This is a published notice on the Find a Tender service: https://www.find-tender.service.gov.uk/Notice/003545-2023

Tender

3631/JN - Spin Test Facility

UNIVERSITY OF SHEFFIELD

F02: Contract notice
Notice identifier: 2023/S 000-003545
Procurement identifier (OCID): ocds-h6vhtk-03a312
Published 6 February 2023, 10:44am

Section I: Contracting authority

I.1) Name and addresses

UNIVERSITY OF SHEFFIELD

Western Bank

SHEFFIELD

S102TN

Contact

James Noble

Email

james.noble@sheffield.ac.uk

Country

United Kingdom

Region code

UKE32 - Sheffield

Companies House

RC000667

Internet address(es)

Main address

https://in-tendhost.co.uk/sheffield

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

https://in-tendhost.co.uk/sheffield

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

https://in-tendhost.co.uk/sheffield

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

3631/JN - Spin Test Facility

Reference number

3631/JN

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

The University of Sheffield's Department of Electronic and Electrical Engineering and AMRC with funding from Innovate UK are looking to acquire a spin-test facility (also colloquially known as 'spin-rig') in support of research in high speed rotating components and assemblies. This capability will form part of a UK-wide network of facilities and capabilities which are available to UK industry and academia to further R&D and supply chain development in power electronics, machines and drives. Its principal role will be to facilitate mechanical testing, model validation and certification of high performance electrical machine rotors, including an ability to determine burst speeds and assess the nature of the burst. Although burst capability and overspeed testing is an essential requirement, much of the demand is driven by the need to characterise rotors and shaft assemblies in terms of radial growth at normal operating conditions and to characterise low-cycle fatigue. The system will consist of an evacuated chambers into which the test-piece is located and connected to a drive mechanism that enables its mechanical response to be quantified over a prescribed speed range as set out in the requirements section below. The facility will also be used in support of wider rotatives research across the University Sheffield, in many cases in collaboration with industry and/or academic partners, where likely use cases include inter-alia tool assemblies, compressor and turbine parts. The facility will be an R&D facility, in many cases testing one-of-a-kind test pieces and not a production facility and hence there is little or no premium in rapid / automated set-up of repeated tests. The equipment will be located in an existing industrial unit within the Advanced Manufacturing Research Centre (AMRC) which has a 400mm thick cast concrete floor, extensive services, large loading doors and a10 tonne overheard crane.

II.1.5) Estimated total value

Value excluding VAT: £1,058,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 38400000 - Instruments for checking physical characteristics
- 38500000 - Checking and testing apparatus
- 38900000 - Miscellaneous evaluation or testing instruments

II.2.3) Place of performance

NUTS codes

- UKE32 - Sheffield

II.2.4) Description of the procurement

The University of Sheffield's Department of Electronic and Electrical Engineering and AMRC with funding from Innovate UK are looking to acquire a spin-test facility (also colloquially known as 'spin-rig') in support of research in high speed rotating components and assemblies. This capability will form part of a UK-wide network of facilities and capabilities which are available to UK industry and academia to further R&D and supply chain development in power electronics, machines and drives. Its principal role will be to facilitate mechanical testing, model validation and certification of high performance electrical machine rotors, including an ability to determine burst speeds and assess the nature of the burst. Although burst capability and overspeed testing is an essential requirement, much of the demand is driven by the need to characterise rotors and shaft assemblies in terms of radial growth at normal operating conditions and to characterise low-cycle fatigue. The system will consist of an evacuated chambers into which the test-piece is located and connected to a drive mechanism that enables its mechanical response to be quantified over a prescribed speed range as set out in the requirements section below. The facility will also be used in support of wider rotatives research across the University Sheffield, in many cases in collaboration with industry and/or academic partners, where likely use cases include inter-alia tool assemblies, compressor and turbine parts. The facility will be an R&D facility, in many cases testing one-of-a-kind test pieces and not a production facility and hence there is little or no premium in rapid / automated set-up of repeated tests. The equipment will be located in an existing industrial

unit within the Advanced Manufacturing Research Centre (AMRC) which has a 400mm thick cast concrete floor, extensive services, large loading doors and a10 tonne overheard crane.

II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Start date

2 May 2024

End date

3 May 2024

This contract is subject to renewal

No

II.2.10) Information about variants

Variants will be accepted: Yes

II.2.11) Information about options

Options: No

Section III. Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.2) Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Open procedure

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

The procurement is covered by the Government Procurement Agreement: Yes

IV.2) Administrative information

IV.2.2) Time limit for receipt of tenders or requests to participate

Date

10 March 2023

Local time

12:00pm

IV.2.4) Languages in which tenders or requests to participate may be submitted

English

IV.2.6) Minimum time frame during which the tenderer must maintain the tender

Duration in months: 3 (from the date stated for receipt of tender)

IV.2.7) Conditions for opening of tenders

Date

10 March 2023

Local time

12:01pm

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.2) Information about electronic workflows

Electronic ordering will be used

Electronic invoicing will be accepted

Electronic payment will be used

VI.4) Procedures for review

VI.4.1) Review body

The University of Sheffield

Sheffield

S10 2TN

Email

james.noble@sheffield.ac.uk

Country

United Kingdom