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SNGC and ADIMRA strengthen their collaboration

Early this month, ADIMRA, the Industrial Association of Mechanical Manufacturers of Argentina, and SNGC, the Spanish Nuclear group for Cooperation, have signed a Memorandum of Understanding to strengthen even more their relationship to develop plans for joint participation in the Argentinian new nuclear program as well as for the support to the plants currently in operation. This cooperation will be materialized through the development of technical seminars on different topics, bilateral meetings from selected companies, analysis and discussion of opportunities of common interest as well as missions and joint visits.

ADIMRA companies have had an increasingly important participation in the existing domestic nuclear program and are obviously well positioned to be active players in the new projects to come. SNGC is offering all its international experience and competences to support this approach in order to provide significant added value to the Argentinian industry.

ENSA completes manufacturing of Vacuum Vessel first parts

ENSA (Equipos Unclears S.A), as part of the AMW consortium, has achieved a key Fusion for Energy (F4E) milestone: the machining of two inner shell plates – the first pieces to be manufactured at ENSA – has been completed. These plates will make up the longest of the segments of the ITER Vacuum Vessel’s sector 3, and measure each 6 metres long, 1.5 metres wide, and has a thickness of 60 millimetres. The plates are made up of the special ITER grade stainless steel. The long length of each plate has entailed a number of challenging steps involving cleaning; cutting and machining of holes which will house the so-called flexible housings (large cylindrical parts which act as bolts); as well as carrying out a wide variety of inspection techniques in order to detect the presence of defects, characterise findings, and measure without causing any damage to the plates themselves (known as Non-destructive Examination – NDE). What makes this work additionally challenging is the fact that the flatness tolerance (the permissible limit or limits of variation in the overall flatness of each plate) is very tight – only a 0.4 mm variation in 6 meters is permitted. With the right techniques, the necessary flatness tolerance for the plates has been achieved, even despite that the longer the length of the piece, the more difficult it is to attain the same overall flatness.

“This milestone achievement shows the commitment of ENSA as part of the AMW consortium to the delivering Europe’s Vacuum Vessel contribution and its key role in the success of the Vacuum Vessel manufacturing”, says Rafael Triviño, Director General of ENSA.

“F4E is pleased with ENSA’s performance: they keep their commitment whilst anticipating and mitigating issues. ENSA has lived up to its reputation of being one of the best European companies in the nuclear field”, says Francesco Zacchia, Project Manager for F4E’s Vacuum Vessel Team.
The ITER Organization chooses ENSA to share the progress of the project

Representatives of several companies involved in the manufacturing of the components that will constitute the Vacuum Vessel of the ITER Project have met these days at the facilities of ENSA to share the last advances in the experimental fusion reactor. During the meeting, various presentations of the general status of each project have been done and ENSA carried out a presentation of its progress since 2012 and showed the results and conclusions obtained with each mock-up performed, as it has done welding work in various structures and mockups to look for the best parameters and configurations for the welds that will be carried out in Cadarache. For ENSA, company in charge of welding the segments and ports that are being manufactured for the Vacuum Vessel of ITER, this encounter has resulted “truly fruitful”, since it has allowed to know other points of view that help to deepen the development of different systems to be able to assemble conveniently the components manufactured by all the other companies attending the meeting.

Ringo provides training to Samson China team

Ringo Válvulas organized a Technical Training for Samson Controls (China) about Ringo products that took place recently at Ringo facilities in Zaragoza. The course was attended by a Samson China team involved in technical sales and production. The program of the Technical Course included the following topics:

- ON/OFF Valves Training: ball, gate, globe, check and butterfly
- Control Valves Training: Globe Cage guided type, Axial and rotary (ball and butterfly)
- Engineering and design process, standardization, software tools
- Ringo Quality Assurance & Documentation Management
- Factory tour
- Ringo Válvulas solution to Severe/Critical applications

The Technical Training was completed successfully and fulfilled its main objectives:

- To make the attendees understand all the Ringo products (on-off and control valves) and their different technical features.
- To let the attendees know the main strengths of Ringo to understand the type of products / applications where to focus their efforts.
Ringo shipment of two fully welded ball valves 42” 900#

Ringo Válvulas has successfully completed the design, manufacturing, testing and dispatch of two (2) fully welded ball valves 42” 900# (28,000 Kg each valve). Valves have been shipped to Petro Karan Shafagh Kish Company to be installed in an Onshore Plant related to South Pars Development Project Phases, 22, 23 & 24 (Iran), whose end user is Pars Oil & Gas Company (P.O.G.C). Dimensions of each valve involved the arrangement of special transportation to the port, since each valve case had more than 6 meters of length, 4 meters of width and 3 meters of height.

