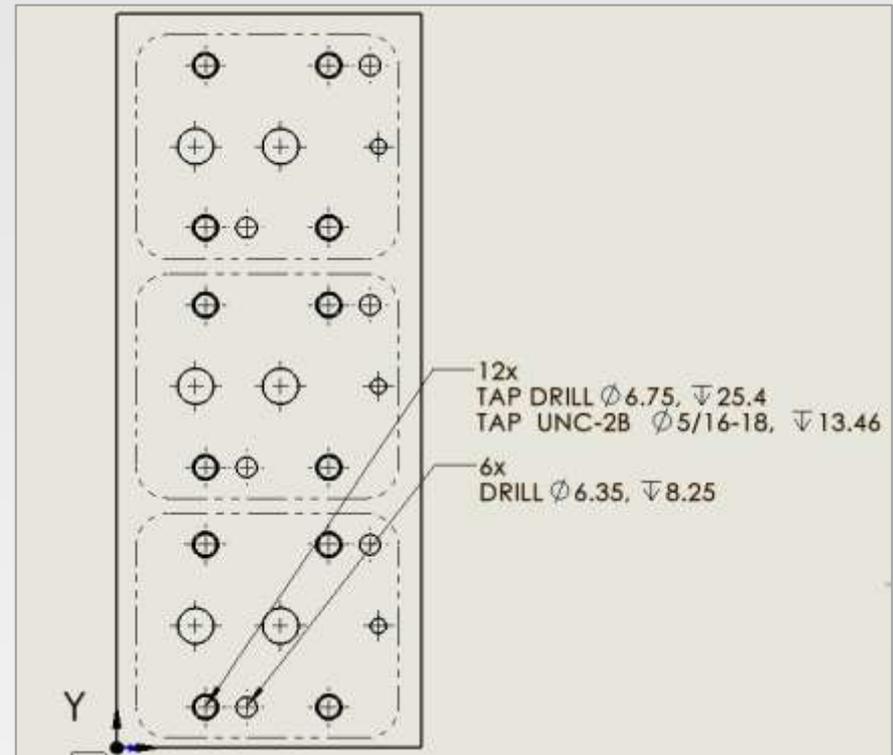
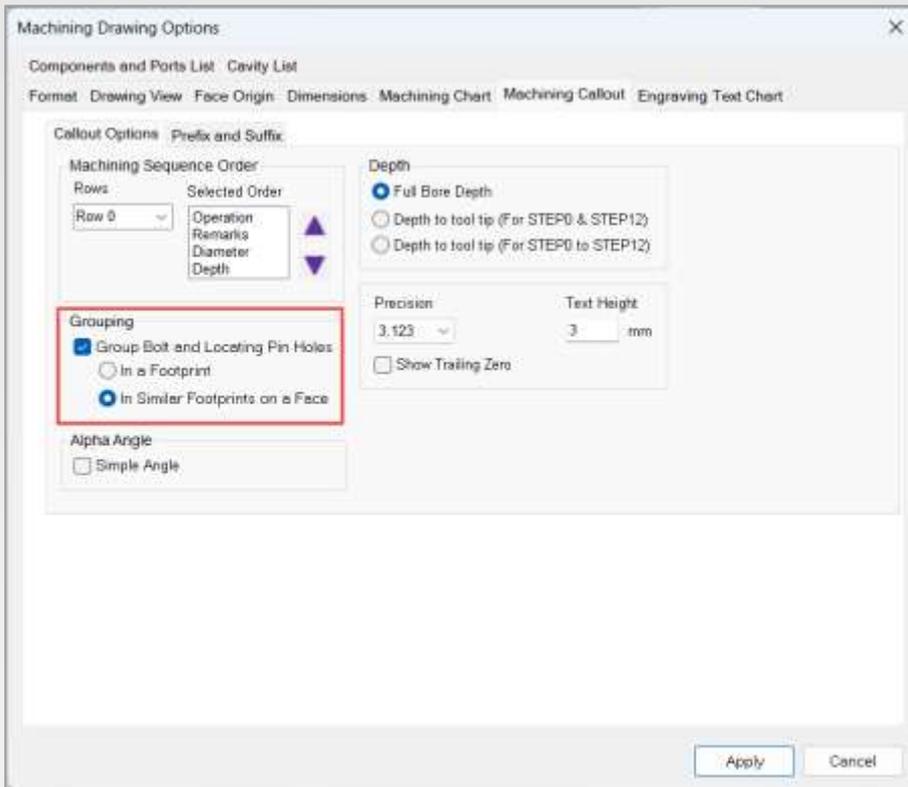
Identical Bolt Holes and Locating Pins can now be Grouped within a Footprint





