

**Editorial: Between East and West**  
**Italian Section**



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## Between East and West

Globalization erases borders and push the merging of capital, projects, technologies.

The rebirth of Benelli and commitment Edison against greenhouse gas emissions are two faces of the same story.

It happens rarely to tell the adventure of a revival: the interest is double if, as in the case nearly century-old history of Benelli, that you will find in pages of this issue of TÜV Journal, the revival of a glorious brand is paired with an experiment extraordinarily innovative of integration of foreign capital (it's been bought by Chinese group Qiangjiang) and the know-how is Italian.

The historic factory of motorcycles today is an medium-small industrial unit, but inserted in a big industrial group and has initiated a new phase growth: sales increase, the number of employees has been increased, new projects have been started.

The fact that Benelli, in consolidating its new organization between East and West, has chosen explicitly TÜV Italia for its certification, and claimed the decision to contact a technical body of recognized worldwide value, can only make us happy.

But as always, it is the case history that interests us: Benelli today is an example that explains better than thousand theories how globalization can bring (if faced with courage, intelligence and confidence in innovations) great development opportunities.

Apparently quite different is the case of Edison: an energy giant that is facing at the same time the problems of supply of raw materials for production and management of the Kyoto Protocol.

The reduction of pollutant emissions is a cost, a requirement that many companies see without doubt as a threat to their financial balances. Transforming these costs into opportunities, working in international projects of development of renewable energy, mean to put one foot in the future. Edison faces the challenge with the decision, and has structured its organization to this end, with a team responsible for developing these projects.

Many of these projects, as if by chance, will take place in China: here again the relationship between East and West, perhaps because it is that today the border of development. It remains central to the search for innovative solutions as a tool to address the new realities of the global market.

Our home company TÜV SÜD is credited on an international level for the validation of CDM projects (Clean Development Mechanism, one of the main means identified by the international agreements for the reduction of greenhouse gas emissions) and to verify their actual compliance with the Kyoto targets. As a group we believe the very fact that the renewable sources and the reduction of greenhouse gases can be the key to a balanced industrial development, and these new areas of markets we focus skills, energy, and human resources.

Finally, of innovative solutions Fabrizio Cirilli explains in the long interview regarding informatics security, and information security in general.

If you think that this problem affects only the big banks and credit card management units and could not affect your company, or even your private life, read it. You will change your thought in regards. ■

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## Benelli returns to run. On the threshold of the centenary.

Acquired by the Chinese group Qiangjiang, the glorious Brand of Pesaro returns to grow. Chinese capital, Italian know-how, certified organization and many new projects to look towards the future.

Arriving to the headquarters of Benelli coming from the town of Pesaro, you cannot fail to notice, at a certain point, the road junction that indicates the way for Tavullia. The birthplace of Valentino Rossi today is a symbol and destination of pilgrimage of the most fanatic bikers, but this closeness is not only just a pure case.

We are just out of the Italian region of Emilia Romagna, but in fact here are historically located the southern extreme ends of the land of the "mutòr" (*word pronounced in local dialect that means motorcycles, cars and engines as well*) that fed for more than a century, in the two and four wheels, the myth of Italian speed. A myth to which Benelli belongs fully.

The history of this company located in Pesaro began in 1911, with the decision of Mrs. Teresa Benelli, widow with six children, to open a garage that would give the opportunity of work for her children, linked by the passion towards motors. The first engine, of 75 cc. , was born in 1920 and was mounted on a bicycle frame. The first real motorcycle was in 1921 and it was named "Moto Leggera" with a 98 cc. engine; it was immediately a success.

In the '20s and '30s of last century, and then with the rebirth after destruction due to World War II, the race tradition did give a lot of satisfaction to the Brand of Pesaro. Perhaps few remember that it was the late Finnish champion Jarno Saarinen to invent, riding a Benelli, the modern style of riding bikes that still today the champions of Moto Gp use: with knee out, in the curve, towards the asphalt to "measure" the bends.

