



EDMS NO.
1771841

REV.
1.0

VALIDITY
VALID

REFERENCE : NOT REQUIRED

HL-LHC Resources request

Date: 2017-02-20

Project/Activity: WP12

Title Position/Task: Engineer / Physicist for adsorption isotherms studies of aC coatings

Description Project:

In the framework of the design of the vacuum system for the HL-LHC beam screens, adsorption isotherms studies are of great importance to evaluate the impact of the vacuum chamber walls on the future machine performance. In particular, adsorption isotherms of amorphous carbon coatings in the 50-100 K range are needed.

Task:

Ex. You will be part of the WP12 study team to:

- Install and commission a new experimental system designed to measure, in the laboratory, adsorption isotherms in the 5 to 150 K range.
- Coordinate and operate the system during the year.
- Analyse, present and publish data.
- Evaluate the impact of the observations on the HL-LHC vacuum system.
- Propose potential upgrades to the system and/or HL-LHC.

Profile: Engineer / Physicist

Experience:

Experience with ultra-high vacuum systems is needed. Hability or commitment to learn data acquisition and data analysis softwares is desired. Knowledge of cryogenics together with the coordination and operation of small systems in a laboratory environment are assets.

Specific details: Candidates will be expected to possess a good working knowledge of either English or French.

Requester: TE-VSC

Starting date: July 2017