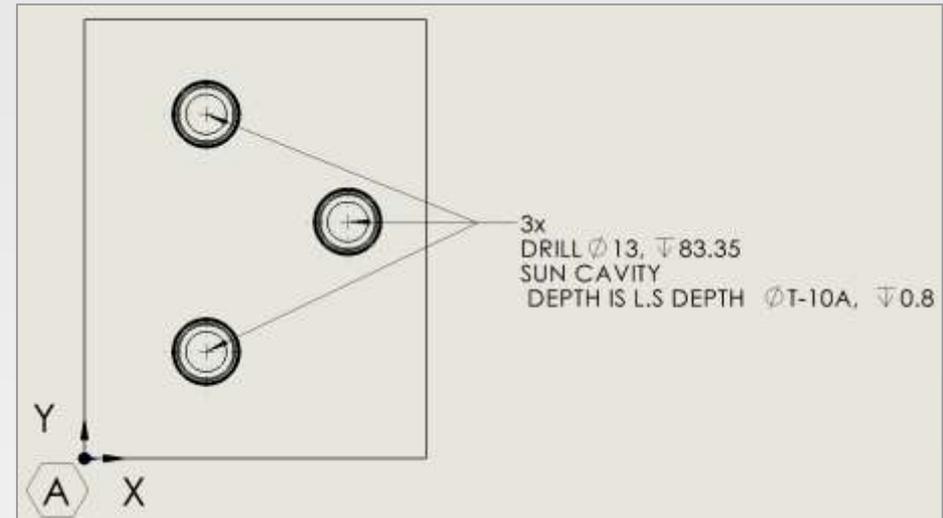
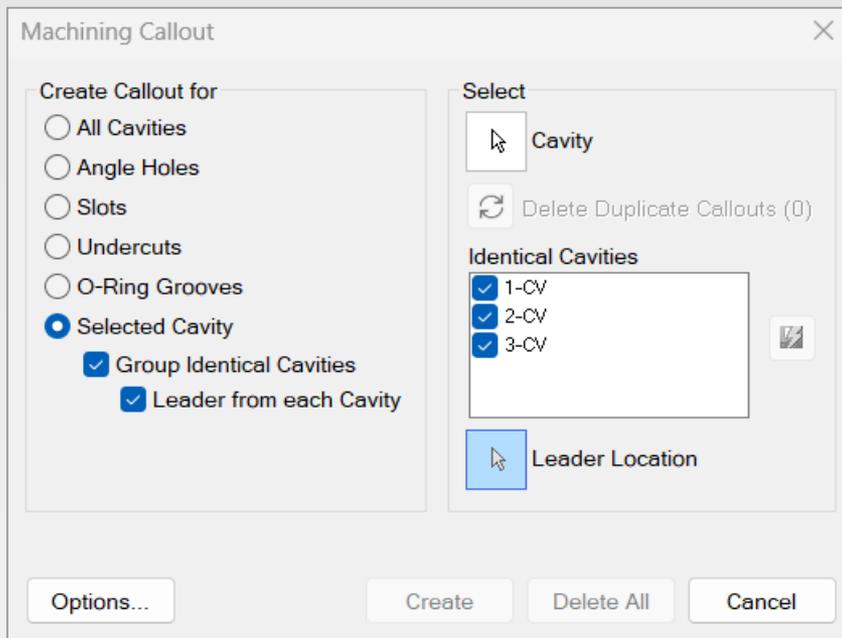
# Grouping Cavities Within Multiple Footprints

Identical Bolt Holes and Locating Pins Within Multiple Footprints can be Grouped on the Same Face



