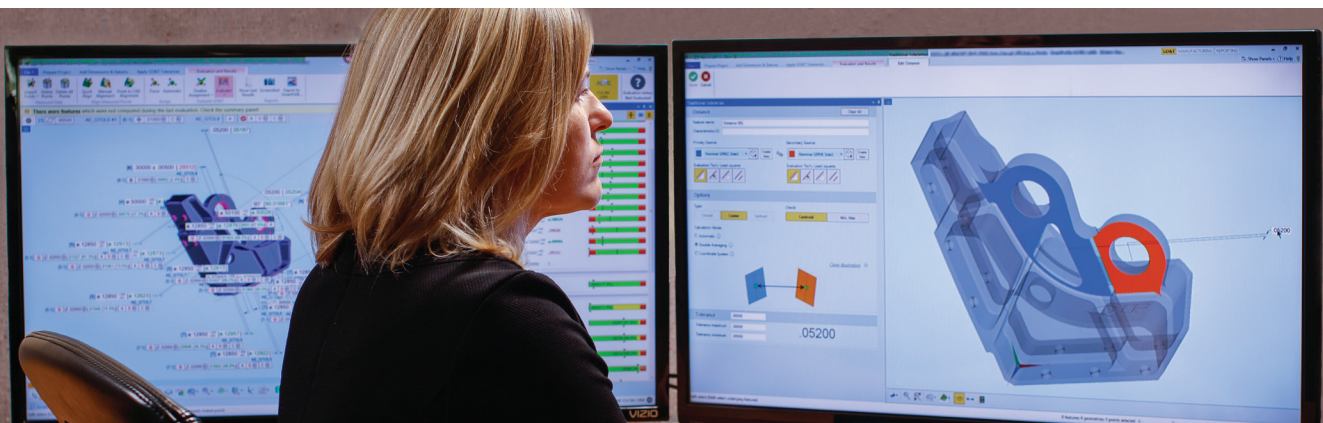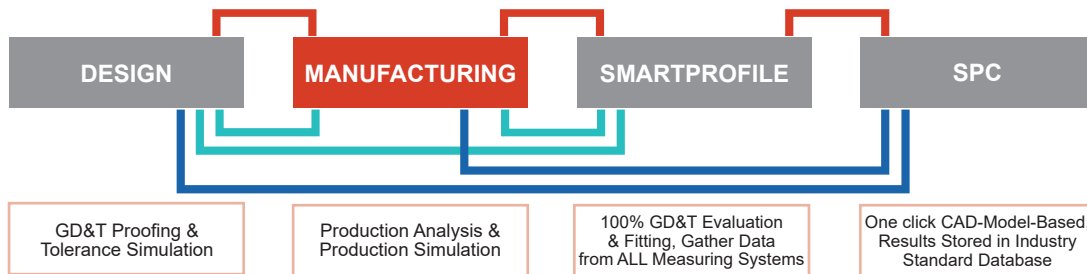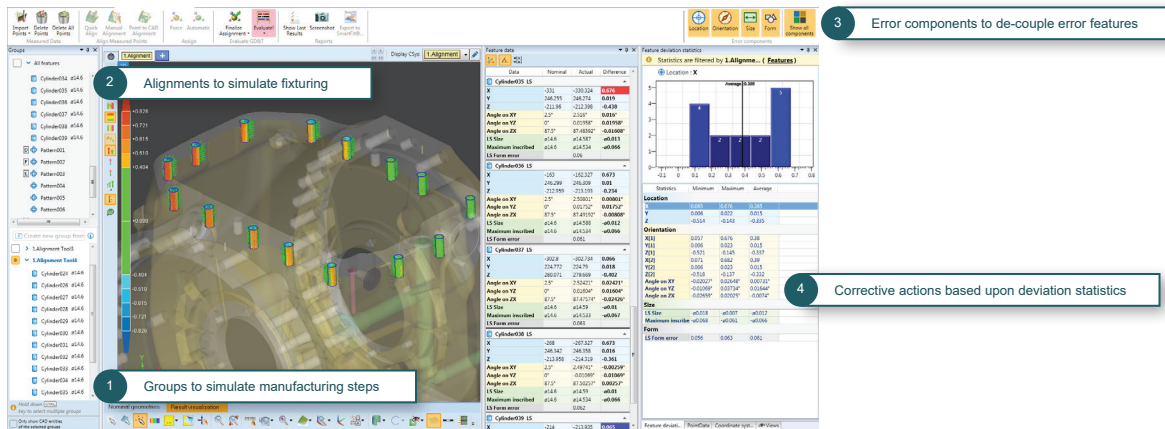## The EVOLVE™ Software Suite

