Not applicable

Fusion Futures: 2D and 3D Analysis of Ceramic to Metal Bonding for High Heat Flux Components

United Kingdom Atomic Energy Authority

F14: Notice for changes or additional information
Notice identifier: 2024/S 000-019582
Procurement identifier (OCID): ocds-h6vhtk-047244
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Section I: Contracting authority/entity

I.1) Name and addresses

United Kingdom Atomic Energy Authority

Culham Campus

Abingdon

OX14 3DB

Contact

Charlotte Byrne

Email

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Country

United Kingdom

Region code

UKJ14 - Oxfordshire

National registration number

N/A

Internet address(es)

Main address

http://www.gov.uk/government/organisations/uk-atomic-energy-authority

Buyer's address

https://uk.eu-supply.com/ctm/Company/CompanyInformation/Index/72814

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Fusion Futures: 2D and 3D Analysis of Ceramic to Metal Bonding for High Heat Flux Components

Reference number

T/CB101/24

II.1.2) Main CPV code

- 42942200 - Vacuum ovens

II.1.3) Type of contract

Supplies

II.1.4) Short description

The objective of this work package is to analyse the ceramic to metal bonding used in the microwave sources on joints that encounters excessively high thermal flux loads.

The work scope envisioned is for a supplier with the capabilities of utilising 3D x-ray tomography, Scanning Electron Microscopes (SEM) and an SEM with the capability of thermal and mechanical testing with simultaneous microstructural observations with both spatial and temporal resolution capabilities (hereafter referred to as specialist SEM).

Section VI. Complementary information

VI.6) Original notice reference

Notice number: 2024/S 000-019348

Section VII. Changes

VII.1.2) Text to be corrected in the original notice

Section number

II

Place of text to be modified

II.1.2) Main CPV code

Instead of

Main CPV code

- 42942200 - Vacuum ovens

Read

Main CPV code

- 38511100 - Scanning electron microscopes

Section number

II

Place of text to be modified

II.1.1) Title

Instead of

Text

Fusion Futures: Ceramic to Metal Bonding

Reference number

T/RK090/24

Read

Text

Fusion Futures: 2D and 3D Analysis of Ceramic to Metal

Bonding for High Heat Flux Components

Reference number

T/CB101/24

Section number

II

Place of text to be modified

II.1.4) Short description

Instead of

Text

The objective of this work package is to develop microwave vacuum windows for either circular or rectangular waveguide.

There will be two general applications in which a ceramic is inserted into a waveguide or metallic wall: • Standard WR-## rectangular waveguide • Small circular or rectangular window with ceramic having a high index of refraction)

The bonding should be compatible with ultra-high vacuum applications with leak rates kept below 10-9mbar/(l•s)

The ceramic material is to be determined based on the suppliers capability, materials index of refraction and microwave transmission efficiency over the range of 25 to 400GHz.

The metallic material is preferred to be either Aluminium (allow 6061 or 6062) and copper (CuCrZr).

Read

Text

The objective of this work package is to analyse the ceramic to metal bonding used in the microwave sources on joints that encounters excessively high thermal flux loads.

The work scope envisioned is for a supplier with the capabilities of utilising 3D x-ray tomography, Scanning Electron Microscopes (SEM) and an SEM with the capability of thermal and mechanical testing with simultaneous microstructural observations with both spatial and temporal resolution capabilities (hereafter referred to as specialist SEM).

This work will also be used by the ITER organisation, as potential improvements to their

future procurement of microwave sources for the proposed EC system upgrade.

Section number

II

Place of text to be modified

II.1.5) Estimated total value

Instead of

Text

II.1.5) Estimated total value

Value excluding VAT: £50,000

Read

Text

II.1.5) Estimated total value

Value excluding VAT: £75,000