

Feature Nominal Definition

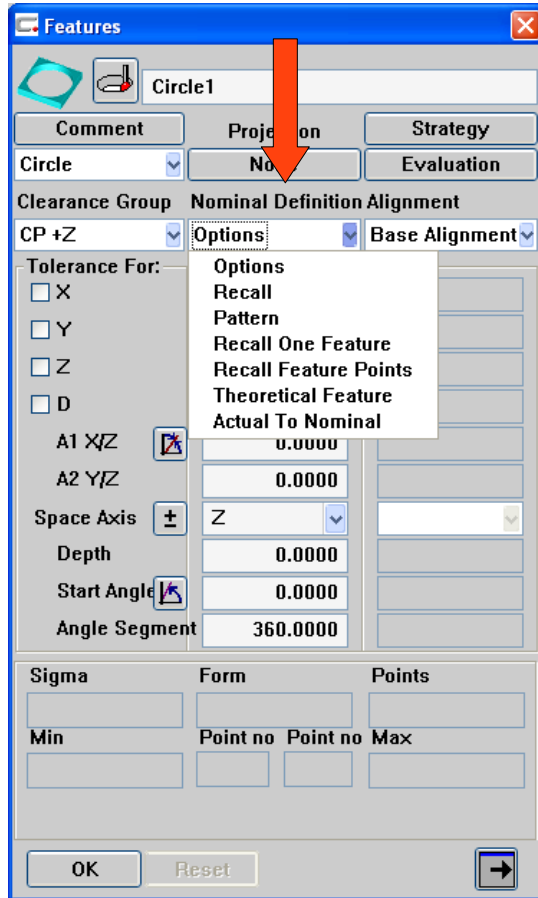
Looking at the alternatives available in the Nominal Definition Option

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We make it visible.

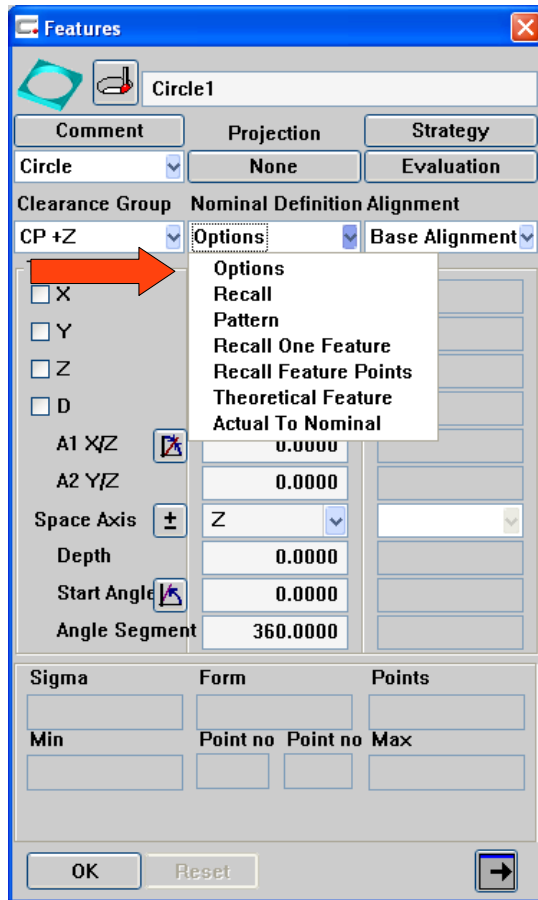
Feature – Nominal Definition (1)



- **Nominal Definition** – The nominal definition of a feature is really the selection of the mode that the feature will play in our program.
- There are various ways that the feature can be defined, lets look at the options available to us.



