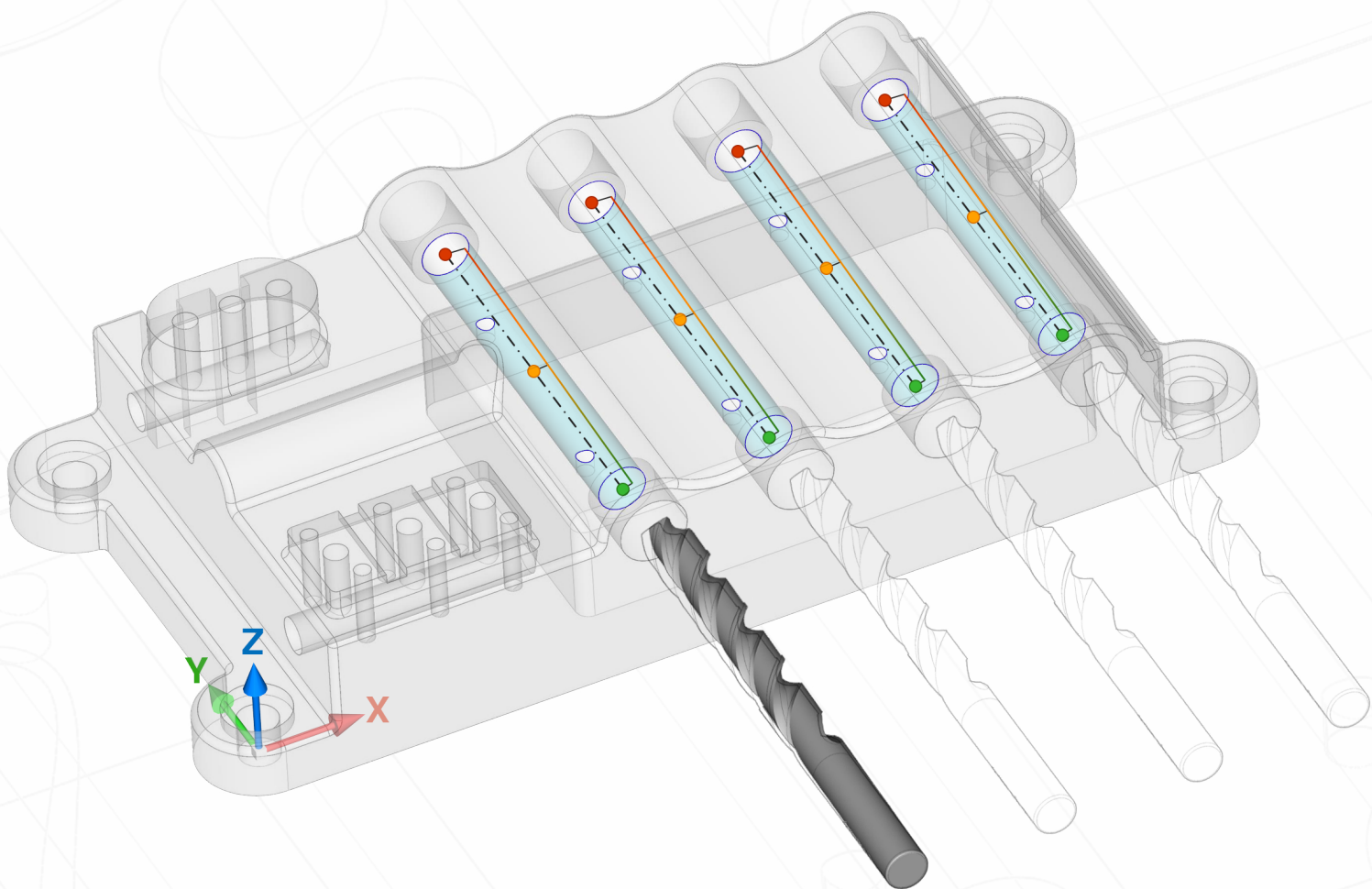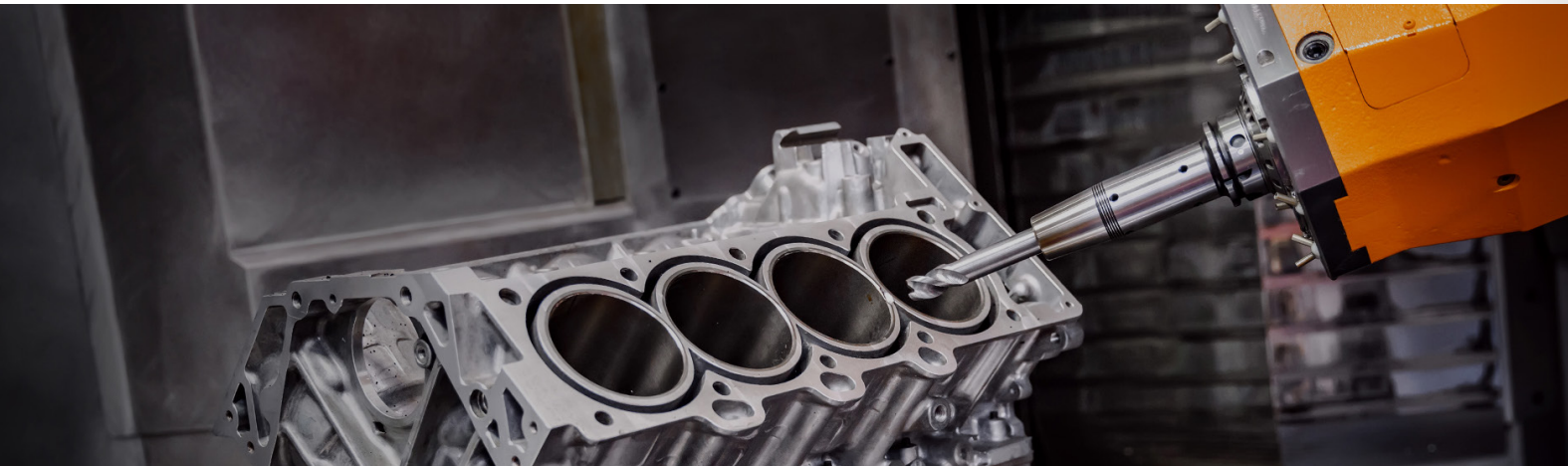# KOTEM