EVOLVE is a model-based family of software that seamlessly connects Design, Production and Inspection Teams across a manufacturing enterprise. It integrates easily with 3D CAD and CAM, incorporating PMI data automatically. EVOLVE optimizes the design process and integrates with production, enabling manufacturers to shorten product design/development time, normalize inspection and measurement techniques, improve process control, and manage product tolerances throughout the manufacturing process.

EVOLVE MANUFACTURING

EVOLVE Manufacturing graphically compares measured results based on design and manufacturing datums, producing fast results for proper machine adjustments and how it impacts GD&T tolerance. EVOLVE Manufacturing recognizes systematic problems and recommends corrections. EVOLVE Manufacturing allows both 3D and 2D analysis of part features displaying different data based upon GD&T. This data is then grouped to simulate the manufacturing process, helping to stay organized when comparing part features.

DESIGN	MANUFACTURING	SMARTPROFILE	SPC
GD&T Proofing & Tolerance Simulation	Production Analysis & Production Simulation	100% GD&T Evaluation & Fitting, Gather Data from ALL Measuring Systems	One click CAD-Model-Based, Results Stored in Industry Standard Database

The Manufacturing Process

3 — Error components to de-couple error features

2 — Alignments to simulate fixturing

4 — Corrective actions based upon deviation statistics

1 — Groups to simulate manufacturing steps

1 Grouping

EVOLVE Manufacturing creates groups of part features to help identify certain part characteristics. The groups are determined by different manufacturing operations.


2 Alignments

Manufacturing alignment is performed for every group created. Groups are developed independently from each other, but alignments are common for all created groups.

3 Error Components

Point deviations are separated into 4 error categories — location, orientation, size and form. These categories can be used individually, together or all at once.

4 Corrective Action

Corrective actions are called out to fix possible errors, such as machine fixturing or changing a tool radius offset. These corrective actions help identify potential issues with part features.
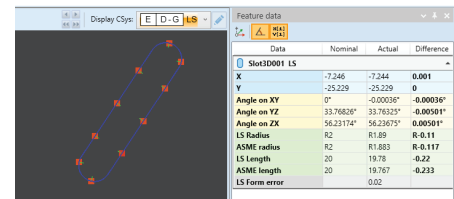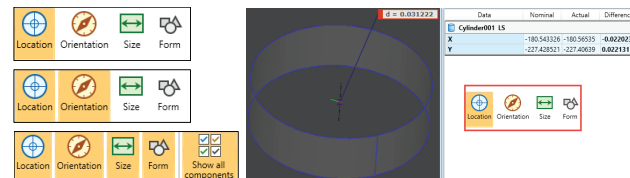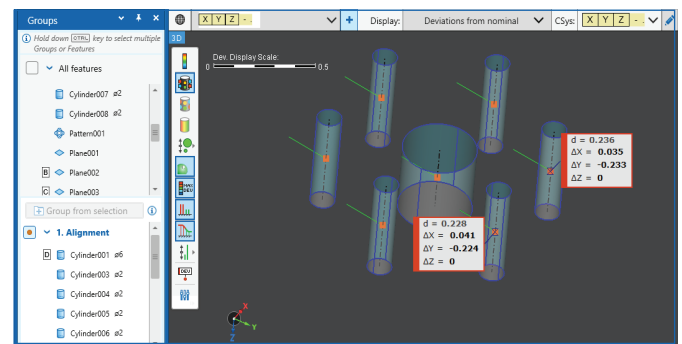
To learn more about EVOLVE Manufacturing go to www.kotem.com/evolve

QVI Precision for People