

Upcoming Tenders at CERN

ILO Forum

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IPT-PI

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LHC Collimator Control System Upgrade

Description & Specific Condition :

Collimation control system allows for remote control and diagnostics of collimator parameters, for all specific sequences associated to LHC operational cycle.

Tenders will be subdivided into :

- Stepping Motors Drivers: MS Q1 2024, IT Q3 2024
- FMC Cards for Motion Control: DO Q1 2024
- PXI-e COMe Adapter: DO Q4 2024
- COMe CPU: DO Q1 2025
- PXIe Carrier: MS Q1 2024, IT Q1 2025





Assembly of DAQ (Data Acquisition System) Electronic Cards

Description & Specific Condition :

Assembly and testing of PCBs of three different types with a maximum size of 322.25 mm x 280 mm, double-sided with up to 22 layers.

The contractor shall assemble a wide mix of components onto the PCBs.

The quantity will be approximately 900 units and deliveries are expected over a duration of 12 months from the date of Contract notification.

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Contact:	Christoph.Schwick@cern.ch	
Planning:	MS: Q4-2023 - IT: Q1-2024	
Cost Range :	750 k CHF ⇔ 5 M CHF	
Procurement code: 03 03 01 00		







Jacks for FRAS

Description & Specific Condition :

FRAS will allow for remote and simultaneous alignment of Magnets, cryostats, crab cavities, cryomodules, and TAXN

The jacks consist of two different types

- Longitudinal jacks (130)
- Central jacks (10)

Build-to-print. High precision machining and assembly, welding and heat treatment are required for this production



Longitudinal Jack

Central Jack



Screwed and welded aluminium support structures for ATLAS

Description & Specific Condition :

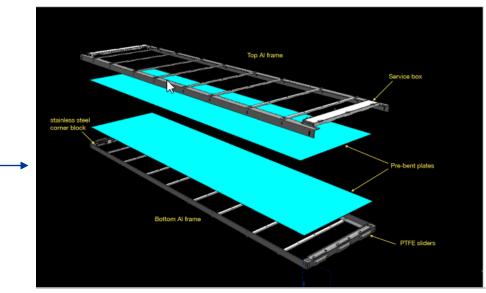
Supply of aluminium support structures to house different chambers.

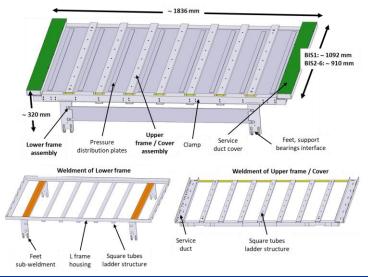
- Screwed structures (210): made of aluminium frames, plates and covers. The general tolerances are 0,1 mm for parts and 1 mm for the assembly
- Welded structures (110): made of aluminium profiles, plates and covers. The general tolerances are 0,05 mm for parts and 0,5 mm for the assembly

Procurement code:

- 05010104: Aluminium, aluminium alloys
- 05040100: Machining of steels, stainless steels, aluminium alloys

Cost Range :	750 k CHF ⇔ 5 M CHF (case B)
<u>Planning:</u>	MS-4900 (sent) - IT: Q1-2024
Contact:	toni.baroncelli@cern.ch







Supports for Collimator Masks

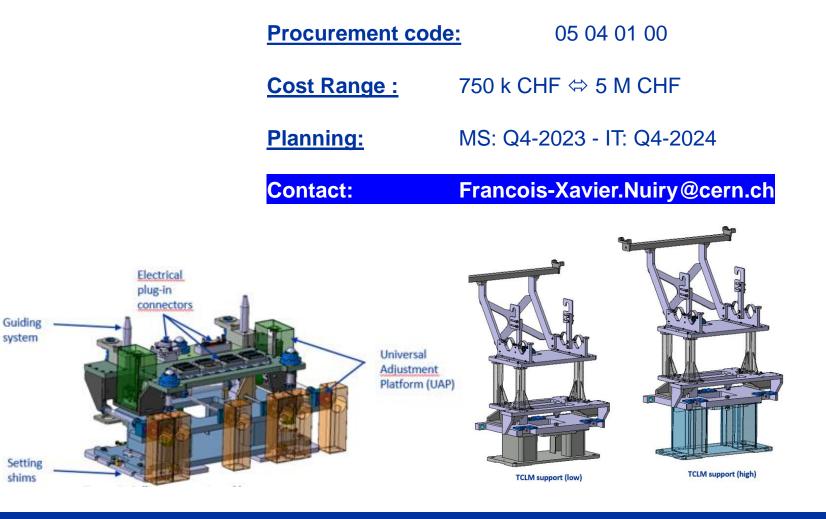
Description & Specific Condition :

Procurement of raw material and components (aluminium, brass, stainless steel)

High precision machining of all components

Assembly, welding

Quality controls and metrology for every unit produced





Power converters of ±600 A and ±10 V

Description & Specific Condition :

Supply of power converters of ± 600 A and ± 10 V for HL-LHC project

Build-to-print

• 21 Units



Procurement Co	de: 02 10 05 00
Cost Range :	<750 k CHF
Planning:	MS: Q1 2024 - IT Q2 2024
Contact:	Vicente.Herrero@cern.ch

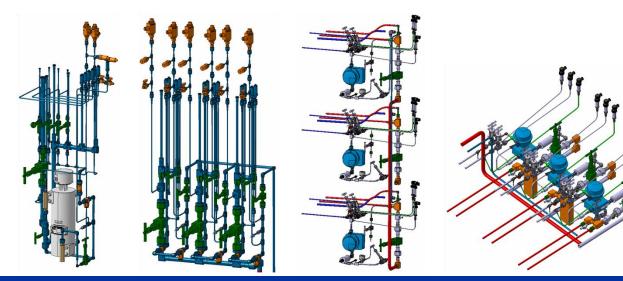


CO2 distribution manifolds for CMS

Description & Specific Condition :

20 distribution manifold boxes consisting of a metallic frame housing a hydraulic piping assembly

Structural verification and manufacturing drawings, plus construction (welding and forming of stainless steel piping and steel support structures) and assembly.







Heavy lifting of CMS calorimeters

Description & Specific Condition :

Removal of 2 existing calorimeters and installation of a new one on the CMS site in Cessy, including:

- Design and supply of tooling for heavy lifting
- Heavy lifting and transportation on site in two phases during 2026/7
- The new calorimeter will weight 230+ tons, with a value ~150 MCHF

Contract adjudicated on a BVFM basis.



Procurement code	<u>e:</u> 13 11 03 00
<u>Cost Range :</u>	750 kCHF ⇔ 5 MCHF (case D)
Planning:	MS: Q4 2023, IT: Q2 2024
Contact:	tristan.loiseau@cern.ch





Thank you



Please contact Jan Visser at jan.visser@nikhef.nl for other upcoming needs and questions

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