ENUSA fuel inspection campaigns in Ling-Ao-3

During February and April, a team of technicians from ENUSA and Tecnatom traveled to Ling Ao nuclear power plant in Guandong (China) to supply fuel inspection services with SICOM-COR equipment, which was just delivered to SNPI, from the CGN group. It is the first time that ENUSA provides irradiated fuel inspection services in China.

February campaign was oriented to prove the correct functioning of the equipment under real working conditions and was done out of outage conditions. Elements with long cooling process in the pool and several irradiation cycles were examined. The inspections showed some minor improvements in the operation of the µDIM module for inspection of the diameters via visual techniques.

April campaign, on the other hand, took place during the plant outage and was on the critical path. This made necessary to establish several working shifts that allowed the inspection to be over within the deadline set by the plant. Four elements containing bars with new alloys developed in China and with a single irradiation cycle were inspected. This has caused some unpredicted effects due to the important thermal and dose loads that the components of SICOM-COR equipment are exposed to. Despite this, it was possible to carry out the whole corrosion inspection and partially the bar profilometry. It is expected that the data obtained will allow the re-use of the elements in a second irradiation cycle.
ENUSAs manufacturing processes approved by EDF

EDF-Ceidre has performed its evaluation of the manufacturing processes of ENUSA for the year 2016, according to the monitoring of the production carried out periodically to its suppliers. The evaluation for 2016 has been (as in previous years) very positive. EDF continues to emphasize as very important the non-existence of non-compliances and observations in the inspections. Other aspects were also highlighted such as the professionalism, competence and involvement of the operators, inspectors and technicians involved in the activities of the production line as well as the implementation of improvements, the risk assessment (safety related) carried out for the activities executed by the EDF inspector and the availability, communication and anticipation of the team dedicated to support the supervision of the manufacturing of supplies to EDF.

Tecnatom supplies inspection equipment to Argentina

The company operating the Atucha and Embalse plants, NA-SA (Nucleoeléctrica Argentina), has awarded Tecnatom a contract for the supply of a new PET inspection system and the updating of PET and WIND equipment acquired by NA-SA in the past. These automatic inspection systems are used for the application of non-destructive testing to piping and components at nuclear power plants or other industrial facilities. In addition to the updating of equipment supplied in the past and the supply of a new PET system, the contract also includes the training of NA-SA personnel and the updating of ultrasonic inspection procedures to incorporate the characteristics and performance of the new equipment.

Tecnatom boasts a solid presence in the Argentinean nuclear programme, where the company has participated in training and inspection activities and the supply of equipment to the Embalse and Atucha nuclear power plants and has worked jointly with the Nuclear Regulatory Authority, the CONUAR nuclear fuel manufacturing facility and the CAREM nuclear reactor development programme.
Tecnatom provides support for the Chinese Regulatory Authority (NNSA)

Tecnatom is participating in an international project funded by the European Commission and aimed at improving the capabilities of the Nuclear Regulatory Authority of the People’s Republic of China, NNSA, in areas regarding nuclear safety. Tecnatom has an important participation within the framework of this project, including activities in tasks related to the regulation of facility dismantling, liquid and gaseous effluents, solid radioactive waste disposal as well as research into nuclear safety and emergency preparedness and response.

The project will last three years and will be run by an international consortium made up by the Spanish Nuclear Safety Council, the ASN and IRSN from France, the German bodies GRS and RISKAUDIT and the French radioactive waste management agency ANDRA.

This project is part of the European Union’s action plan for cooperation in nuclear safety and is a continuation of other INSC projects in which Tecnatom is also currently participating as part of its internationalisation activities in the Asian market.

Tecnatom will train the personnel of the new Horizon nuclear power plant in United Kingdom

Horizon Nuclear Power has today announced a partnership with Tecnatom, a global nuclear training services provider, as it looks to grow the future operational workforce for its lead project Wyfya Newydd on Anglesey, North Wales. Tecnatom which provides training services to a range of nuclear power stations around the world, will lead a training support team comprising GEN II Engineering and Technology Training Ltd and GE Hitachi Nuclear Energy. Collectively they bring a vast amount of global experience both in nuclear operations training generally and in ABWR reactor operations training specifically.

The training support team will provide a rigorous, Systematic Approach to Training (SAT) in line with global best practice. The initial phase of work will deliver a comprehensive training needs analysis and set the scope of the training requirements for all licenced company roles including the Control Room Operators, Field Operators, Engineers, Maintenance Technicians, Radiation Protection Technicians, Chemists and other support staff. Further phases of work will cover the delivery of training.
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