## SteelForum2014

The AIST Italy Steel Forum 2014 was held on 9–10 October 2014 at the Pomini Tenova Conference Center in Castellanza, Italy. The program included two keynote presentations, a Transforming Iron Production panel, a moderated Industry Leader Panel, and an overview and tour of the Acciaieria Arvedi S.p.A., Cremona facility. The event drew 121 attendees.







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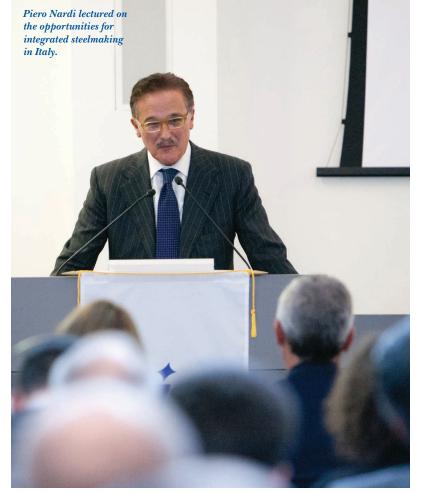
he event kicked off on the morning of 9 October 2014 with a welcome from Mauro Medici, chief executive officer, Pomini Tenova. Ron Ashburn, AIST executive director, thanked all in attendance for their presence and provided an overview of the steel forum and the many programs and activities of AIST. Gianfelice Rocca, chairman, Techint Group, and president, Assolombarda, added his support for the forum and the networking opportunity it provided. He also thanked the organizers and AIST for bringing the forum, once again, to Pomini Tenova. Mr. Rocca highlighted the global situation for Ternium and Tenaris companies for the attendees. Antonio Gozzi, chief executive officer, Duferco Group, and president, Federacciai, presented "The Situation for Steel in Italy — 2014." His presentation detailed the world and European steel industries in terms of capacity, production tonnage and distribution of products across the world and throughout the European Union. He then focused specifically on Italy, its steel production as well as its potential for demand growth, and concerns with imports. Following Mr. Gozzi's presentation, **Piero Nardi**, extraordinary commissioner, Lucchini S.p.A., lectured on the opportunities and perspectives for integrated steelmaking in Italy.

AIST Italy Steel Forum attendees visited Acciaieria Arvedi S.p.A. in Cremona, Italy.











A Transforming Iron Production
Panel Discussion highlighting the
benefit of previously unattainable
energy sources and underutilized raw
materials kicked off the afternoon.
Each panelist presented their
experiences and visions for using
these "newfound" resources.

**Dr. Jose Henrique Noldin Jr.,** senior marketing manager steel, Lhoist Group, discussed the various types of alternative iron production technologies under development or in production around world.

Additionally, new raw materials such as charcoal can be leveraged to improve the sustainable production of today's blast furnace process. **Conrad Fisher**, plant manager, Steel Dynamics Inc. – Iron Dynamics Div., discussed how alternative iron can be converted into molten iron and directly charged into an EAF to reduce trace residuals in the final steel chemistry and improve carbon boil in the furnace while not having to rely on external pig iron



sources. **Jay Henderson**, general manager and chief operating officer, Duferdofin Nucor S.r.l., described the technology and challenges of producing and shipping merchant DRI across international waterways. **Hannes Nogratnig**, process engineer, voestalpine Stahl GmbH, presented how voestalpine Linz will utilize hot briquetted iron (HBI) to increase blast furnace production and to improve the quality of low-sulfur-grade steels. Included in









the emission goals of the EU. **Prof.**Carlo Mapelli, Politecnico di Milano, and AIM president, presented the technologies currently being utilized in Italy to improve production efficiencies, and the new technologies in research and development to improve the end product and reduce and recycle steelmaking byproducts.

