

AFRC

ADVANCED FORMING RESEARCH CENTRE

UNIVERSITY OF STRATHCLYDE



University of
Strathclyde
Glasgow

Advanced Forming Research Centre Glenammer Sieves

Funding stream

Scottish Funding Council Innovation Voucher

Problem

Glenammer manufactures industrial test sieves for a wide range of industry sectors as well as laboratories, universities and test environments where the most exacting standards are required. Some of Glenammer's test sieves require the support of a backing mesh. The presence of this backing mesh interferes with the methods of optical measurements that are currently used, and therefore prevents the in-house certification of this range of mesh sizes. This presents an issue for Glenammer as they strive to ensure consistent and precise measurements regardless of the mesh support and sieve design.

As a result, the customer wished to assess a range of sieves in a way that eliminates the problems caused by the backing mesh. If achievable, then a new and improved methodology could be established for this measurement process.

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“We were a bit in awe of working with the university at first but once we sat and discussed our project with their staff our fears evaporated and the whole experience was a very good one.”

Allen Matthews, Director at Glenammer Sieves



What we did

The Advanced Forming Research Centre (AFRC) took a structured approach to the feasibility study, using high resolution non-contact Alicona InfiniteFocus measuring equipment, establishing the optimum measuring parameters. Once the optimum parameters were established, researchers then carried out a repeatability study, to demonstrate the consistency of this measurement process.

Result

The AFRC successfully developed a methodology to measure the mesh dimensions of sieves that are supported with a backing mesh. The methodology eliminates the problems caused by the backing mesh.

The key benefit to the company is the confirmation that the concept of non-contact optical measurement of mesh size in such sieves is attainable. The ability to accurately measure the mesh size of the company's products will also support future innovation opportunities in the exploration of product design developments. The results established by AFRC researchers, will allow Glenammer to expand their business and explore developments in product design.

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