Magnet for nuclear fusion made in Italy (4)

ASG Superconductors build core element for ITER project

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(ANSA) - La Spezia, May 19 - Italian firm ASG Superconductors on Friday presented the first magnet for ITER, the world's largest experimental plant designed to show it is possible to produce energy from nuclear fusion. It is 14 metres high, nine metres long, weighs 300 tonnes - as much as a Boeing 747 - and is the shape of a big capital D. The super-high-tech magnet, the first of 18 destined for the ITER project, was made by the Malacalza family's ASG Superconductors in its La Spezia plant, which will go on to produce another nine (plus one spare one) of the 18 which will form the core of the Iter reactor being built at Cadarache in southern France.

The other nine will be made in Japan.

"We are very proud," said ASG Superconductors President Davide Malacalza, "we and all those who worked on building it: the head of production had goose pimples when he moved this coil for the first time.

"It took five years to realise the prototype".

The magnet will produce a magnetic field one million times stronger than that of the Earth.

ASG, which formerly made washing machines at the plant, now "puts the sun in a bottle," said production chief Marco Chiodo, 58, who has been through both eras.

"I joined the San Giorgio plant on May 7, 1981. There were a thousand of us making almost 2,000 washing machines a day. Now we're working on nuclear fusion.

"WE are proud of making, for the first time in the world, an object that has never been seen before. You could see washing machines everywhere. We had to be trained, but now we're here to present what we've succeeded in making". The first experiments with nuclear fusion are scheduled for 2025, ITER Director-General Bernard Bigot said, stressing the "great enthusiasm" among the 35 countries collaborating on the project.

The production of clean energy through nuclear fusion, which reconciles the energy needs of the modern world while safeguarding the environment, is a challenge that researchers and industries have been striving to meet.

The quality of ASG's nuclear fusion offering is the result of "unequalled technical and productive expertise", according to a statement on its website. ASG magnets have been used in all the main fusion experiments undertaken so far in Europe. ASG plays a leading role - as a supplier of magnets - in ITER (Europe) and JT-60SA (Japan), the two principal research projects which aim to study the feasibility of producing clean energy by replicating the process that takes place in the sun and stars.