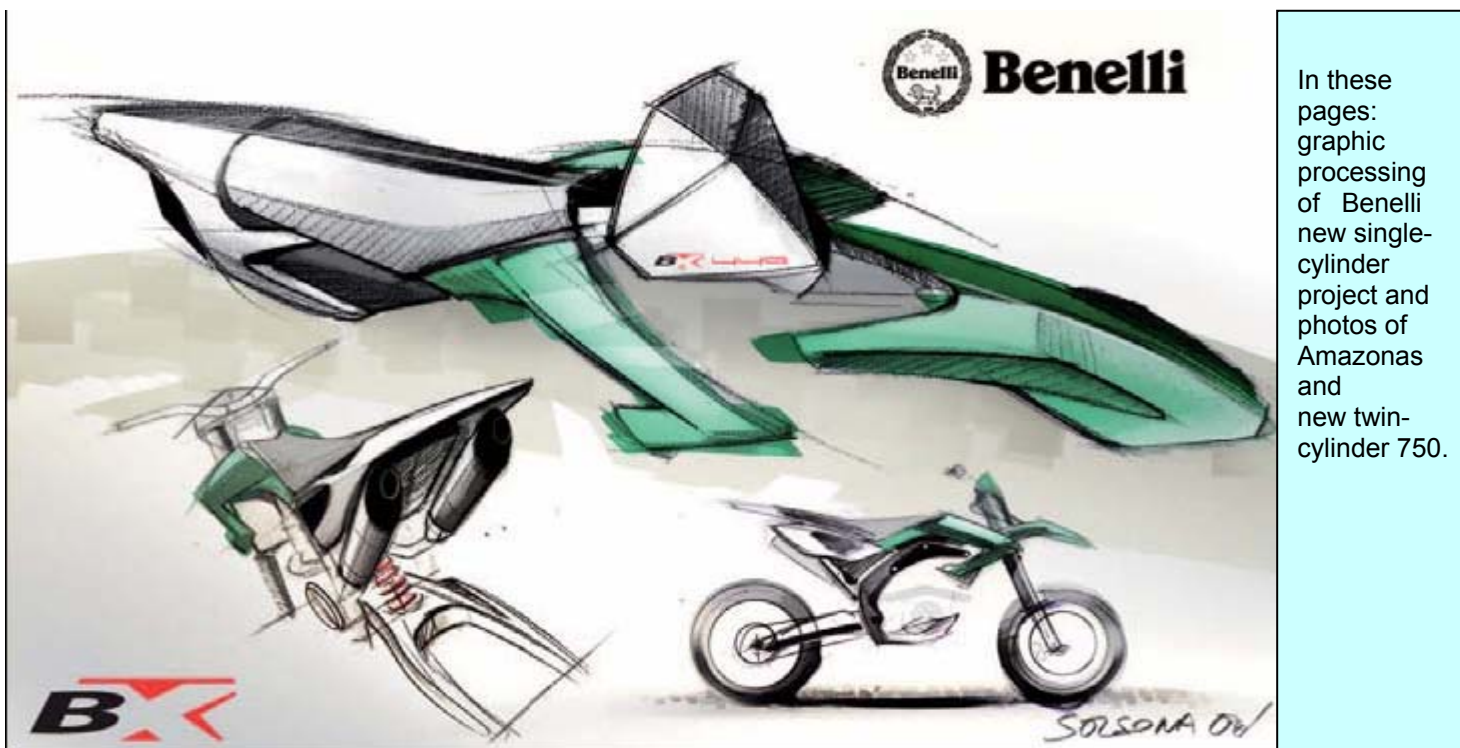
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Engineer Pierluigi Marconi, Technical Director and Deputy General Manager, does not hide the pride of a glorious history: *"We have in our background – he says – years of very important competitions, of world championships won, innovations like the famous engine with gear distribution friendly called due to exterior aspect 'ham bone' (in Italy due to the aspect it was called 'a Osso di Prosciutto', from this the translation 'Ham Bone'), or six-cylinder four-stroke production series of the 70s, which was then totally copied by Honda."* With the explosion of the domain of big Japanese Brands on the markets, Benelli, as almost all European Brands producing motorcycles, did lived more than a one crisis. For many years Benelli did produced only scooters, risking more than once to disappear from the market.

Actually today the bikes have their background linked to the Tornado project, the powerful 3 cylinder engine born at the end of the 90s under the Merloni management, but the real revival came in year 2005 with the acquisition on behalf of the Chinese group 'Qiangjiang': fourteen thousand employees, one million two hundred thousand motor-vehicles and two million engines produced annually, the new shareholder has the right size for a global revival. While Benelli, with its tradition and its know-how, guarantees technology and prestige.

