

THE DIGITAL EVOLUTION AND NEW PARADIGMS

Manufacturing processes in the fourth industrial revolution.

Digitalisation, interconnection and automation are modifying - and continue to modify - the competitive environment in which businesses operate, as well as the context in which we live and work. Faced with that which is defined as the fourth industrial revolution or industry 4.0, the manufacturing sector is certainly among those most involved, and that which, more than any other, is experiencing radical change. Nowadays, digital technology allows for the processing of an enormous quantity of data - so-called big data - which can be collected, analysed and processed in real time, becoming a tool for the reading and solving of problems and for the instructing of machines. Effectiveness, efficiency and quality of

operational processes are only some of the benefits for companies, which manage to control manufacturing processes in a precise and rapid manner, wherever in the world they are carried out, at any time, thus dematerialising control operations which, up to just a few years ago, had to be carried out directly in the plant.

We are facing a revolution which is not only technological, but above all cultural. The way of seeing industry, manufacturing and organisation of work is changing, requiring ever-more specialised personnel, as are the relationships with all of the stakeholders, in particular with Customers, who can now count on intelligent products and on an ever-increasingly personalised offer.

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TRAINING, INNOVATION, PRODUCTION. THE VALUE OF PEOPLE

The dynamics of industry 4.0 affect all of Magneti Marelli's Business Lines. New technological frontiers and staff specialisation are the secrets to competitiveness.

Magneti Marelli is targeting its activities towards two fundamental results: the quality of the product and the efficiency of management. These objectives are pursued through new manufacturing processes, which take advantage of technological innovation and the specialisation of human resources. The fourth industrial revolution involves all of the Business Lines, re-designing processes. The ability to interpret market trends and to understand the cross-sector requirements of the organisation allows for the elaboration of information which serves to reduce waste, for the increasing of the reliability of sensors, and for the development of digital ma-

nufacturing, or rather the virtualisation of assembly lines, aimed at improving the efficiency, ergonomics and safety of manufacturing lines. In this framework, a factor which emerges as essential is the role of people, who in fact represent an important cornerstone in the company's strategic vision and idea. Each manufacturing line requires specific training, which provides people with particular know-how and places them in the condition to provide value for the organisation, thanks to a contribution in terms of innovation. The staff are called on to contribute to the improvement of manufacturing processes, manifesting their own ideas and suggestions through dedicated programmes.

The four industrial revolutions

