

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/006662-2026>

Planning

## **Particle Size and Shape Analyser**

University Of Edinburgh

F01: Prior information notice

Prior information only

Notice identifier: 2026/S 000-006662

Procurement identifier (OCID): ocds-h6vhtk-060e8e

Published 26 January 2026, 1:23pm

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

University Of Edinburgh

Charles Stewart House, 9-16 Chambers Street

Edinburgh

EH1 1HT

#### **Email**

[aoughton@ed.ac.uk](mailto:aoughton@ed.ac.uk)

#### **Telephone**

+44 1316502759

#### **Country**

United Kingdom

#### **NUTS code**

UKM75 - Edinburgh, City of

**Internet address(es)**

Main address

<http://www.ed.ac.uk>

Buyer's address

[https://www.publiccontractsscotland.gov.uk/search/Search\\_AuthProfile.aspx?ID=AA00107](https://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00107)

**I.2) Information about joint procurement**

The contract is awarded by a central purchasing body

**I.3) Communication**

Additional information can be obtained from the above-mentioned address

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Education

---

**Section II: Object**

**II.1) Scope of the procurement**

**II.1.1) Title**

Particle Size and Shape Analyser

**II.1.2) Main CPV code**

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

**II.1.3) Type of contract**

Supplies

#### **II.1.4) Short description**

Instrument for particle size and shape characterisation of natural and industrial granular materials.

#### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.2) Description**

#### **II.2.2) Additional CPV code(s)**

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

#### **II.2.3) Place of performance**

NUTS codes

- UKM75 - Edinburgh, City of

Main site or place of performance

University of Edinburgh

#### **II.2.4) Description of the procurement**

Instrument for particle size and shape characterisation of natural and industrial granular materials e.g.:

-Volcanic flow particles (ash, lapilli, pumice, scoria etc.) derived from pyroclastic density currents, fallout deposits, lahars and debris flows.

-Industrial particulate materials relevant to construction.

-Soils

-Construction materials (concretes, mortars, lightweight aggregates, composites)

-Agricultural amendments and granules (including Biochar)

-Polymer/composite additives

-Energy storage materials (electrodes, conductive carbons)

Materials will range from coarse granules to fine powders, typically irregular, porous, low-density and black.

Essential requirements (minimum)

Measurement capability

-Measures both particle size distribution and particle shape in one instrument or tightly integrated system.

-Image-based technique (e.g. dynamic image analysis or equivalent) suitable for irregular, opaque, carbonaceous particles.

-Provides at least:

-Size metrics: equivalent diameter, D10/D50/D90, full distribution.

-Shape metrics: aspect ratio, circularity/roundness, and at least one compactness/solidity/convexity parameter.

Size range and performance

-Usable size range:

-Lower limit ? 1?m

-Upper limit ? 5 mm

-Capable of analysing polydisperse samples in a single run.

-At least 50,000 particles analysed per standard measurement (for powders).

-Repeatability better than 3 % RSD on D10/D50/D90 for suitable reference materials.

Sample handling and dispersion

-Dry dispersion unit for low-density, porous, angular powders and granules:

-Controlled feed (e.g. vibratory feeder or equivalent).

-Adjustable dispersion energy/pressure.

-Wet dispersion capability:

- Recirculating wet cell for suspensions of soils, biochar and carbon powders.
- Compatibility with at least water and common alcohols (e.g. ethanol or isopropanol).

#### Shape analysis and classification

- Shape parameters computed for all measured particles or size classes.
- Ability to filter and analyse particles by size and/or shape (e.g. size range, aspect ratio range).
- Display and export of representative particle images for documentation and publications.

#### Software, data handling and reporting

- Method/SOP editor for storing and recalling measurement conditions.
- Export of size and shape data in standard formats (e.g. CSV, Excel).
- Overlay and comparison of multiple measurements.
- Configurable reports (number/area/volume distributions, cumulative and density plots, basic shape statistics).

#### Calibration and practical aspects

- Calibration/verification with traceable particle size standards in relevant ranges.
- Documented traceability to relevant particle sizing standards (ISO/ASTM or equivalent).
- Design suitable for dusty, abrasive, black powders, with straightforward cleaning of the dispersion path.
- Enclosed optics and standard laser/electrical safety compliance.
- Access to local service and technical support.

### 3. Desirable (nice-to-have) features

#### Extended capabilities

- Integrated laser diffraction module (wet and/or dry) using the same dispersion units, providing sub-micron coverage ( $<0.1 \mu\text{m}$  or lower).

- Dedicated fibre/rod analysis (length, width, L/W ratio) for fibrous chars/carbon fibres.
- Extended upper size limit to ? 10 mm for large granules and aggregates.
- Interchangeable optics/lenses to optimise measurements for fine powders vs coarse granules.

#### Advanced dispersion and handling

- Multiple dry disperser configurations (gentle and aggressive).
- Integrated anti-static measures (e.g. ioniser) for very fine, low-density powders.
- Low-volume wet cells (few mL) for expensive or low-yield materials.
- Integrated, controllable ultrasonic dispersion (power and time) with logging.

#### Automation and integration

- Optional autosampler for unattended measurement of multiple samples.
- API or scripting interface for method control and automated data extraction.
- Database/LIMS connectivity for long-term storage and retrieval of results.

#### Robustness

- Wear-resistant materials in nozzles and flow paths.
- Design that minimises cross-contamination.

### **II.3) Estimated date of publication of contract notice**

2 March 2026

---

## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.8) Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: Yes

---

## **Section VI. Complementary information**

### **VI.3) Additional information**

NOTE: To register your interest in this notice and obtain any additional information please visit the Public Contracts Scotland Web Site at

[https://www.publiccontractsscotland.gov.uk/Search/Search\\_Switch.aspx?ID=821672](https://www.publiccontractsscotland.gov.uk/Search/Search_Switch.aspx?ID=821672).

(SC Ref:821672)