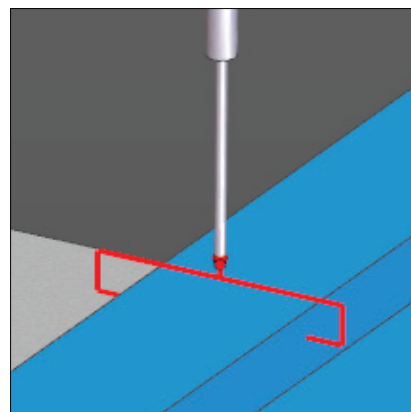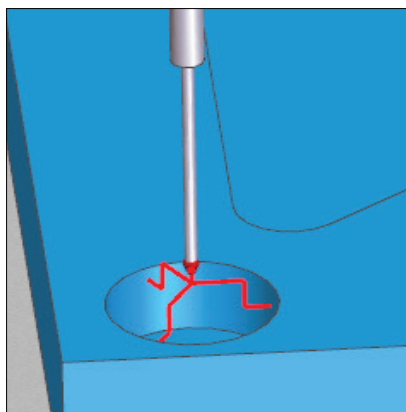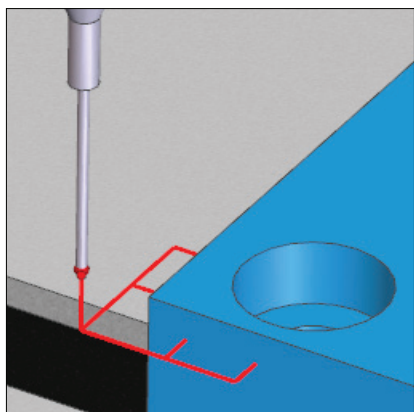# edgecam

m&h Probing Systems

m&h - Measuring On Machine Tools

Edgecam supports m&h touch probes. Users can measure workpieces and simulate the probe movements with six individual measuring cycles. Each cycle has been enhanced with eight new functions, giving a wider choice of inspection data.

PART OF HEXAGON

vero
Software

Probe – Select a probe from the ToolStore. A selection of probes are available or you can create your own combinations of body, extensions and probe stylus.

Probe Feed – Protected positioning moves to probe safely into position. If there is a probe trigger during a protected positioning move, EMERGENCY STOP occurs and an error message appears on the screen.

Cycles offer a number of ways to touch the part and establish a point(s) that can be used for various functions (see below) such as update a datum, check position or size.

Probe Corner cycle
Use this cycle to measure an internal or external corner and update the current datum by the deviation from the expected position.

Probe Bore/Boss cycle
Use this cycle to detect the position of a circular component, and update the machine's current datum by the deviation from the expected position. When creating the cycle you select an arc on the bore/boss. From this the centre position and diameter are derived.

Probe Web/Pocket cycle
Use this cycle to detect the position of a web or pocket, and update the machine's current datum by the deviation from the expected position. When creating the cycle you select two points, on either side of the web, or on opposite walls of the pocket.

Probe Surface cycle
Use this cycle to detect the position of a surface, and update the machine's current datum by the deviation from the expected position. When creating the cycle you select a point on the surface.

Probe 4th Axis cycle
Use this cycle to measure the slope of a surface, and update the rotation of the machine's 4th axis by the deviation from the expected slope. When creating the cycle you select two points on the surface

Function
Allows you to select what the probing should do, for example, update a datum, measure or check size :

Measure	Standard measuring cycle. Outputs a F0 for m&h Probing.
Shift and Update Work coordinate	The actual work coordinate will be shifted and updated by the difference between the input values and the measuring results. Outputs a F7 for m&h Probing.
Update Actual Work coordinate	The actual work coordinate will be updated by the measuring result. Outputs a F8 for m&h Probing.
Check Position	Outputs a F500 for m&h Probing.
Check Size	Checks size of diameter or distances. Outputs a F600 for m&h Probing.
Check form and Positions	Outputs a F700 for m&h Probing.
Update Work coordinate	The selected Work Coordinate (from the list; G54-G59) will be updated.
Update Extended Work coordinate	The selected Extended Work Coordinate (integer input) will be updated. Allowed range is 1-300 for m&h Probing.

Print
Sends the probe information to a printer.

Work Coordinate
Only available when the Update Work coordinate function is selected.

Extended Work Coordinate
Only available when the Update Extended Work coordinate function is selected.