



Contribution ID: 1504 Contribution code: THPA149

Type: **Poster Presentation**

A new NEG coating setup with travelling thin solenoids for the SLS 2.0 complex vacuum chambers

Thursday, 11 May 2023 16:30 (2 hours)

The 288m long SLS 2.0 Storage Ring consists of several vacuum chambers with unique geometries. Complicated features, with many changes in the cross sections, are essential to provide the best impedance matching and to allow synchrotron light extraction under the tight geometrical constraints. In order to speed up the commissioning time, it was decided to NEG coat most of the vacuum chambers. A new magnetron sputtering setup has been developed in Paul Scherrer Institute, where the plasma length, defined by thin solenoids, is relatively small. The solenoids are then travelling over the entire vacuum chambers more than ten times per coating process to assure best possible thickness uniformity. Flexibility provided by this solution allows to coat various vacuum vessels in one assembly. This paper will describe this NEG coating setup and show results on SLS 2.0 vacuum chambers.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: KIRCHGEORG, Natalia (Paul Scherrer Institut)

Co-authors: BUCHMANN, Jonas (Paul Scherrer Institut); GAIFFI, Nazareno (Paul Scherrer Institut); GANTER, Romain (Paul Scherrer Institut); HUBER, Peter (Paul Scherrer Institut); MAGJAR, Marijo (Paul Scherrer Institut); ROSENBERG, Colette (Paul Scherrer Institut); STEPHAN, David (Paul Scherrer Institut)

Presenter: KIRCHGEORG, Natalia (Paul Scherrer Institut)

Session Classification: Thursday Poster Session

Track Classification: MC7: Accelerator Technology and Sustainability: MC7.T14: Vacuum Technology