

SENIS

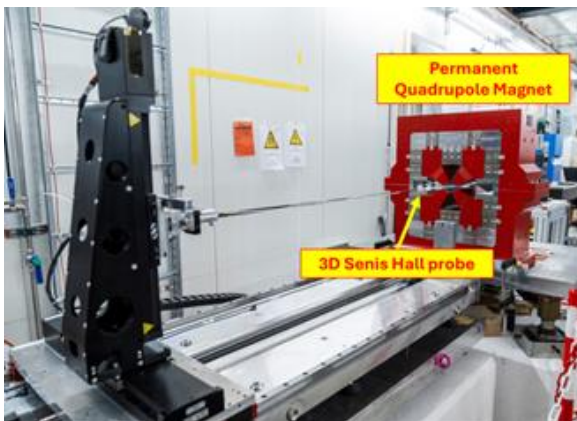
Customer Success Story

“SENIS high-performance 3D Hall probes, the right tool for the SLS2.0 magnets mutual coupling studies.

SENIS® Hall Probe type C with I3D transducer is the key ingredient for precise 3D mapping of magnetic fields for electro and permanent magnets used to upgrade of the Swiss Light Source (SLS2.0)

Objective: Measurements of “cross-talk” effect

The Paul Scherrer Institut is the largest research institute for natural and engineering sciences in Switzerland. It hosts an articulated set of particle accelerator facilities. Key building blocks, among others, of those large research complexes are magnets. Before installation in a machine, magnets must be qualified in terms of produced field quality. The SENIS integrated high-performances 3D Hall probes are an important ingredient for the magnets characterizations when it comes to map the field behavior in a very small 3D volume. During the latest upgrade of the Swiss Light Source (SLS2.0), a 3D Senis probe type I3D is used to assess the magnetic coupling (cross-talk) between neighboring magnets in an assembly. This allowed to optimize the response of the magnets for the operation in the machine.



ABOUT THE CUSTOMER PROJECT

The Swiss Light Source SLS has been in operation since 2001. This large research facility, which is unique in Switzerland, began a comprehensive upgrade to a diffraction-limited storage ring in October 2023. The machine upgrade was completed by the end of 2024, and the beamlines are now coming back online. With this upgrade, photon science at PSI will keep pace with the latest developments in science, technology, engineering and data processing. Following the modernisation project, called SLS 2.0, novel research and more precise investigations are possible. With this technical overhaul, SLS will remain in the top tier of international synchrotron light sources. The project is being funded as part of the ERI Dispatch 2021-2024 programme.

More information about PSI can be found on: <https://www.psi.ch/en/>

About SENIS

SENIS AG, Switzerland, develops, manufactures and supplies advanced sensors and instruments for magnetic field and electric current measurements. We provide innovative but simple solutions to satisfy customer needs for precision, reliability and safety in robotics, consumer electronics, automotive and T&M industries.



ACCURATE



INVENTIVE



CUSTOMIZED