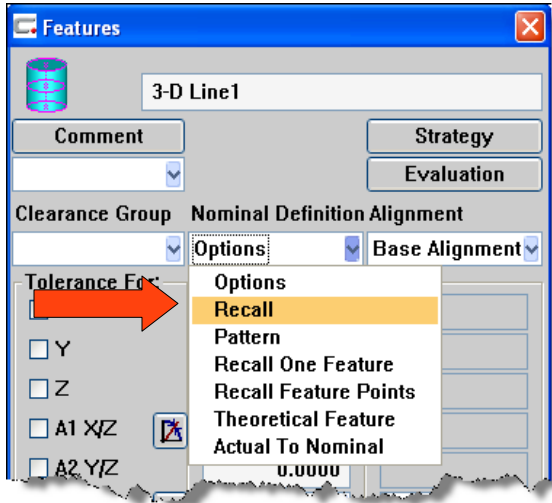
Feature – Nominal Definition (2)



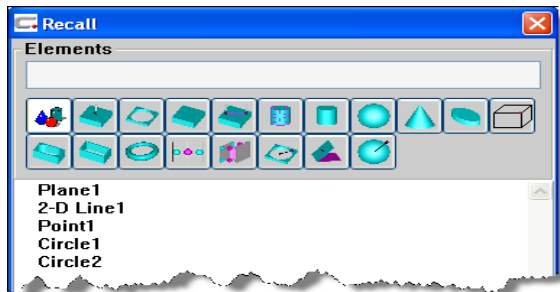
- **Options** – The default setting for a feature is to display the “Options” setting. In this mode the feature is being used as a regular feature.
- Nothing special is being done to the feature with options which are available in this list.
- The function when this setting is selected is to measure a feature using the strategy provided.



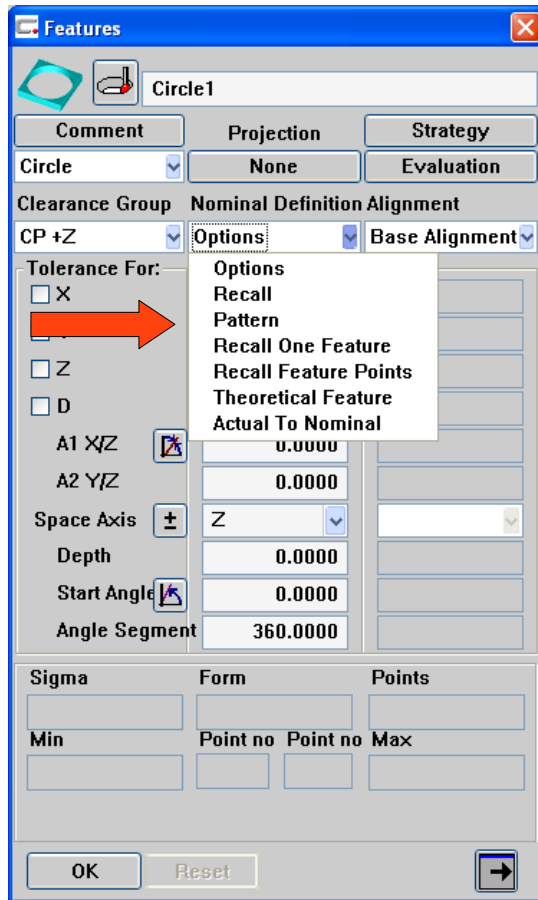
Feature – Nominal Definition (3)



- **Recall** – Allows you recall existing features to create a new feature.
- In our example we are going to create a 3D line between two circles. Click on Recall and you will be shown the list of features that have been measured so far.
- Select the features that you wish to use in the construction, in our case Circle 1 and Circle 2
- The line would be created and added to the Feature list.



