

THE POWER OF MODELS

Task

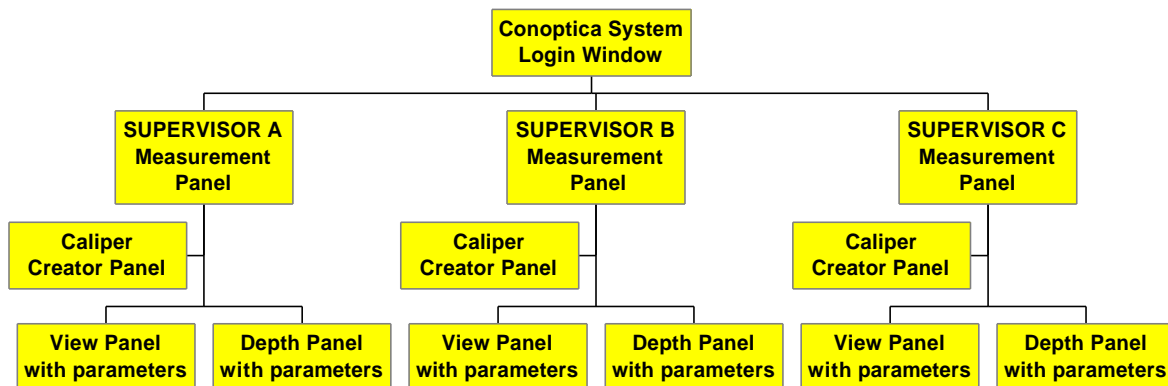
In order to do a proper job in defining the measurement geometry, positions, parameters, settings, strategies, etc., of a 2D and 3D geometrical measurement system a lot of specific information needs to be communicated to the system. In order to make the measurements powerful, and fully explore the possibilities offered by a measurement system, the challenging task is that this information must be communicated as intuitively and efficiently as possible.

Solution

A key idea behind the Conoptica concept is that a Model of the measurement object also governs the geometrical measurements. A Caliper represents either a Nominal or Measured Model geometry. The geometrical Parameters Of Interest (POI) are extracted from these Calipers and are also an integral part of this Model. That is, when a Model has been created and saved it will contain all the information necessary to carry out an optimum measurement of that specific group of measurement objects the Model represents. A Conoptica Supervisor is software that is tailored to measure a certain class of measurement objects.

Benefit

One unique capability of the Conoptica solution is the simple, and easy to use, teach-in features for making new Calipers and POIs. As a consequence the Conoptica Model simultaneously simplifies/automates the operator involvement and improves accuracy. Another main advantage of the Conoptica Model is that, as soon as the Model has been created, any operator may use it. The operator simply loads the Model and starts the automatic measurement, defined by the Model, to perform very advanced geometrical production and quality control. The Model also ensures objectivity and that different operators carry out the measurements in exactly the same manner. As a result the use of Conoptica Models both improves operator efficiency and simplifies quality control activities, resulting in production and quality control excellence.



Step by Step

To create a Model do the following:

- In the Caliper Creator Panel create the geometrical nominal 2D view and depth (3rd D) outline of the measurement object.
- In the View Panel add POIs to the local parameter list of the view Caliper.
- In the Depth Panel add POIs to the local parameter list of the depth Caliper.
- Enter the Measurement Panel to select measurement settings.

A previously created Model can be loaded from the Measurement Panel File Menu.