EVOLVE
Manufacturing

EVOLVE Suite   Model-Based Family of Software

EVOLVE **Manufacturing**

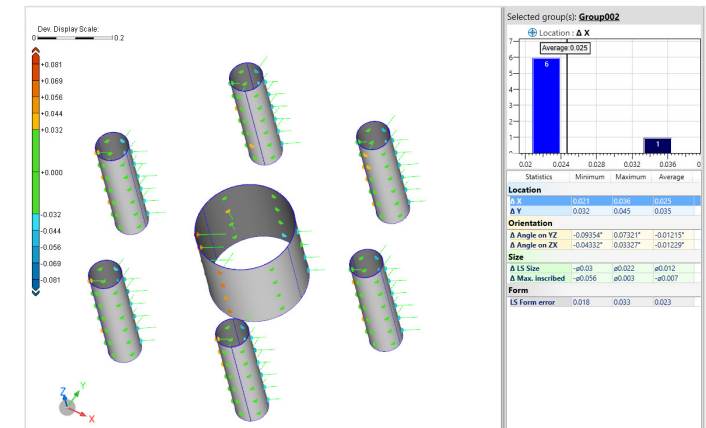Part of the EVOLVE Software Suite

The Manufacturing Process

1 Grouping

EVOLVE Manufacturing creates groups of part features to help identify possible manufacturing issues.

The groups are determined by different manufacturing operations, tools or alignments.