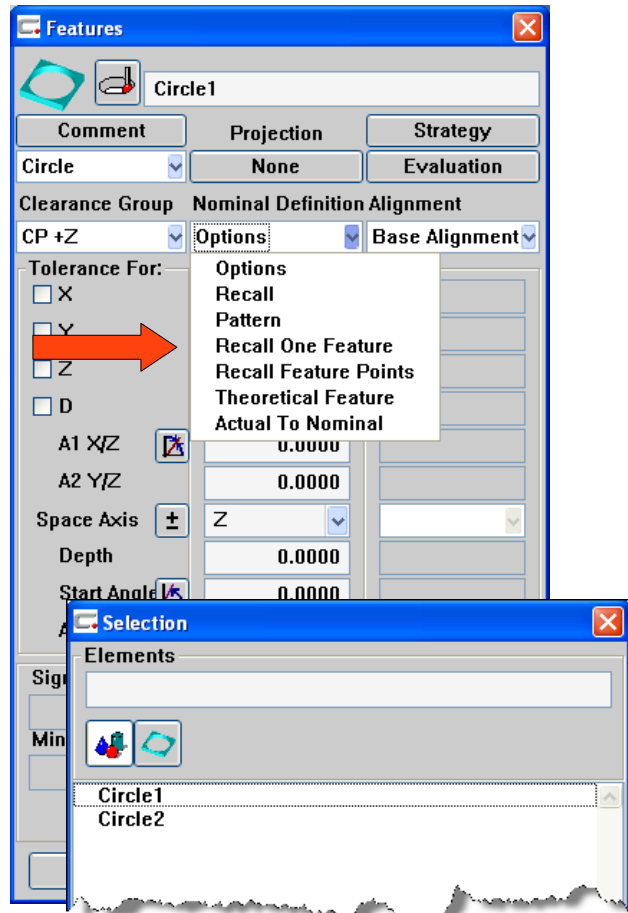
Feature – Nominal Definition (4)



- **Pattern** – Contained within a feature is the ability to create patterns based upon this feature. A pattern is a repeat of this measurement in a series of offsets.
- The offsets could represent 10 holes in line or in a bolt circle. There are 5 patterns available:
- Polar Pattern Offset
- 1D Linear pattern
- 2D Linear pattern
- A rotational pattern for scallops
- A pattern containing a list of coordinates



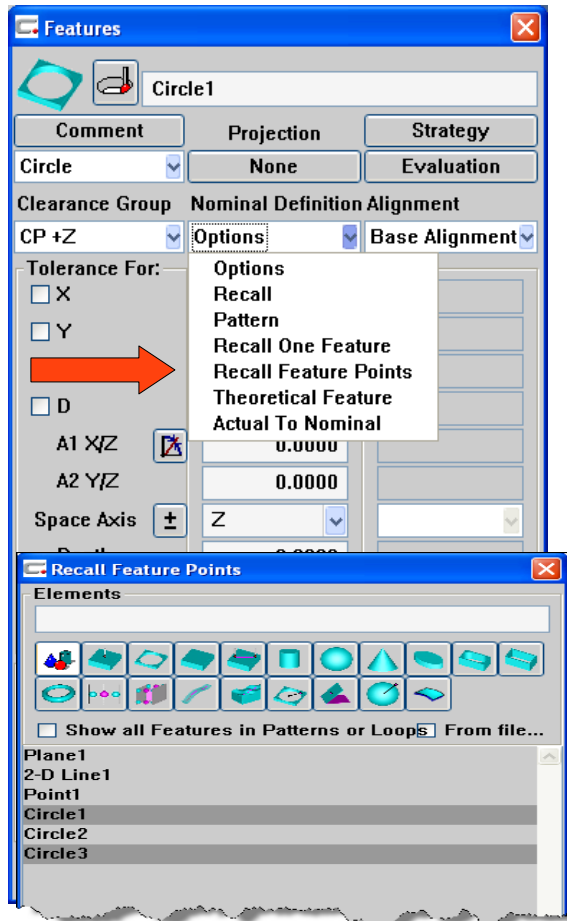
Feature – Nominal Definition (5)



- **Recall One Feature** – The only features that you can recall are those that have the same geometry as the current feature.
- An example would be if the same feature had to be evaluated in different coordinate systems. It is an alternative way of calling out the same feature under different conditions.
- In this example we already have two circles that exist as separate features and we have created a new circle.
- By selecting one of the circles from the list we have a copy that we can report under different circumstances.



