COMPARE PRODUCT AND TOOL DIMENSIONS

SHAPED DIES, WIRES, AND RODS

Task

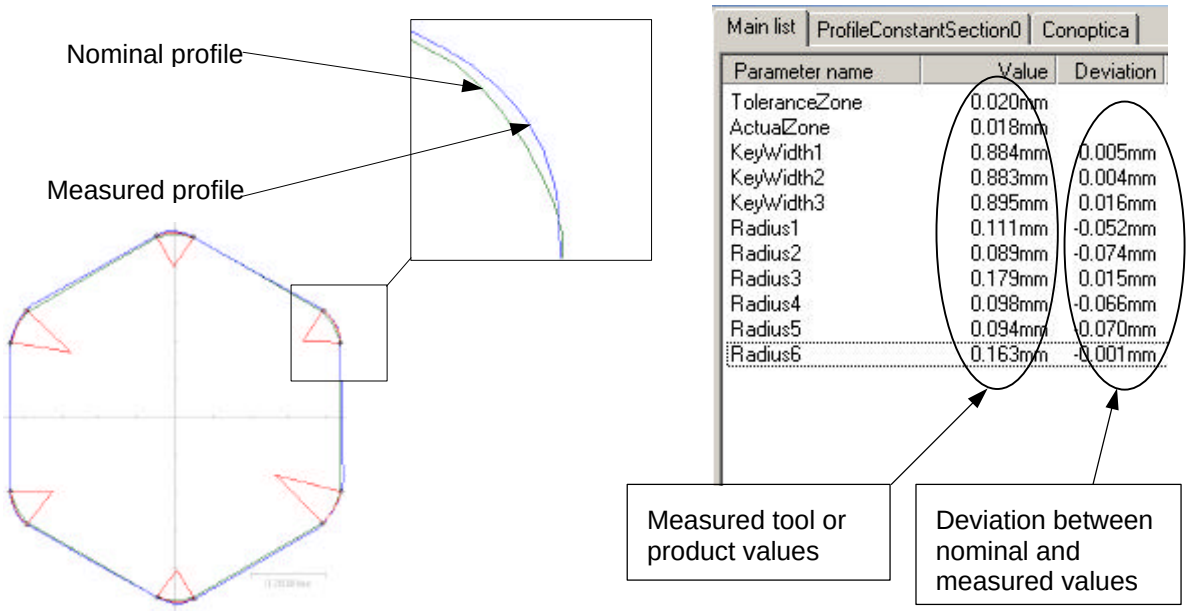
It is necessary to measure both the drawing die and the product for efficient quality control of shaped wires and rods. If the wire or rod dimensions deviate from nominal values, the drawing die might need modification. A Quality Control System that can measure corresponding parameters for both product and tool is needed to specify the correct drawing die parameters.

Solution

Conoptica's Quality Control System is perfectly suited for this task. Measurements are closely linked through a common **Model** for both product and tool. This ensures that measurements of corresponding parameters are carried out with reference to exactly the same definitions and coordinate ranges, and simplifies the task of modifying the die so that the nominal product geometry can be achieved. Measurement reports focusing on problem areas can be printed for both product and tool.

Benefit

The Conoptica Quality Control System makes tool making more cost effective, especially in the finishing stage where measurements play an important role. It improves the communication between toolmaker and wire producer through objective comparison between tool and product. Tool making skills are accumulated while human measurement errors are reduced to a minimum.



Step by Step

After making a drawing die model and a wire model:

- Measure die using the Shaped Die System and store the measurement results.
- Measure the wire using the Constant Section Rotation Supervisor or the Cut X-section Supervisor and store the measurement results.
- Study the wire deviations from the nominal geometry and make corresponding adjustments to an improved drawing die model that in its turn can be used as a nominal model.