EVOLVE Suite

EVOLVE is a model-based family of software that seamlessly connects Design, Production and Inspection Teams across a manufacturing enterprise. EVOLVE optimizes the design process, provides fully automatic GD&T evaluation for pa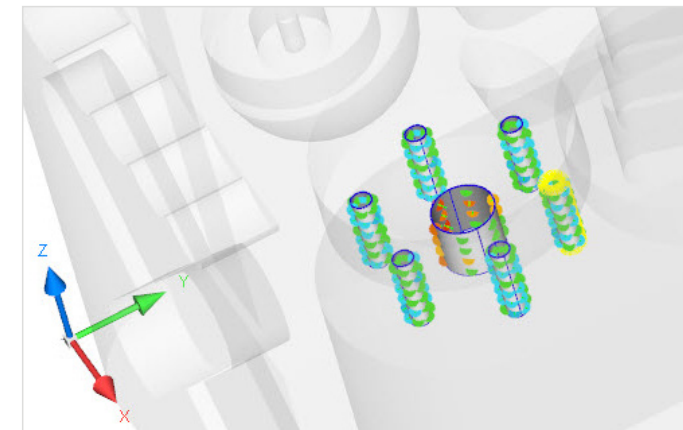rt acceptance, unparalleled manufacturing setup, specific feedback and correction simulations enabling manufacturers to shorten product design/development time, normalize inspection and measurement techniques, improve process control, and manage product tolerances throughout the manufacturing process.
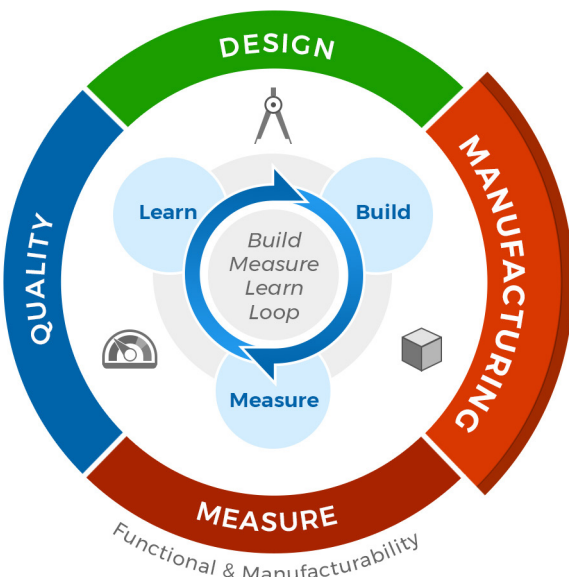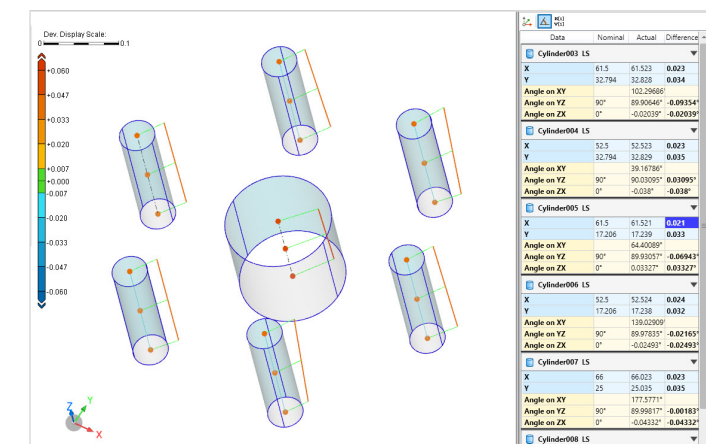

2 Alignments

Manufacturing alignments simulating the real manufacturing process are created.

Features and groups are evaluated in their manufacturing alignments.

EVOLVE **Manufacturing**

EVOLVE Manufacturing graphically compares measured results based on design or manufacturing datums, producing **proper manufacturing adjustments** and how they impact GD&T tolerances. Find out why a part has failed during the GD&T evaluation and **which corrective actions can fix the manufacturing process**.

EVOLVE Manufacturing is a powerful and unique 2D/3D tool which uses the same point cloud data as the GD&T evaluation. This allows correlation of the GD&T results to feature deviations displayed in the manufacturing coordinate systems.

3 Error Components

Point deviations are separated into 4 error categories — location, orientation, size and form.

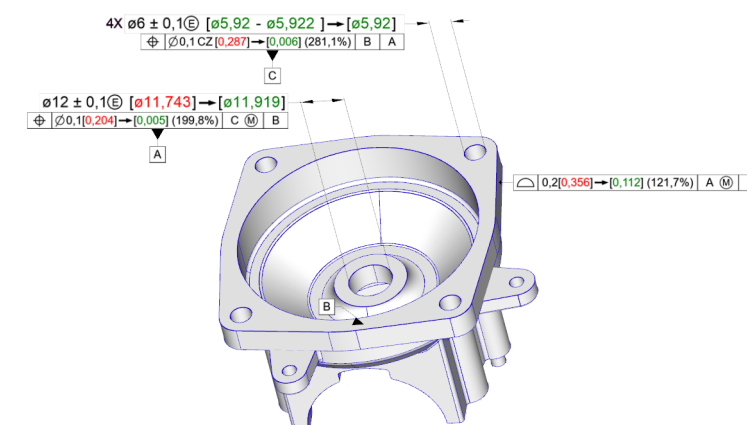These categories can be used individually, together or all at once.

4 Corrective Action Analysis

Powerful "What-if" simulations based on observed deviations allow immediate prediction of the effects of applied manufacturing corrections on the GD&T results.