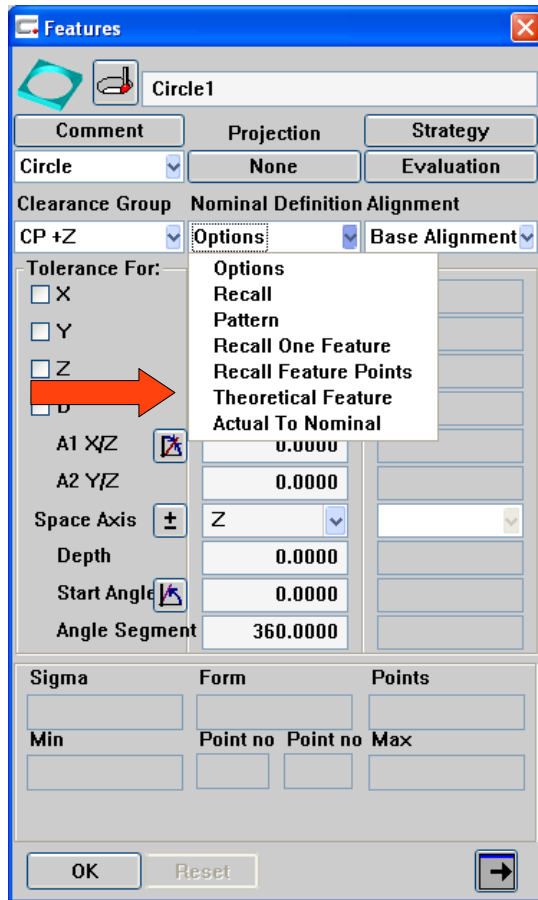
Feature – Nominal Definition (6)



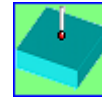
- **Recall Feature Points** – The ability to be able to recall previously measured points and apply a new creation to them.
- Example – A cylinder could be created from two separate circle features..
- In the example shown we have chosen two circles, however, the circles have another feature in between them.
- In an example like this, click on the first circle, Circle1 in our example, hold down the Ctrl key and select Circle3.



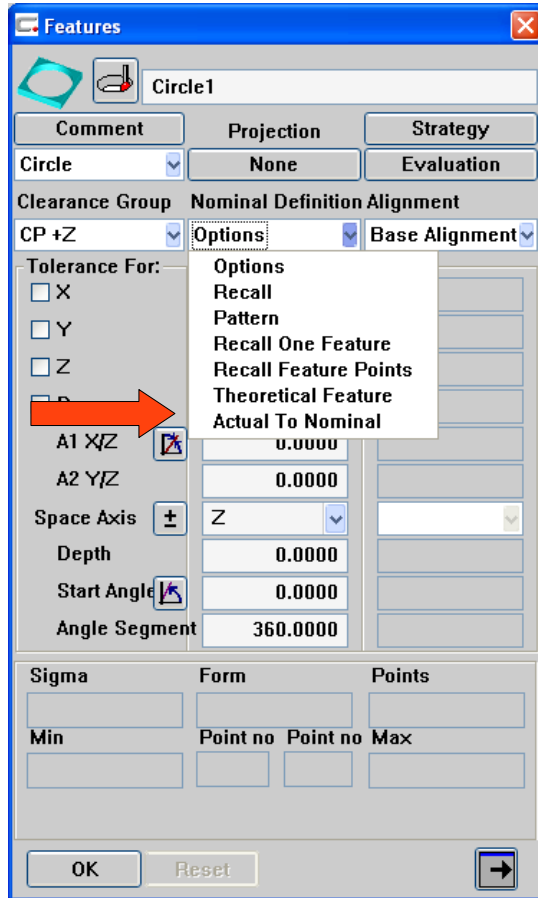
Feature – Nominal Definition (7)



- **Theoretical Feature** – A theoretical feature is a feature that is created without actually being measured.
- A theoretical feature can always be recognized because the feature is surrounded by a blue box and it is never physically measured.
- An example of its use could be the center of a series of calculations that are done in Formula. Lets say that you wished to know the area of a circle that you had measured. The calculation would be done inside this theoretical feature.



Feature – Nominal Definition (8)



- **Actual to nominal** – Uses the current measured values, rounded off, as nominal values.

