



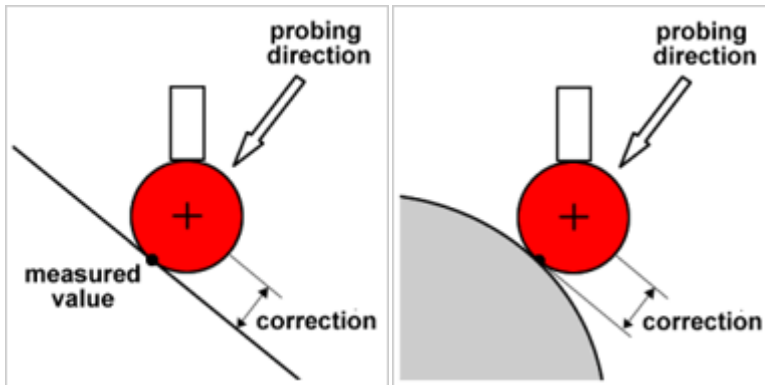
We make it visible.

CALYPSO Tip: An Insight into the Simple Point

By Phil Adair, Applications Engineer

What is a Point?

A point is a value defining a single location on the part relative to a reference system.

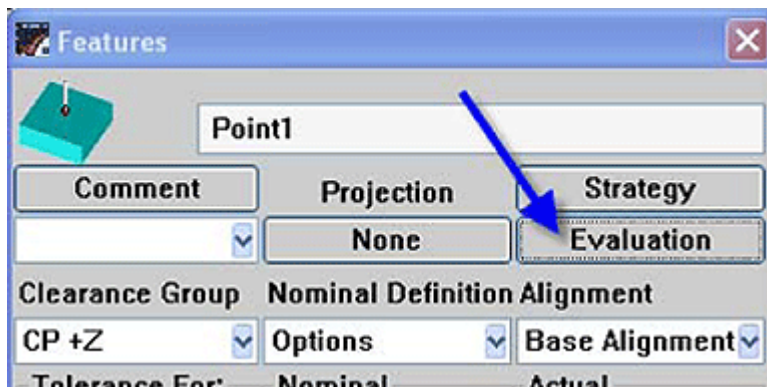


Point and Surface

Point and Surface

Probe Compensation

To obtain accurate correction for the stylus tip radius, various options in CALYPSO are available. It is possible to switch default settings by clicking the Evaluation setting within the feature template. With an unknown normal vector direction, the correction will be automatically defined. From within the point, select the Evaluation button.



Within the point feature, select the Evaluation button.

Need Support?

For CALYPSO Support, call our software hotline:

USA: (800) 327-9735

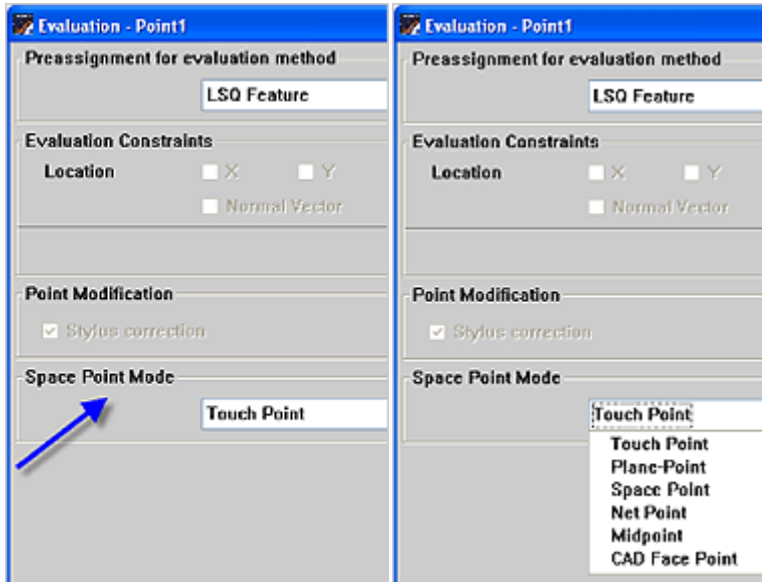
CA/MX: (763) 744-2600

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Metrologic: (248) 426-9090

Space Point Mode is a feature that allows you to modify the type of probe compensation that is applied to the point. Calypso offers you with a series of options to report the point. Let's look at what each of the options reports:



Space Point Mode

Menu Options

1. The Touch Point

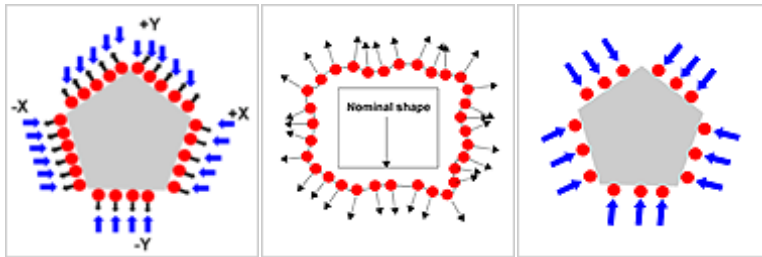
The Touch Point is a simple way of assigning probe correction in the direction of the axis of the coordinate system. The vector of each point is looked at and compared to the X,Y or Z axis, and compensation is done in the direction of the closest axis. The blue arrow represents the direction of probe compensation.

2. The Plane Point

Probe correction is applied relative to the actual data not the nominal data. Note how the vectors and hence the offset applied to the points varies.

3. The Space Point

Radius correction in normal vector direction, followed by projection onto the normal of the nominal point. Can be considered a material on/off condition.



Touch Point

Plane Point

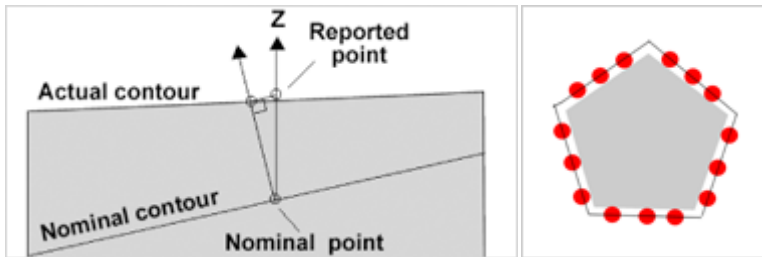
Space Point

4. The Net Point

Radius correction is done in the normal vector direction, followed by projection onto the coordinate axis which corresponds to the reference axis of the nominal plane.

5. The Mid Point

With the mid point method the data that is returned is ball center data. This can be useful in self center probing between two teeth in a gear. The point can be used as an alignment point. This is commonly referred to as ball center.



Net Point

Mid Point