# Grouping Identical Cavities

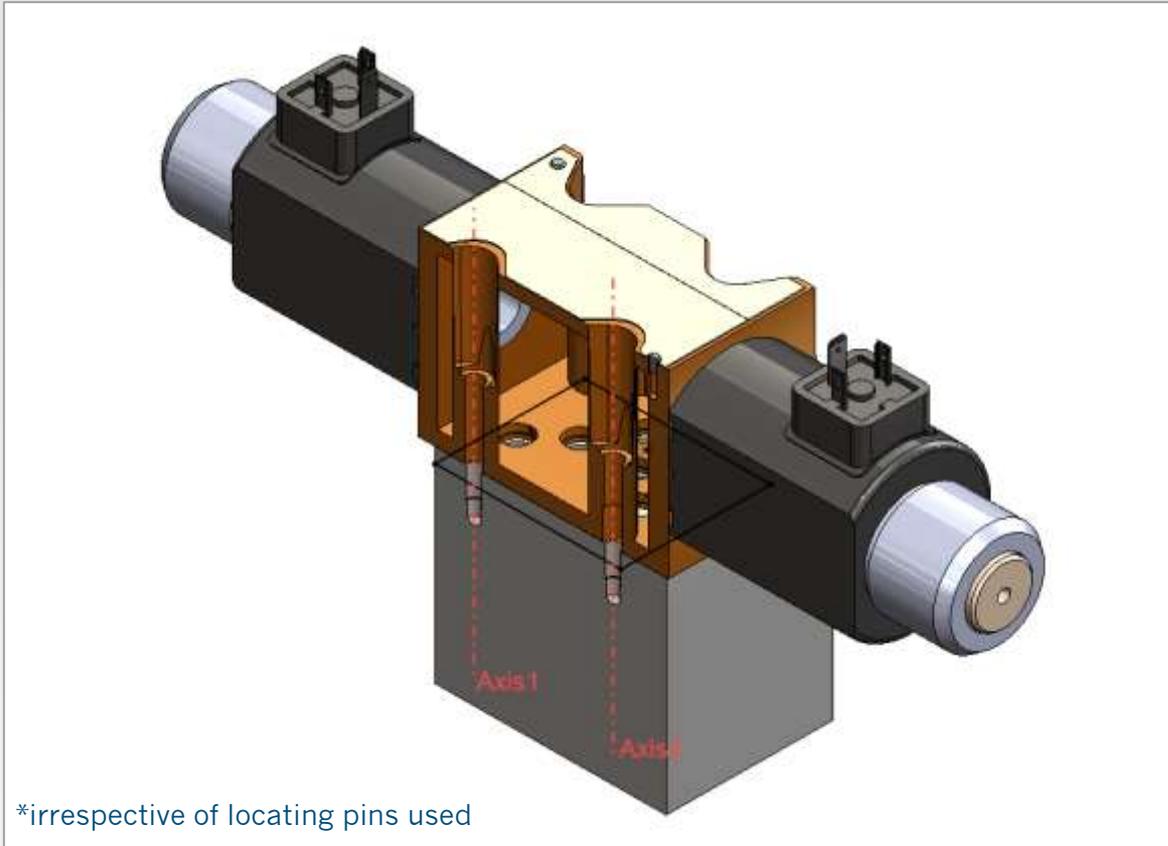
Identical Cavities on the Same Face can be Grouped





