
SPECIFICATION SHEET

**SUPPLY, INSTALLATION AND COMISSIONING OF A “72mm BOTTOM
LOADING LOAD-LOCK SAMPLE PUCK” FOR ICFO’S
LABORATORY, THROUGH AN OPEN PROCEDURE**

NÚMERO D’EXPEDIENT: 2023.SU.019
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CLAUSE 1. Object of the contract

The purpose of this contract is the supply, installation and commissioning of a "72mm BOTTOM LOADING LOAD-LOCK SAMPLE PUCK" for ICFO' laboratory.

The types of items supplied are linked to the CPV (Common Public Procurement Vocabulary), **38000000-5** Laboratory, optical and precision equipment (except glasses).

CLAUSE 2. Needs to satisfy

Research lines where ICFO's groups are involved require a cryogen-free dilution cryostat with a bottom loading system for rapid exchanges of samples. The goal is to measure the electron transport in twisted stacks made of different monolayer materials. For this, it is important to have a bottom loader to be able to exchange devices rapidly, since these samples turn out to be often unusable at low temperature. The cryogenic system was sold already with one sample puck but, in order to accelerate the turnover of devices and be able to prepare different experiments in parallel, we are looking to purchase a second sample puck unit.

CLAUSE 3. Technical specifications

The puck for rapid sample exchange unit needs to fulfil at least the next several features:

- The sample puck must be compatible and then able to connect with the external bottom loader and also the experimental wiring installed on the mixing chamber docking system of the Proteox cryostat placed at ICFO.
- The unit shall be equipped with at least 28 SMP and 96 DC wiring interface.
- The sample puck should include a sample holder with better than 72 mm diameter inner diameter and a 50 mm clear diameter. Internal height of sample holder should be better than 144 mm.
- It must not be necessary to pre-cool the sample puck before it can dock with the mixing chamber

CLAUSE 4. Shipping, transport

Shipping and transport to the laboratories of Prof. Adrian Bachtold at ICFO must be included. DAP incoterms will apply.

CLAUSE 5. Warranty

One-year full warranty on all components, starting at system acceptance. The warranty will include the replacement of any faulty or damaged part(s) during the normal use of the system, no matter the manufacturer of the component(s). It will cover any cost related with the disassembly, transportation, reparation and re-assembly of the damaged component(s), including all travelling and living costs of the required service engineer(s). An on-site repair, or a justified alternative to reduce the system down time to the minimum, will always be the first service option. A team of properly qualified and skilled service engineers will have to be available. It will also cover the costs and the maintenance related to the machine move and installation on the new building.

CLAUSE 6. CE Marking

CLAUSE 7. Target price

26.375,00 EUR (VAT excluded).

CLAUSE 8. Delivery time

8.1. Delivery time maximum of 12 weeks:

- Delivery time is defined as the time elapsed since the signature of the awarding document until the system delivery at ICFO facilities. It includes the manufacture of the system, the acceptance test at company's premises and the transportation.

Castelldefels, on the date of its digital signature

Prof. Dr. Adrian Bachtold
GL Quantum NanoElectronics and NanoMechanics Group