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Mechanical Ice drilling

Oral

A new dynamometer for testing ice core drill motors and gears.

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Specialised test equipment is frequently required during the design and verification phases of a project. However, this equipment is often expensive, not always readily available at the time, or just time-consuming to use. This can result in reliance on systems that have not been adequately tested prior to field campaigns. This may lead to system failures or substandard designs.

This newly designed dynamometer is intended for use in testing motors and gears of ice core drills. The aim is to resolve the issue of a missing test facility by using off-the-shelf components in its construction, with a relatively small and user-friendly form factor.

This presentation will introduce the design concept and its intended use cases.

References