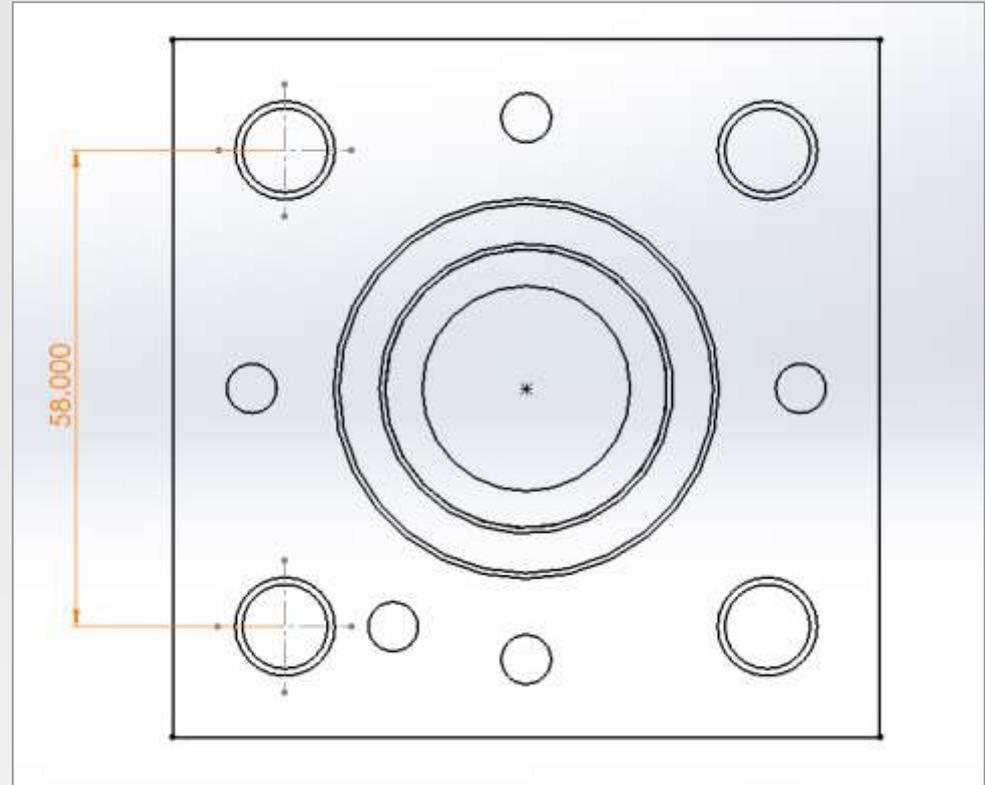
# Assemble Valves using Bolt Hole Pattern

Valves located\* using BH1 and BH2 as Axis



# Reduced Precision Requirements

Previously, MDTools required precision down to five decimal places. As this is impractical for assemblies, we reduced the precision requirement to three places beyond the decimal.





# Clearance from SF/CB to Working Area

Min. Wall Thickness from Spot Face/Counterbore to Working Area listed in a Separate Section

Wall Thickness Check

Parameter

Check

Around all Cavities

Around Selected Cavities

Between Selected Cavities

2

1

Clear Selection

Min. Wall Thickness 5 mm

Report

Clearance List

Cavity	Cavities with Wall Thickness < 5
1-D	2[NET-1] (0.768)
2[NET-1]	1-D (0.768)

Clearance in Same Net

No Issues Found

Clearance From Spot Face/Counterbore to Working Area

Cavity	Cavities with Wall Thickness < 5
1-D	2[NET-1] (3.814)
2[NET-1]	1-D (3.814)

