

ASG Superconductors is to build the world's most powerful magnets to study the brain

The magnets will create a magnetic field 260,888 times more powerful than the one generated by the Earth, for a high energy magnetic resonance system designed to produce even more detailed images of the brain, at Gachon University Gil Medical Center in Incheon (South Korea), which specialises in neurological studies

ASG produces superconducting magnets for basic scientific research and for the medical (hadrontherapy and MRI) and energy sectors (FCL anti-blackout systems)

Genoa – October 26, 2016 - ASG Superconductors, a company owned by the Malacalza family with production sites in Italy, has been awarded a contract by Gachon University Gil Medical Center in Incheon South Korea (GUGMC) to build Ultra High Field (UHF) superconducting magnets. The magnets produced in Italy by ASG will be used to create an extremely powerful magnetic field of 11.74 Tesla, or 260,888 times stronger than the earth's magnetic field, making it possible to acquire images at a high level of spatial resolution that will push the frontier of neurological research beyond the limits imposed by today's imaging systems, which use lower energy magnetic fields.

The Gachon magnetic resonance system will be the medical instrument with the highest energy field ever used in medical research on human beings. This project is supported by a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry for Health and Welfare, Korea. The magnets, weighing about 70 tonnes, will use over 600 km of superconducting cable in a production process that draws on high-tech computation tools and mechanical, cryogenic and magnetic engineering software.

The contract will be performed on a joint basis with Korean company Magnex Scientific Inc and is worth over €10 million for ASG, representing yet another example of the company's skills in the medical magnets sector. ASG has already produced numerous magnets for applications in the field of hadrontherapy and oncological radiotherapy (cancer care), for customers like the CNAO in Pavia, Alberta Health Services in Edmonton, Canada, and other operators in this sector. The magnets' design, technology and production drawing on skills built up over more than 50 years working on major research projects including LHC-CERN and ITER.

Established in 1958, the GUGMC is a medical foundation established through the generosity of Dr Lee Gil Ya. Over the years it has become one of Asia's most important medical centers and a leading development center for magnetic resonance and radiology technology.

To know more about ASG check out the website www.asgsuperconductors.com

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