

# Zenith

## Rigibore's Zenith Solution



Unlock unparalleled savings by reducing labour costs, removing scrap and supporting 24 hour production through lights-out manufacturing...

### What is Zenith?

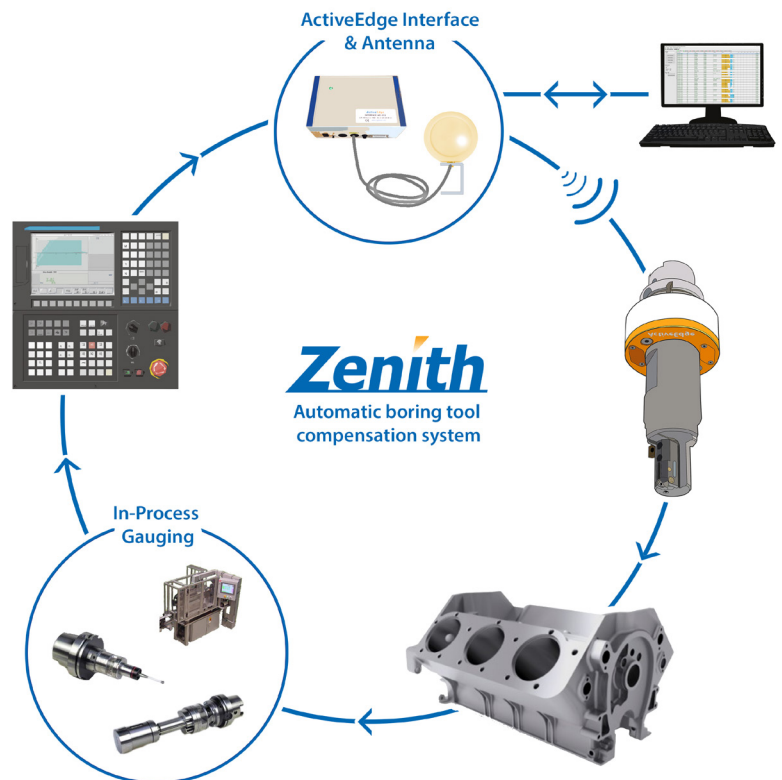
**Zenith** is Rigibore's **total automation solution** for producing micron-accurate bores.

Modern CNC machines, regardless of their sophistication, cannot automatically compensate a boring tool's cutting edges. Rigibore's ActiveEdge tooling in combination with in-process measurement has overcome this problem.

The Zenith system integrates ActiveEdge tools with in-process gauging to enable a machine controller to automatically compensate for **insert wear, temperature change and material inconsistency**.

### Closed-Loop Manufacturing

- 1. Initial Bore** — A hole is bored using the ActiveEdge tool.
- 2. Measurement** — The bore is measured using in-process gauging and the measured diameter is placed in a variable in the CNC control.
- 3. Calculation** — This measured diameter is assessed against user defined limits. If necessary a compensation value is calculated.
- 4. Compensation** — If compensation is needed, an automatic compensation request is sent directly to the ActiveEdge tool, which adjusts to ensure the next machined bore achieves nominal size.
- 5. Process Monitoring** — 'ActiveNet' PC software captures a chronological record of all tool operations and provides easily accessible data retrieval for analysis and optimisation.



Whether **high-value** or **high-volume** production is your objective, Rigibore's Zenith solution creates and sustains an accurate and repeatable process to revolutionise your boring operations.