Clearance with Spot Faces/Counterbores

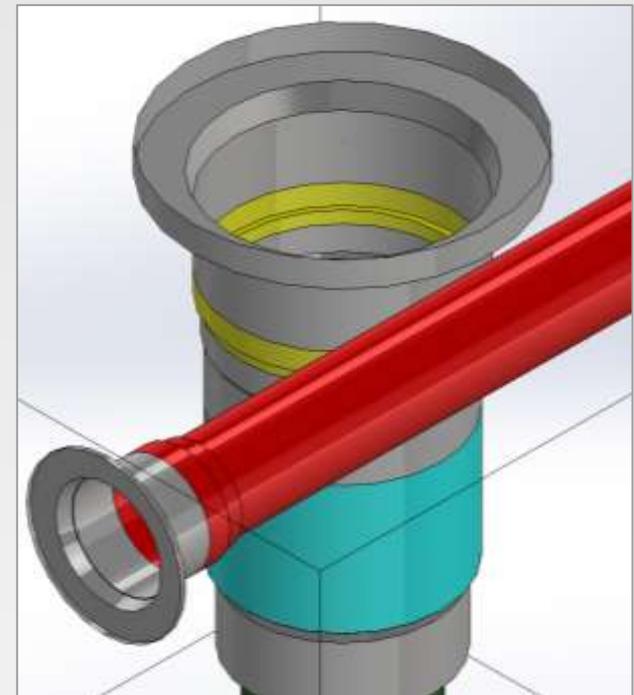
No Issues Found

Clearance with Manifold Face

No Issues Found

Start Selection

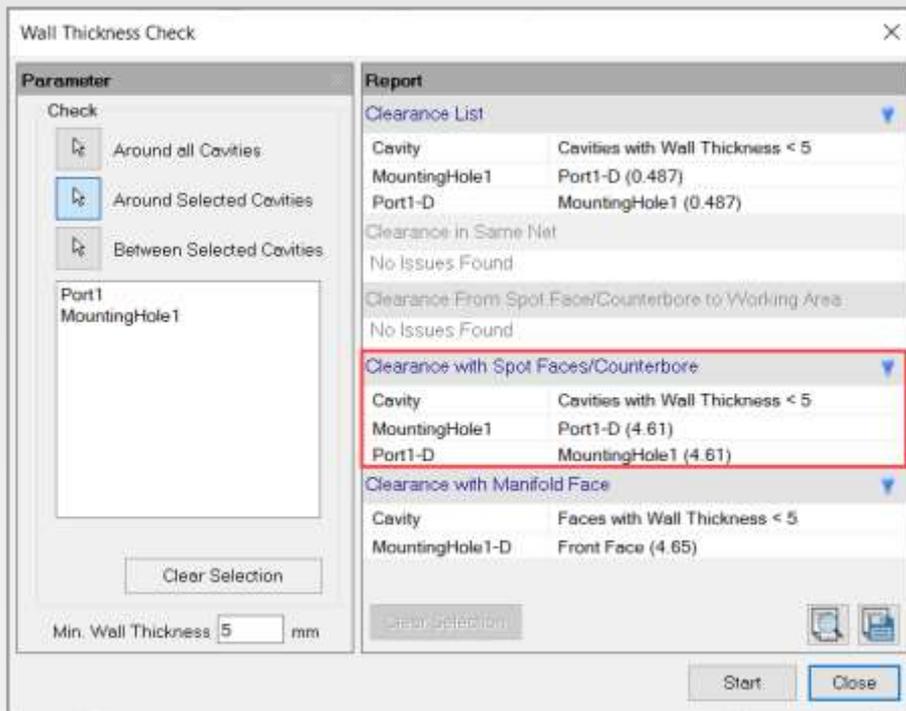
Start Close





# Clearance with Non-Pressurized Area

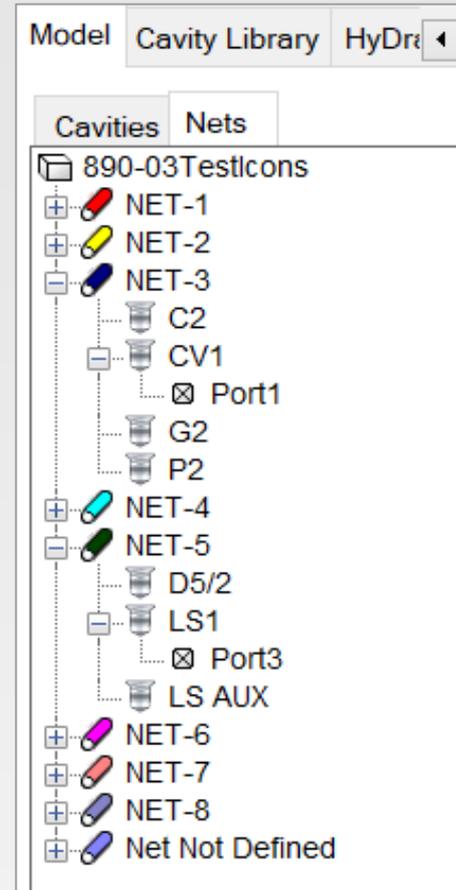
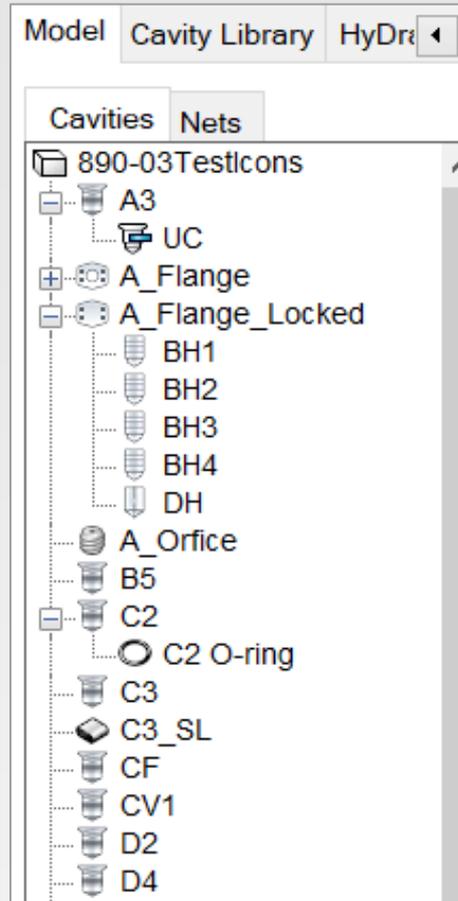
Min. Wall Thickness from Spot Face/Counterbore to Dead Area listed in a Separate Section





