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RCS L-90 ballbar enables robotic machining to perform at the highest levels of precision.

Significantly reduces calibration time

Removes the need to reteach robot

Background:

The University of Tennessee's Engineering Department, with the support of One Off Robotics, is engaged in research involving carbon fibre composites. These materials can have significant variations in material properties, which makes it difficult to achieve consistent results in machining and trimming operations.

Challenge:

Carbon fibre materials require specific cutting depth, angle, and position to prevent damage; so the trimming process needs to be precise. Final product quality can be impacted by any damage caused to the material during this process. High-accuracy calibration of the robot-mounted spindle is essential for successful operation.

Solution:

The RCS L-90 ballbar system enabled One Off Robotics to quickly and easily perform high-accuracy calibration of the systems in use. This enables the cell to perform within the specified tolerances and at the highest levels of precision, something that would have been extremely challenging to achieve without this technology.

> **"At One Off Robotics, precise calibration is crucial to our business, which is why we were delighted to work with Renishaw to help bring this technology to robotic fabrication."**
>
> One Off Robotics (USA)

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