

## ACADEMIC WORLD - ESSC & DUPLEX 2017 – NORSOK

### SIDERFORGEROSSİ

## Everything revolves around Research and Innovation

28 June 2017, Arsiero – ITALY



On Monday 29 May, Siderforgerossi welcomed Prof. Jan-Olof Krister Nilsson to its boardroom. He was accompanied by Prof. P. Ferro Ph.D. (an Associate Professor of Metallurgical Engineering at the University of Padua's Department of Management and Engineering) and he gave a lecture on stainless steel for the Siderforgerossi R&D team, focusing in particular on DSS and SDSS.

Prof. Nilsson taught at the Chalmers University of Technology in Gothenburg (Sweden) for many years and he has had an exceptional academic career, with more than 150 scientific publications on metallurgical physics to his name. He worked in active partnership with Sandvik Materials Technology (SMT) from 1979 to 2014, serving in roles with significant responsibilities. He was initially appointed as a scientist and he went on to become a member of the group of experts from 2007 onwards.

In addition, he works with international magazines and regularly publishes articles in "Stainless Steel", a leading reference material for the international stainless steel steering committee. Prof. Nilsson is an internationally renowned luminary



in the academic world thanks to his in-depth knowledge of stainless steel and he continues to work with a number of universities. Among them is the University of Padua, where he plays a significant role at the Department of Management and Engineering (DTG).

After visiting Siderforgerossi and taking part in the 2017 ESSC & Duplex Conference, Prof. Nilsson ended his trip to Italy at the University of Padua's DTG on 30 May, where he gave a lecture to the Product Innovation Engineering students.



The 2017 ESSC & Duplex Conference was organized by the Italian Society for Metallurgy (AIM) and it took place in Bergamo from 25 to 27 May 2017. As well as giving a talk in partnership with the University of Padua's DTG, Prof. Nilsson was also the chairman.



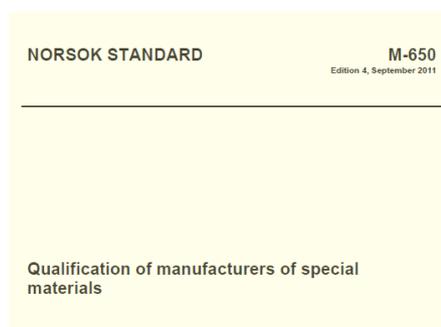
Members of Siderforgerossi’s R&D team also took part in the event. They gave a presentation of a technical case study that they had drawn up in partnership with the Department of Management and Engineering at the University of Padua. Presented by G. Camicia, M. Longin, P. Ferro and F. Bonollo, it underlined the outstanding level of expertise that has been reached in the field of DSS/SDSS and was entitled “Chromium nitrides effects on low temperature impact toughness and durability of duplex stainless steels forgings”.

Further confirmation of Siderforgerossi’s unparalleled reputation for excellence in the field comes from the fact that for many years now it has been listed as an approved supplier in accordance with the Norsok M-650 standard, which is required by the main oil & gas companies for the most demanding uses.

Following the qualifications awarded in the first few months of 2017, the Cogollo del Cengio facility has been added to the list, the number of possible thicknesses for SDSS supplies has increased and the range of suppliers and raw material types has been extended. Further details about the qualifications currently held can be found in the “Quality” section of the “Siderforgerossi” website.



The Norsok standards were developed by the Norwegian oil & gas industry and based on internationally recognized principles. The aim was to guarantee appropriate levels of safety for petroleum extraction installations in tough conditions with significant environmental risks. In addition, the Norsok standards are intended to replace oil company specifications and serve as core references for regulatory authorities.



In 2011, the fourth - and latest - edition of the Norsok M-650 standard was published. It establishes a set of quality and assessment requirements to verify that the manufacturer has sufficient competence and experience of the relevant material grades, and the necessary facilities and equipment to manufacture these in the required shapes and sizes with acceptable mechanical properties. The standard also requires test laboratories to have accreditation in accordance with the ISO/IEC 17025 standard or equivalent.

In order to ensure that its materials comply with the standard, Siderforgerossi has put in place numerous internal procedures for closed-die and forged component manufacturing. With regard to the qualification company, for a number of years now Siderforgerossi has been working in partnership with Aker Solutions, an internationally renowned provider of products, systems and services to the oil and gas industry worldwide. This has led to the recognition of its Qualification Test Records (QTRs) by the oil & gas company Statoil, which has included it in its internal database of approved TR2000 qualified manufacturers.

The entire Siderforgerossi organizational and manufacturing structure is constantly committed to keeping Norsok M-650 approval. The company is devoted to supplying customers with high-quality products that fully satisfy their specific technical requirements while guaranteeing exceptional reliability.