*"In the end - Marconi says - even the Merloni family decided to throw the towel and sell, after years of large investments. The project of the 3 cylinder bike had been very demanding financially, because it was born from a blank paper sheet, that is from zero: when the old Benelli had been sold, the Argentine industrial De Tomaso had sold even the projects: nothing had remained. With Merloni we produced motorcycles and scooters, but each component was made in Italy, and since there was a market crisis, we were forced to sell our products with very low prices, which did not allow our survival. The group Qiangjiang is the third biggest company per dimension in China, they producing scooters and motorcycles of 125 cc and 250 cc. They export 150,000 units a year, with two brands: Keeway (based in Italy at Pistoia) and Generic (which is based in Austria). But having become aware that with two brands born from nothing they cannot produce motorcycles, they decided to buy Benelli so to have the technologies and design and a respected brand in Europe. Essentially, they bought the history and know-how."*

To make what? *"In China there are about 100 motorcycle companies, a potential market of sixteen million vehicles. Among the top ten companies, eight have already standing joint ventures with the Japanese, but have verified that the Japanese are jealous of their know-how, they providing only what they want, keep them in a state of technological inferiority. They bought Benelli for the technologies and so to face decidedly the Japanese competition. Our company is 50% Chinese state-owned and Beijing pushes a lot so that its companies do not just copy the products of others. For them we are a vital tool for growth. But they too, otherwise, they have been for us: the first step done after the acquisition was to bring the whole production of engines within Benelli,*



In these pages: graphic processing of Benelli new single-cylinder project and photos of Amazonas and new twin-cylinder 750.

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*whereas before the project was ours and the production was external, made by Franco Morini. The engine, which is the heart of the bike should be built inside so to ensure the quality that the brand requires and to reduce costs. The other important step was to produce a number of components in China, those that their technological capacity did allow: we started from the simplest type of plastics components, wirings, electrical controls mounted on the handlebars. A decided shift towards cost reduction, but without affecting the quality, because the parts that require more advanced processing are produced in this factory. In the meantime we have moved forward, today we manufacture in China, the gear-box, the throttle-body system and balancing-shaft. And that has been achieved by purchasing the machinery for working the components in Europe and bringing them to China. There are Italian technicians who are often at our home company so to support them in the production starts as well as for the quality control of the produced components."*

Overlooking the production in the factory, a detail you immediately notice: there are so many women that work on both the production-lines, the engine assembly and the final assembly of motorcycles. Because "they are more concentrated, make fewer mistakes." Benelli today also manufactures marine engines derived from the super-sporty three-cylinder, but the bike remains the core business of the company, and with the financial breath given by entry of Chinese capital brought to Pesaro, has already resulted in these years as an enrichment of the range: next to the powerful 1130 cc engine the 899 cc engine has born, with the naked has arrived also the Amazonas, recently tested successfully in extreme environmental conditions and situations in Latin America. But in the Technical Office of Benelli is now working a strong team of 14 persons, 2 designers and 12 design engineers, and new issues come at a rate up to yesterday the unthinkable. And today we look to the future with confidence: "We are working - says Marconi – on a two-cylinder 750 and 600 for road bike, it will be a naked, and at the same time on another project, the single-cylinder, which will be marketed in 450, 505 and 570 displacements, in version as Cross, Enduro and Supermotard."

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**PIERLUIGI  
MARCONI**

After graduating in engineering, his entire professional curriculum is formed in known 2 wheels companies.

Begins in Bimota, where he remained for more than a decade to pass later in Aprilia.

He joined Benelli in 2001 and today, in the company of Pesaro, is Deputy General Manager and Technical Director, with responsibilities even in management control.



