

# Mandelli is growing

## thanks to the aerospace and energy

by Luca Rossi

The bet made years ago on areas such as China, North America and more generally the Northern European market, the identification of two very specific application sectors ( Aerospace and Energy ) but also the adoption of the Lean philosophy and production of high-tech machines are giving Mandelli Sistemi satisfactory results. Courageous and farsighted decisions about which we will talk to Saverio Gellini, CEO at Mandelli Sistemi in Piacenza.

Mandelli Sistemi has long focused on the Aerospace sector, both structural and related to engines, the Energy sector and the Oil & Gas, identifying their huge potential for development in the near future and the compliance of its Machining Centers advanced technological solutions to these fields. If the domestic market is showing signs of recovery, many opportunities for growth are also coming from export markets from which the Piacenza-based company derives 80% of its turnover. Europe on the one hand, China and North America as the major export markets. But also Iran is a frontier on which Mandelli is focusing thanks to a penetration policy implemented long before the international sanctions. Mandelli

is a growing company, as Saverio Gellini, General Manager, says after introducing the Lean philosophy on the company's production lines obtaining immediate significant benefits.

**Mr. Gellini, let's start with the 2015 GDP data in Italy, that is a 0.8% growth: do you also have a response to the minimal restart of the Italian market?**

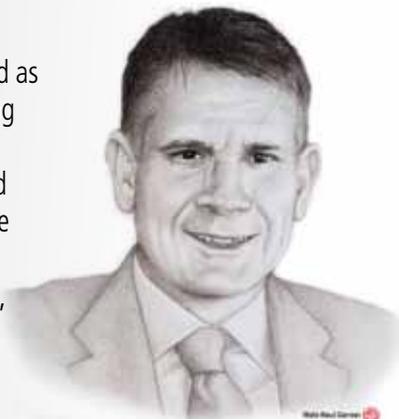
"Historically speaking, the domestic market has always been very important for Mandelli, although over the past 10-15 years it has become slightly less significant. But I can confirm that, in particular since the beginning of the year, we are witnessing some fervour also due to some legislative interventions such as the maxi depreciation or the Sabatini Law. There are several clients showing their willingness to bring forward those investments that had already been planned at a future date. So I would say that the actions that have been taken by the government have been of help, in general".

**A recent survey presented by ICE and UCIMU shows that the average age of the Italian machines tools is the highest recorded in the last 40 years. What do companies need to do to change this ?**

"Our company is tackling this issue on the basis of two guidelines. First we try to propose innovative solutions so as to stimulate even the most fearful investor, and, as it often happens in the domestic market, we try to identify the advantages which may lead the customer to make investments, for example, with the integration of functions on a same machine as turning and milling, with the possibility of 5-axis machining to have the maximum flexibility or a greater automation. If this does not happen we also offer our cooperation as a partner, quite successfully I must say, for the complete reconstruction of existing machineries:



Since 2014 **Saverio Gellini** has been CEO at Mandelli Sistemi SpA in Piacenza ( the reference shareholder of which is Gruppo Riello Sistemi). From 2011 to 2013, Gellini worked as an Independent Executive (leadership in the team work development in growing / renovating companies ) while from 2009 to 2010 he was CEO at Redecam, company specializing in filtering and fumes/gases industrial treatment equipment. In 2008 he was Vicepresident and CEO at Snap On Equipment Emea ( car maintenance equipment ) and from 2003 to 2007 he was vicepresident and member of the Board of Directors at ITT Corp. Lowara Emea ( pumps and water pumping systems for residential/industrial/ agricultural use ). From 1991 to 2003, Gellini was General Manager at Igmi SpA ( automatic loaders of bars for lathes & machine transfer) while from 1987 to 1990 he was Sales Area manager at Sacmi Coop.



we bring them back to life with a smaller investment. In Italy and Europe there are thousands of Mandelli machines : we take them back to Mandelli's, we dismantle them, equip them with a brand new NC and replace all the components that need to be replaced. An HMC which is maybe 20-25 years old can gain about 20 more years, guaranteed as if it were brand new. In this case the advantage is that the timing is generally faster, the customer retains a machine that he already knows and therefore is less worried about having to learn the novelties that new technologies would imply".

**The market has not only changed in recent years but has even been revolutionized for machine manufacturers, is it correct?**

"It is a very demanding market where you have to think not only in terms of technical solution but also integrated solution. That is, you need to get so much in tune with the customer so as to get him to think differently from

the past. That's why we work so hard during the pre-sale phase: we devote a lot of attention to the analysis of the customers' needs, markets and products, trying to understand the issues that sometimes even they themselves cannot fully identify; hence, we can show them several solutions that provide them with greater flexibility and higher ability to adapt to a market that in 5 years may not be as it is now " .

**So far we have been talking about the Italian market but Mandelli is a company that looks beyond its borders: what is your percentage of exports and which are the countries where you have a more significant presence?**

"On average, our percentage of exports is around 80% and at the moment it is divided into two halves : Europe on the one hand, China and North America on the other. In this second half, China has a higher value so today we are taking some actions to strongly enhance our positioning in the North



A view of a Spark 2100 Milling / Turning and an FMS of two Spark 2600.

## THE PERSON OF THE MONTH

American territory through the Group subsidiary based in Canada” .

