

Robust, Wireless Instrumentation Solution for High-speed Measurement of In-process Frictional Forces

Novelis is a world leader in aluminium rolling and recycling, working alongside its customers to provide innovative solutions to the aerospace, automotive, beverage can, and speciality markets. The company is looking to implement **a robust system to measure and trend the forces created during the aluminium can body forming process**. The system should be able to **wirelessly measure friction and load with high-speed data acquisition** and must be capable of running in a production environment.



Approaches of interest

- Advancements available for **wireless measurement devices with high-speed data acquisition**
- New methodologies for **measuring friction at production speeds**
- Instrumentation capable of measuring forces in an industrial production environment (e.g. high humidity, presence of lubricants, high strokes per minute)
- Data acquisition rate should be able to operate above 25 kHz
- The device should be capable of measuring loads up to 5000 lbs and friction forces typically between 200-1000 lbs, and achieve accurate measurement with resolution in the region of 50 lbs

Developmental Stages of Interest

- **Lab-tested equipment** (TRL4-5) ready for trial in an industrial environment is ideal
- Opportunities **TRL4+** are preferred but more experimental opportunities with proof-of-concept are also of interest






Submission Information

Submission of one-page, 200-300 word briefs are encouraged. Along with any optional supplementary information e.g. relevant publications and patents. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Opportunity for Collaboration

The client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licensing assets, joint development and research collaborations with scope for funding or investment. Successful collaborators could also potentially gain access to key industries such as the automotive industry.

Opportunities sought

-  Technologies
-  Academics and expertise
-  Centres of excellence
-  Research projects
-  Spinout companies

Submissions

Please submit relevant, non-confidential opportunities online via: discover.in-part.com

Deadline: **7th November 2022 - 11:59 pm GMT**

Have any questions?

Contact our team at discover@in-part.co.uk

Novelis

Novelis is the leading producer of flat-rolled aluminium products and the world's largest recycler of aluminium. The company provides innovative solutions to the aerospace, automotive, beverage can, and speciality markets.