# New and Improved Cavity Browser Icons

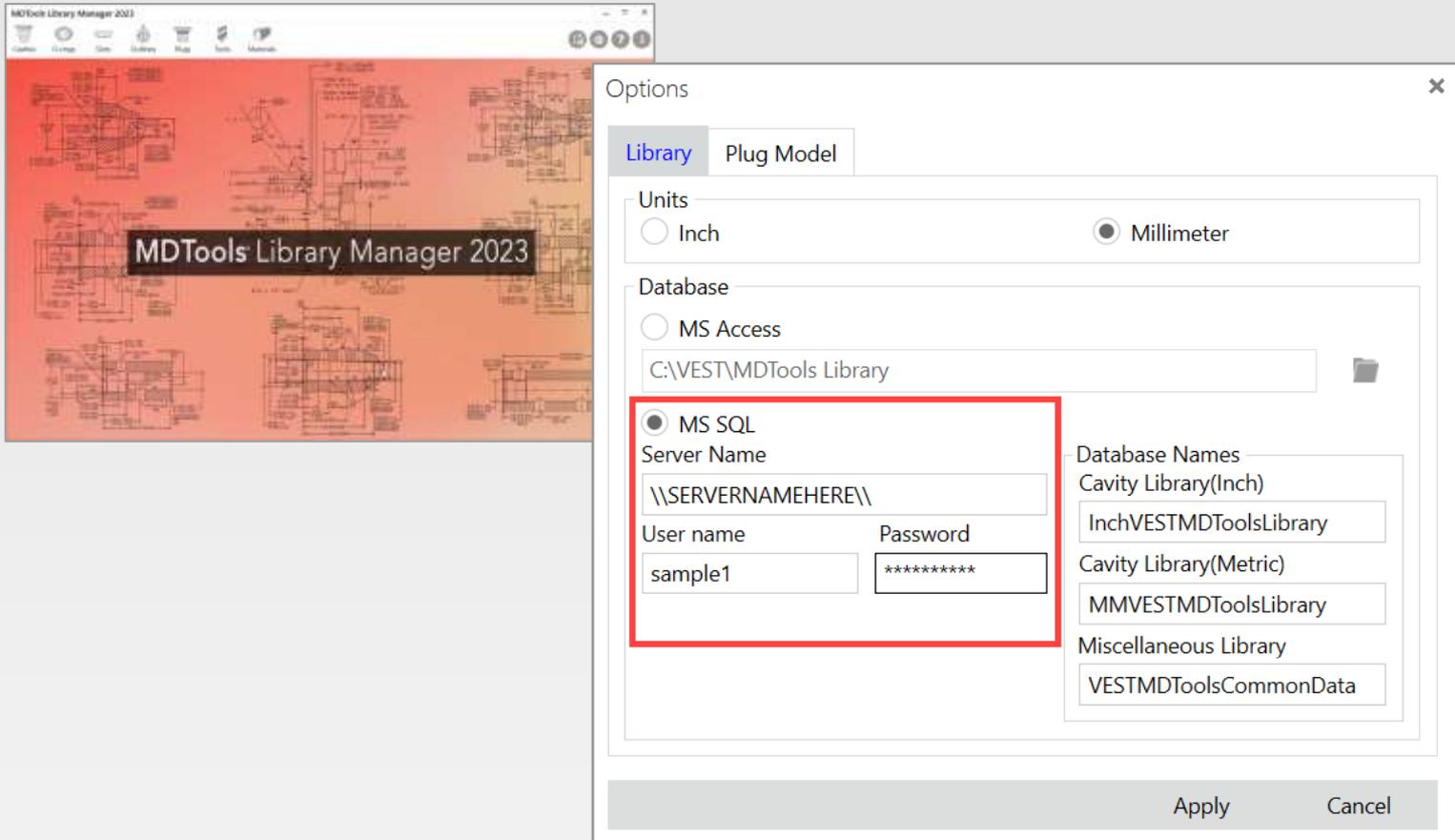
## New Icons to Better Visualize Manifold Components