**China right now is experiencing a sharp contraction of the domestic market and the Government has drawn up an expansive program on SMEs. How are you experiencing this moment in the country?**

“In China we have had a consolidated presence for 15 years. In the last decade and particularly in the last two years that I am leading the company, Mandelli has focused on two primary sectors: the Aerospace on one side and the Energy and Oil & Gas on the other side. These two sectors, in spite of the economic situation in the Oil & Gas, have a steady and strong growth forecast on a global scale for the next decade. In this context, China is going on making investments, particularly in the Aerospace. Therefore, the current Chinese GDP contraction has not turned into a decrease of opportunities for us. Instead, there is an increased focus by our interlocutors who are large state-owned customers to make the right investment also through a careful comparison. The Chinese market has become more demanding and this is positive for Mandelli because we offer a technologically advanced solution that is based on the top of the range”.

**Another country where you have a fairly significant presence is Iran. Even here you have been a sort of precursors. How are you moving now that the sanctions have been lifted?**

“In the past we worked a lot in Iran when there were no export-related issues. Now that the country is reopening we’re definitely focusing our attention on it because we have a good basis of customers and machines. Our strongly consolidated presence could really favour us over other competitors. However, during the embargo, our production range has been addressed almost exclusively towards 5-axis machines which are included in the so-called Dual Use purpose machines which can be used also for purposes different from those for which they have been designed. I think in Iran we can expect a development and indeed I suggest the Italians should take a step ahead because it is a



The turning head and turning table on Spark 2100 Milling /Turning.



country that offers plenty of opportunities and has a positive predisposition towards Italy in general and Italian industry in particular”.

**What was the reason behind the decision to focus on the two sectors such as the Aerospace and the Energy, Oil & Gas? And consequently , technologically speaking, how did you get organized to meet the needs of these two sectors?**

“Lately in particular, our choice has been driven by our technical and technological solutions because, further to a thorough analysis of these two sectors, we have seen they perfectly fit the customer’s needs. And with a maintenance and update plan and an integration with additional accessories, we believe we will be able to meet the customers’ expectations in the next five years. We have therefore launched a program of improvement and enrichment of our line of products aimed at this type of

A morning meeting at the Assembly Area Info Point. The adoption of the Lean Philosophy has brought numerous benefits.





The angular transmission head and the facing head on Spark 2100 Milling / Turning.

customers and the needs they have. As for the aerospace, between now and 2030 we expect the fleet of commercial aircraft to double. A doubling in the next 15 years: both Boeing and Airbus have exactly similar numbers and history reports that their recent past predictions have always found it accurate and timely feedback. So it's a market with a very important potential, and the complexity and technological developments associated with the production of aircraft, together with the development of materials that become ever lighter but at the same time difficult and tough to machine, have led us to say that our product line is the right one. Therefore, it's here where we make investments. As for the Energy sector, apart from the Oil & Gas, the world is changing and will be more and more in need of energy, from photovoltaic to wind power, where you need components machined with extreme precision by machines like ours. There was and there still is a temporary critical issue in the Oil & Gas but it suffers from political and geopolitical factors more than anything else."

**Let's talk about the company organization. Mr. Gellini, you pushed in order to implement the Lean production. What are the results now?**

" At a corporate level this has been done at 360°. Over the past 10 years I have been working in companies very different from the machine tools where the Lean philosophy was very strongly set. This led me to the conviction that it is a powerful tool to get a lot getting everybody to work better, reducing waste and focusing on activities that create true value, devoting all the energies to this. Lean is a business philosophy which starts from the idea that man is the center and we have to give him value acting on the way people work . In doing so, we have already achieved concrete results also thanks to our Staufen consultant who has been and still is a great and competent support. In our case, we produce some dozens of machines per year, big and complex. Therefore, we cannot speak of mass production. However, we have been able to improve the average crossing time by more than 20%, over the last two years we have lowered the costs related to indirect activities, that is non-value added, by at least 15%. Then, we have increased the quality of the products, so the guarantee and non-quality costs have been halved and this was achieved by dedicating time to the in-depth analysis of data and consequent actions rather than the action before analysing the figures. All this means

hundreds of thousands of Euros saved having a direct impact on the bottom line".

**Mr. Gellini, to conclude, what are your programs for the near future?**

" We have three major guidelines that we follow. The first is relevant to the value creation, that is the tireless application of the Lean logic and the optimization of our internal processes. The second is related to the penetration and enhancement of our presence in the North American markets and in three specific European markets such as France, Britain and Germany as well as the maintenance of our presence in Asia, China, Singapore, Malaysia and Korea in particular which are, geographically speaking, those areas where aerospace activities are mainly concentrated. The third and last guideline develops into three subchapters. The first subchapter, from the technological point of view, is to maintain a top level of knowledge and expertise in the machining of hard materials such as titanium, widely used in the Aerospace, and in multitasking, milling and turning, angular or facing head machining, always improving our response to the customers' specific needs. The second subchapter is to confirm and strengthen the typically Italian ability to be 'tailor made' that is to propose a solution that perfectly fits the customer's requirements. Finally, the third subchapter is to catch the opportunities that the new sensor-based technologies as well as distribution and data processing arisen in different areas are sketching to make the machine tools more and more reliable, performing and at the same time controllable by the operator. This is the area where Mandelli is launching a plan that will generate Mandelli's answer according to the German paradigm Industry 4.0."

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