



Contract code	SU739000CO2024054
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Technical specifications for contract X- Ray inspection system for circuits

By submitting a tender, the participating bidders accept the technical specifications established herein, which are considered the minimum compulsory requirements.

Any proposal that does not comply with the minimum requirements set out in these technical specifications will be excluded from the procurement procedure.

1. Subject of the contract or need of the contracting authority

The purpose of these technical specifications is to establish the particular conditions that will govern the provision of an X-Ray system for the inspection of integrated circuits. The system must be capable of analyzing single packages as well as various solder joints (e. g. BGA, QFN, QFP, PTH, CSP, Flip Chip a.o.), small casts, mechanical and electrical components.

2. Activities and functions of participating bidders

Bidders must take on the following functions:

- Deliver the equipment at the designated UPC facilities located in Barcelona, Spain
- Provide assistance in the installation process at the UPC facilities that can be online.
- Provide the necessary elements for the operation of the equipment.
- Provide at least 10 hours consulting/formation on the equipment use.

The tenders submitted by participating bidders must cover all the activities and functions mentioned in these technical specifications and in the special conditions for public contracts, all of which are compulsory for a tender to be admitted.

3. Compulsory general technical requirements of the provision and/or performance criteria or functional requirements of the provision

Bidders must have the sufficient technical, material and qualitative means and human resources to carry out the tasks that are the subject of this contract.

The service regulated in these specifications must meet, at a minimum, the following technical requirements, without prejudice to the award criteria:

- Imaging area larger than 450mm x 350 mm
- View angle from 0° to 70 °
- Minimum detail detectability 200 nm
- Minimum FOD (Focus Object Distance) 0.4 mm
- Maximum sample weight 10 kg
- 5-axis sample manipulation.
- The system must be self-contained and installed ready to use including if necessary:

- Protective equipment
- Antivibration system
- Control computer and associated software for the system operation as supplied.
- Maintenance expendables for 500 hours of use.

In terms of performance or functional requirements, the provision of this contract must fulfil the following aims (*including the environmental characteristics, for example*):

- Deliver the equipment at the designated UPC facilities located in Barcelona, Spain
- The equipment must comply with the EMC and X-Ray Safety regulations of the European Union.
- Deliver all the necessary supplies for the equipment use.
- Provide assistance during the installation process.
- Provide at least 10 hour consulting on the equipment use
- Delivery time of less than 6 months.
- Minimum warranty of 12 months.

4. System for monitoring and controlling the execution of the specifications

The contractor must appoint a person who will be entrusted with managing the execution of the contract, who must guarantee the quality of the subject of the contract and deal directly with any issues related to the normal development of the tasks indicated herein with the interlocutor designated by the contracting authority.

5. Technical documents to be provided by successful bidder

The technical specifications proposed by the bidding company in its tender will become obligatory conditions that must be fulfilled during the execution of the contract if the bidding company is awarded the contract.

To certify the fulfilment of each technical specification, the successful bidder must provide the following documents:

- Manual and Technical specifications for the equipment.
- IEC TEST REPORT, IEC6101-1 Safety requirements for electrical equipment.
- Fulfilment of the requirements set by Reglamento sobre Instalaciones Nucleares y Radiactivas, aprobado por el Real Decreto 1836/1999, de 3 de diciembre, y con el Reglamento sobre protección de la salud contra los riesgos derivados de la exposición a las radiaciones ionizantes, aprobado por el Real Decreto 1029/2022, de 20 de diciembre.
- Dose rate protocol



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