EVOLVE Design helps designers with GD&T (GPS) specification by proofing the callouts and providing guidance on the standard.

EVOLVE SmartProfile merges point data from any measurement system with a part's nominal CAD model and automatically performs a comprehensive GD&T evaluation.
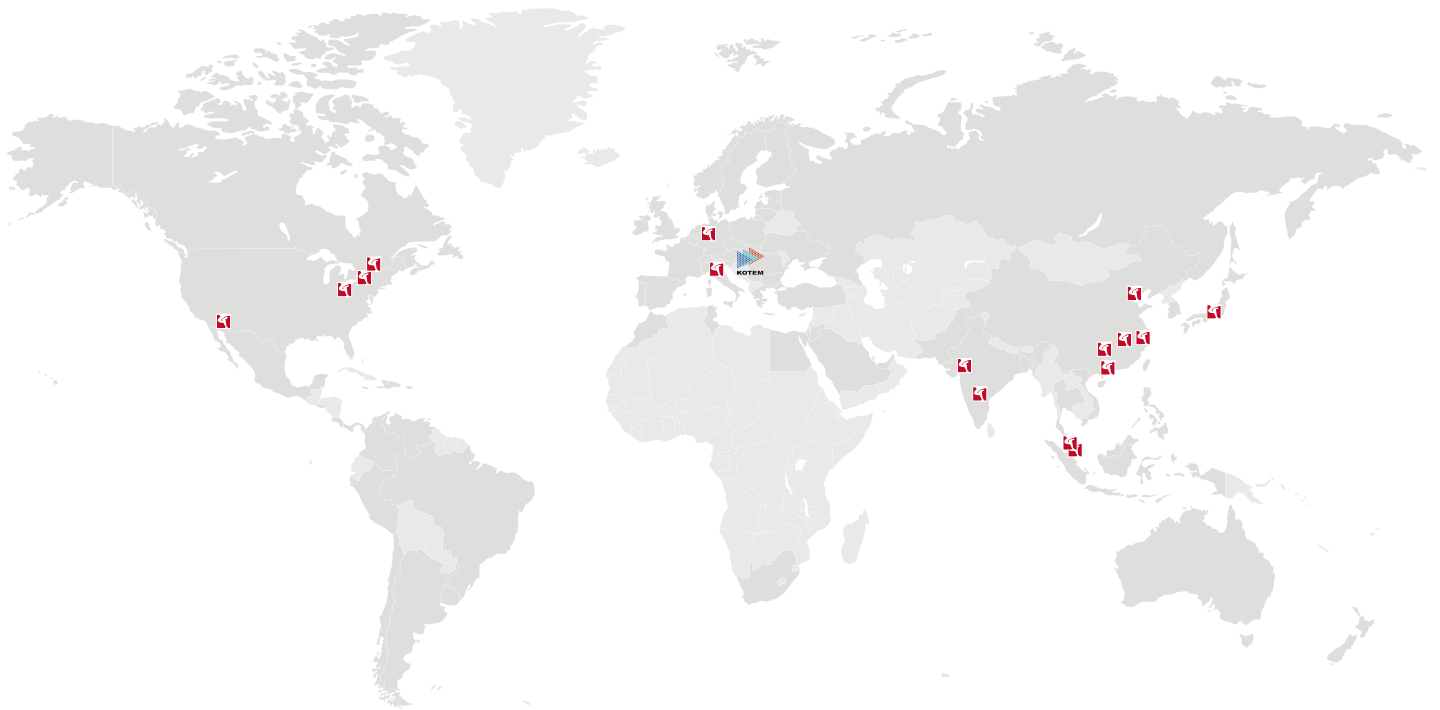
EVOLVE SPC is a full statistical process control software that can be used as either a standalone product with existing measuring systems or integrated into the EVOLVE Suite..

KOTEM

The leader in dimensional analysis software

KOTEM is the worldwide leader in dimensional analysis software. Our family of advanced GD&T and fitting software helps manufacturers integrate quality inspection data with their manufacturing and design work flows. KOTEM is a Quality Vision International company.

QVI® (Quality Vision International) is the world's largest vision metrology company. Founded in 1945, QVI is the world leader in optical, electronic and software technologies for vision and multisensor measuring systems.

To learn more about the EVOLVE family go to **www.kotem.com/evolve-suite**

EVOLVE is fully compliant with all internationally accepted GD&T Standards:

ISO 1101   ASME Y14.5M-1994   ASME Y14.5-2009