



## **Microsoft and Tenova launched an integrated system enabled by industry 4.0 technologies to promote digital transformation in the iron and steel industry and increase competitiveness**

*An innovative solution aimed at improving the level of customers' productivity and goal achievement, representing a real added value for the business: this is the outcome of the partnership between, Microsoft and Tenova presented during SPS Italy, the leading industrial automation trade fair.*

*Through Cloud Computing, Machine Learning and Augmented Reality it is possible to gather and analyze the data from plants in order to optimize industrial processes.*

**Castellanza, 15<sup>th</sup> June 2017 – Microsoft and Tenova** – a Techint Group company headquartered in Castellanza, Italy, worldwide partner for innovative and reliable solutions in the metal and mining industries – announced their collaboration in occasion of SPS Italy – the fair trade dedicated to the world of industrial automation which took place in Parma on May 22-24 – and presented the characteristics of the groundbreaking Tenova solution that is based on three key elements – **sensors/actuators, decentralized intelligence, and supplier-customer interaction** – with the objective to improve business productivity in the steel and manufacturing sectors.

Thanks to this integrated system with multiple **integrated sensors and actuators**, plant machines will be enabled to manage the specific productive process as well as to provide the operators or AI algorithms with specific information on their own conditions – detected autonomously – through dedicated measurements and reporting with respect to specific events.

**Decentralized intelligence**, by evaluating the information derived from sensors, will elaborate in real time the possible behavioral scenarios, providing functions of monitoring and predictive maintenance. The system may also make available the opportunity to reset specific configurations automatically or to modify functioning parameters to achieve the optimal configuration of the plant.

A service portfolio of high added value, thanks to the network connection of the machines, will allow to capitalize the data from machines and plants to optimize production, so to guarantee a prompt remote assistance and minimize downtime.

Through the partnership with Microsoft, Tenova will be able to provide **even more efficient and innovative metals production plants**, compliant with the strict regulations on **safety and environmental sustainability**. The system will be realized thanks to three factors: the possibility to connect the plant machines (involved in each productivity phase) to **Azure cloud platform**; the high computational power; and the application of provisional algorithms – based on **machine learning** technologies – available on the cloud platform.

The definite advantages of this Industry 4.0 solution are numerous and measurable. The system will allow to **increase the overall equipment effectiveness (OEE) index, reduce energy consumption, get valuable remote assistance** by Tenova specialists to lower maintenance costs and downtime, **guarantee flexibility in order management** according to customers' business plans and equipment conditions, **control the plant more effectively** through a comprehensive overview of single components.

*“Technological innovation represents a major commitment for Tenova and a crucial factor in the company’s growth strategy, and we found in Microsoft a key ally to bring about digital transformation. Thanks to cloud computing, IoT, and machine learning technologies by Microsoft, we are able to develop a 4.0 solution which represents our best recipe to contribute the future of the iron and steel industry. The goal is to make plants always more intelligent and connected, to offer services of high added value by analyzing the data from machines to optimize production, and to help our customers to achieve their business objectives”*, affirmed **Andrea Lovato, Tenova CEO**.

*“The Italian iron and steel industry represents a driving sector of the European manufacturing industry. Our country excels both in steel quality and in the level of innovation of metals production machines, a crucial factor to be competitive in the market and face the challenges of globalization successfully. In order to preserve the Italian competitive advantage, it is fundamental to invest in technological innovation. This is the path that Tenova has decided to follow together with Microsoft, by developing a brand-new industrial solution which enables iron and steel firms to optimize their productive performances and safeguard the qualitative standard of products. Through our collaboration, we aim to lead the digital transformation process of the Italian iron and steel industry and boost, as a consequence, the competitiveness manufacturing sector”*, stated **Fabio Moiola, Director of the Enterprise Services Division at Microsoft Italy**.

#### **About Tenova**

Tenova, a Techint Group company, is a worldwide partner for innovative, reliable and sustainable solutions in metals and mining. Leveraging a workforce of over three thousand forward-thinking professionals located in 22 countries across 5 continents, Tenova designs technologies and develops services that help companies reduce costs, save energy, limit environmental impact and improve working conditions. For more information, visit [www.tenova.com](http://www.tenova.com).

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#### **About Microsoft**

Microsoft (Nasdaq “MSFT” @microsoft) is the leading platform and productivity company for the mobile-first, cloud-first world, and its mission is to empower every person and every organization on the planet to achieve more.

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