# SQL Now Supported as Cavity Library Format

## MDTools Library Manager 2023 and MDTools now support SQL Databases



# SQL Library Accessible from MDTools

Users can now select SQL Libraries directly from MDTools Settings

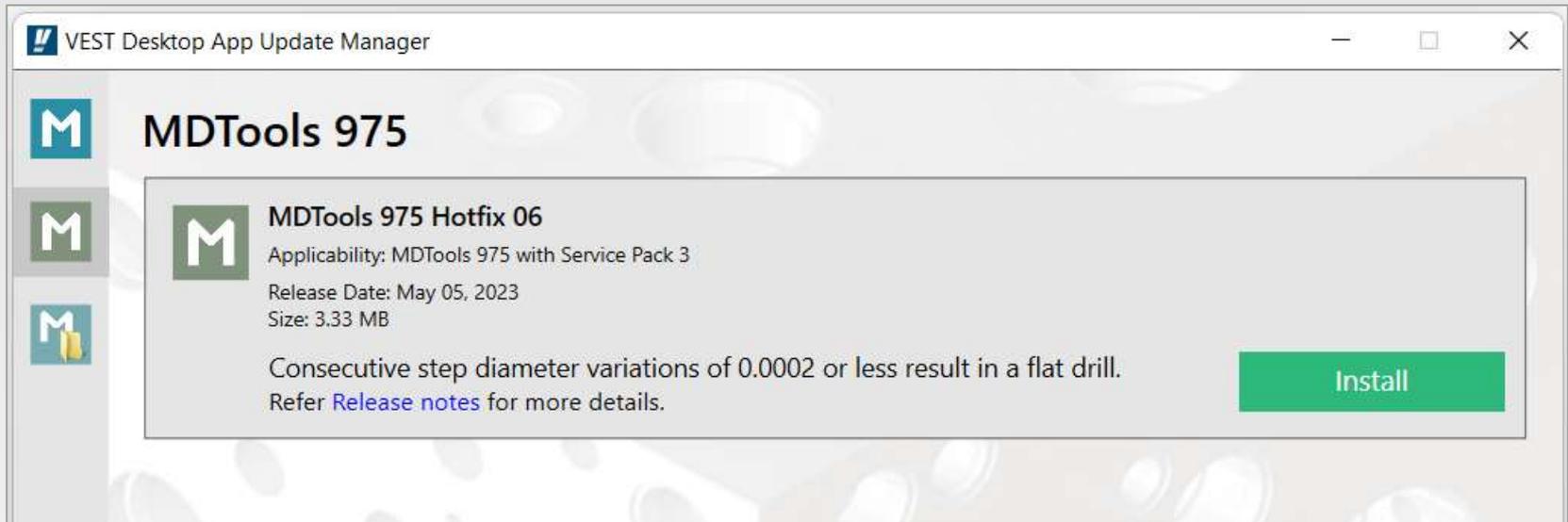
The screenshot shows the MDTools Options dialog box with the following settings:

- Library and Units** (selected tab):
  - Design Unit:  Inches,  MM
  - Precision:
    - Location: 3.123
    - Drill Depth: 2.12
    - Inclination: 0
- Database**:
  - MS Access
  - Library Path: C:\VESTMDTools Library
  - MS SQL (highlighted with a red box):
    - Server name: \\SERVERNAMEHERE\\
    - User Name: sample1
    - Password: \*\*\*\*\*
  - Database Names:
    - Cavity Library (Inch): InchVESTMDToolsLibrary
    - Cavity Library (Metric): MMVESTMDToolsLibrary
    - Miscellaneous library: VESTMDToolsCommonData

Buttons: Apply, Cancel

# Integration with VEST Desktop App

Notifications and Updates can be received and acted upon directly from the VEST Desktop App



# Additional MDTools® Enhancements

- Speed has been improved in many commands that were previously negatively affected by the presence of engravings.
- MDTools now supports Windows® 11 GUI (sp2975)
- Machining Chart update now supports multi-sheet charts

# MDTools® 980

Premier 3D manifold design software

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