# Certificate of Calibration



Glenammer Sieves Ltd 62 Viewfield Road

Ayr KA8 8HH

Tel: +44 (0)1292 261444

Email: sales@glenammer.com Web Site: www.glenammer.com

UKAS
CALIBRATION

24551

Customer: Sample
Address: Sample

Sample Sample Sample Sample

Sieve: 150 Dia. x 500 µm w/w Sieve

Condition: New Serial No.: 23080875

Specification: BS ISO 3310-1:2016

Lab Location: Glenammer (see above)

Issued by: Daniel Smith
Date of Issue: 30/08/2023
Certificate No.: CC-0156
Calibration Technician: Daniel Smith
Date of Test: 30/08/2023
Test Temperature: 20.0 °C ± 2.0 °C

Test Type: Optical

Test Method: Diagonal Spot Check

Expanded Uncertainty: 3.6 µm
Approved Signatory: Daniel Smith

Signature: Organical Signature:

## Results

Parameters	Measured Values (1)		Standard	Decision
	Warp	Weft	Tolerances (2)	
Average size (3)	504.3 µm	501.4 µm	w <sup>a (9)</sup> ± 16.2 µm	Accepted
Standard deviation (4)	9.3 µm	6.9 µm	≤ 30.0 µm	Accepted
Maximum size (5)	522.6 µm	515.2 µm	≤ w <sup>a (9)</sup> + 80.5 µm	Accepted
Measured apertures	75	75	≥ 68	Accepted
Average wire diameter (7)	307.6 μm	308.6 µm	≤ 360.0 µm AND ≥ 270.0 µm	Accepted
Measured wires <sup>(8)</sup>	75	75	≥ 10	Accepted

- (1) Values are measured in two orthogonal directions labelled warp and weft.
- (2) Tolerances according to BS ISO 3310-1:2016.
- (3) Mean aperture size.
- (4) Maximum standard deviation multiplied by coverage factor k =1.46. K is calculated in accordance with BS ISO 3310-1:2016
- (5) Maximum value measured for aperture size.
- (6) Total number of apertures measured.
- (7) Mean wire diameter.
- (8) Total number of wires measured.
- (9) Nominal aperture size.

## **Decision Rule:**

To account for measurement uncertainty, we add a guard band equal to our expanded uncertainty to both sides of the tolerance intervals provided in the specification. A result which is within tolerance including our guard band

is accepted as conforming to the specification and rejected otherwise. If all results are accepted, then the sieve is accepted as conforming to the specification.

Based on the above results the sieve identified above is Accepted as conforming to BS ISO 3310-1:2016

#### **Calibration Methods:**

The calibration of this sieve has been carried out in accordance with the procedures documented in BS ISO 3310-1:2016 using the Optical method. The sieve was sampled using the Diagonal Spot Check method. All test equipment used in this calibration is calibrated and traceable to a UKAS accredited laboratory.

#### **Uncertainty of Measurement:**

The reported expanded uncertainty is based on a combined standard uncertainty multiplied by a coverage factor k = 2 providing a coverage probability of approximately 95%.

The results shown only relate to the item identified on this certificate.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

End of Report.