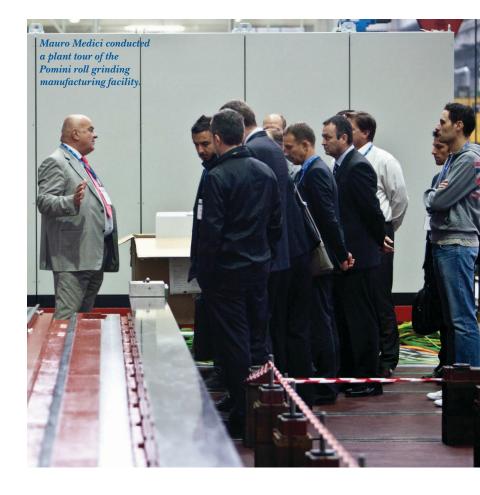
Angelo Manenti, vice president, North American business development,
Tenova Core, and chair, AIST DRI
Subcommittee, moderated the session.



The evening concluded with a dinner hosted by Pomini Tenova at the Pomini Tenova Conference Center. Mr. Medici again thanked all in attendance and AIST for bringing the event to Castellanza. Mr. Ashburn expressed his gratitude to Mr. Medici and to Pomini Tenova for being a partner in the success of the event.

On 10 October 2014, the attendees again convened at the Pomini Tenova Conference Center for the Industry Leader Town Hall Forum. Panelists included **George Babcoke**, senior vice president, European operations and global safety, and president, U. S. Steel Košice; **Eric De Coninck**, general manager, business development and new technologies, ArcelorMittal Innovation, Belgium; and **R. Joseph Stratman**, executive vice president,





Nucor Corp. They discussed in an open forum key business issues impacting the global steel industry, including: the scars left after the global economic crisis, how geopolitical instability is affecting the steel industry, steel's competitiveness versus other materials, research and development, trade issues, safety, and workforce issues. Stratman said many scars still remain from the financial crisis, including a regulatory environment that has created significant investment uncertainty. Although countries around the world are on the road to recovery, it's still a very slow and, at times, painful process from a global perspective, he said. Babcoke noted that geopolitical instability from the Russia-Ukraine conflict has created short-term market distortions, but noted one silver lining with the dark cloud: the European conversation about shale exploration has become much more favorable as a result of the energy conflict. De Coninck commented on Europe's struggle with attracting the right people to the steel industry: it's a tough job to find skilled workers, but the industry truly needs highly skilled people to fill many positions which are opening due to attrition. Dr. Carlo Giacobbe, editor-in-chief (retired), ANSA, moderated the discussion.



Following the Industry Leader Forum, Acciaieria Arvedi S.p.A. in Cremona hosted a plant tour. Mr. Mario Caldonazzo, vice president, Acciaieria Arvedi S.p.A., introduced the facility and welcomed everyone. Mr. Federico Mazzolari, marketing consultant, Finarvedi S.p.A., provided an overview of the steel manufacturing facility and its subsidiaries, its products and markets. The Cremona facility was described in detail — in particular its in-line strip production (ISP) and endless strip production (ESP) processes. Both processes are unique to Arvedi in Cremona, and both maximize the heat retention of the solidified steel slab with direct linking of the caster to the hot rolling mill. Following the presentation, a tour was given of the ESP process from the continuous caster through the rolling facility. The entire process route, from ladle turret to downcolier, is remarkably efficient, requiring only approximately 180 m.

Later that evening, Acciaieria Arvedi S.p.A. welcomed everyone to the Cremona Historic Violin Museum to observe the art and elegance of the unique violins produced in the Cremona region. A violin virtuoso performed a selection of songs on one of the classic violins from the museum. Following the museum visit, Acciaieria Arvedi S.p.A. hosted the attendees at its headquarters for a reception and dinner, which concluded the event.

AIST extends a special thanks to the many sponsors of the event, including Tenova, Acciaieria Arvedi S.p.A., Berry Metal Co. and the North American Crane Bureau (NACB), and wishes to recognize the Associazione Italiana de Metallurgia (AIM) for its support of and contribution to the success of AIST's program in Italy.

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