

SPECIAL TECHNICAL TERMS AND CONDITIONS

MARCHÉ PUBLIC DE FOURNITURES COURANTES ET DE SERVICES

**Purchase of a 12T/14T superconducting coil 12T/14T
(new or refurbished)**

Université Grenoble Alpes
PHELIQS
17 Avenue des Martyrs
Bat 10.05
38000 Grenoble

Context of the purchase

PHELIQS, a joint research unit of Grenoble Alpes University is carrying out experiments to explore the fundamental properties of correlated electron systems under pressure and at low temperature. As part of these experiments, the research unit wants to be able to apply a strong magnetic field. To achieve this, PHELIQS needs to acquire a superconducting coil with the following characteristics:

Technical description

Max field at 4.2 K	$\geq 12\text{T}$
Max field at 2.2 K	$\geq 14\text{T}$
Current for maximum field	$\leq 120\text{A}$
Bore	$\geq 52\text{mm}$
homogeneity	$\leq 0.1\%$ over 10mm

A diagram of our Internal Vacuum Can (IVC) is provided. We wish to be able to insert the IVC in the magnet to have the shortest distance between the bottom of the 84mm diameter part of the IVC and the field centre. This distance must be 160mm maximum.

The total length of the coil below the bottom of the 84mm diameter part of the IVC should be less than 280 mm

The total external diameter should be less than 246mm

The magnet should include a switch for operation in persistent mode, and full protection against accidental quenching.

The magnet should be tested up to maximum fields at 2.2K and 4.2K, and for quenching.

A test report and field profile will be provided

Instructions and assistance by telephone or message will be provided for the installation and connection of the coil and protection circuits, in accordance with Article 9 of the special administrative terms and conditions (CCAP).

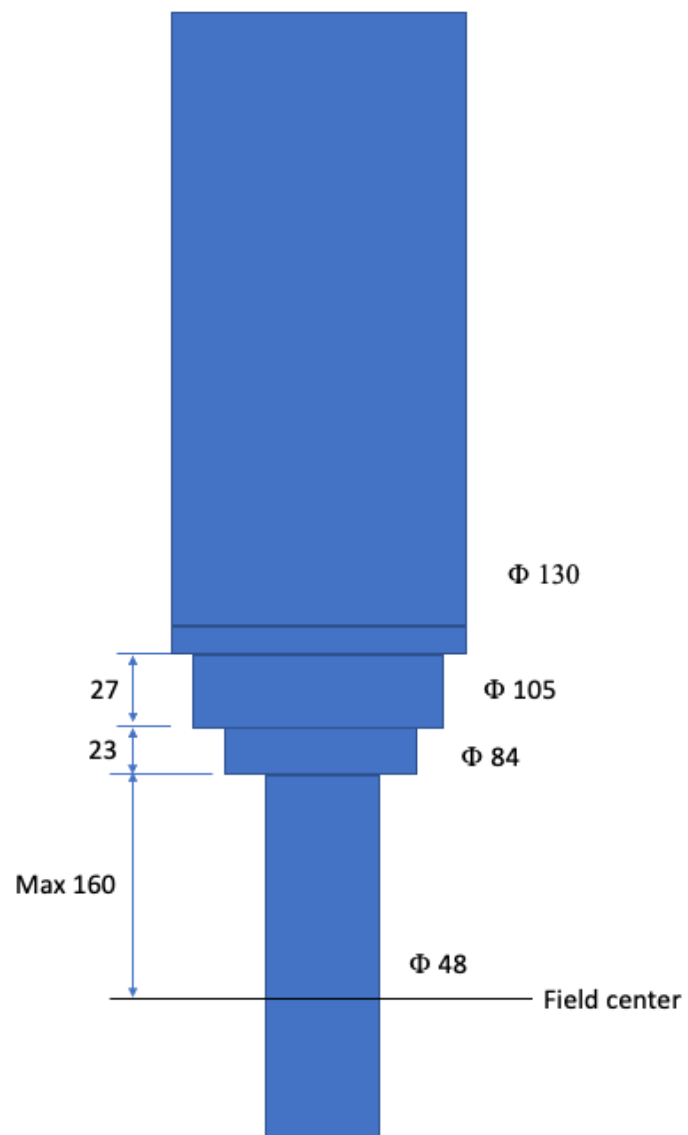


Diagram of IVC used

Dimensions in mm

(Drawing not to scale)