*For small displacements we shall manage to do, but we started from the top of the range from 450 for the image: the strategy is to associate the brand Benelli the concept of technology. At the same time, after years in which our bikes were very expensive, we want to make people understand that Benelli can stay on the market with an entry level model, like the 750, which will go on the market at 7000 euros, a price competitive with the Japanese bikes, and on the other side enter into competition with historic off-road brands like Ktm, Honda, Suzuki, with a product of high technology. Our 'single' is unique. It will be a twin-cam head with titanium valves, electronic injection, removable cylinder and gear-box, double lubrication with segments and oil-pump. All designed for competitions, we have also patented the frame with a system that, through a carbon rod, may make it more or less flexible. This is because the supermotard must have a high stiffness, cross and enduro less, and will be adjustable. In theory, the setup could be make even by the customer, and his choice of a degree of stiffness rather than another, may result from personal driving style." Other projects are in the scooter world, "but here - specifies the engineer - the time is longer because the primary goal is to produce everything in China, always ensuring European quality. And as for 50 and 125 cc their technology is already sufficient, and our scooters have returned to be super-competitive in ratio price/quality, for higher displacements still work has to be done. So we have to use products made in this factory and shipped to China for assembly, or have mixed design engineering, with the cylinder unit built in China and the removable cylinder-barrel in Italy, the same technique that we used for the new bikes that we are preparing". For now, therefore, the scooters are 50, 125 and 150, "but we are working on projects of 250, 500 and 700 cc. of displacement." At Pesaro, in the meeting room, the eye jumps to the big screen for video conferencing: a comparison and communication between engineers in the East and West are continuing, "and even here comes the argument of the certification. We went - explains Marconi - from a reality only Italian to a situation in which only 50% of the components are made in Italy. We therefore need to create a system for quality control in particular the suppliers. It was a long journey, which lasted three years. It is concluded, and for us it is not an end but the beginning of a new phase of our work." Being a Chinese-owned company, "they should be checking/controlling us, but in reality we are checking/controlling them. However, it is also why they bought us ...".*



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DAVIDE FERRI

Obtained the diploma of industrial technical engineer, specializing in industrial electronics, he began his professional experience in manufacturing and engineering companies located in the Marche region, following with growing responsibilities, first of the commercial area to go after to the production area. Over the years enlarges his experience in areas such as quality, logistics, maintenance and security.

In 2007 he joined Benelli Q.J. as Quality Manager of the quality department with commitments even regarding the monitoring and management of suppliers quality.



To TÜV Italy Benelli has applied since long ago for approvals, from the fuel tank tests to the torsion of wheels, from the braking tests to the pollution emissions, up to the total approval of the vehicle. *"The fundamental thing for us is that TÜV is a recognized worldwide, and we important export goals: at the moment the market is mainly Italian, then we have shares in Germany, France, Spain, Great Britain and the United States. But we are going to start selling in China, Russia and Brazil."* The goal? *"Today we produce 2 / 3000 bikes a year, in 2011 we would want to sell 50,000 vehicles, including scooters of course."*

The certification is an important milestone in the growth of the new Benelli: the news has bounced on the internet sites and pages of journals of reference in the 2 wheel world. But essentially, what does it mean? Which changes were required? Getting closer to the argument with Davide Ferri, Quality Manager of the Italian-Chinese company: *"It was a long journey, that of certification, for various reasons. But the basic premise that we have to make is that Benelli has unfortunately paid a period of stop, between the old and new management. In these cases restarting is never like putting a key in the dashboard and turning the engine on. Despite the short stop this did created confusion in the network and for the customers, even a disservice regarding the supply of spare parts needed, never the less some dealers and importers had stocks so to meet the requests. It took some time and one of the first goals we set was to reactivate the productive area and rebuild the sales network. It was necessary to reassure the network on the fact that we were able to provide after-sales service, spare parts and so on. In conclusion, we restarted from the foundations. And today Benelli is able again to produce and to ensure high standards. The initial strategy was to give objective evidence of improvements made to the product, as well as work much on the sales network. We do not have single-brand dealers, but we are with multi-brand, therefore we wanted that the dealers could touch this new reality."*

*"The next step - explains Ferri - was to establish a quality management system so to manage the company, but customer-oriented. In Benelli there were certain procedures but required to be formalized or implemented. We have set goals so to improve the management, that start from design and from the design engineering process. Certification is a way to follow during the business/work day, using all the inputs that arrive, processing them properly. It could be the testing, the arrival of a shipment on behalf of a supplier, it could be a new specification to be introduced within the system, but every action is oriented for product improvement and ultimately to customer satisfaction. The quality system allows us to emphasize the team spirit, energy, it is the fuse for moving everything. As for the choice of contacting TÜV Italy, it was a way to put ourselves in discussion, with an entity of great experience in the automotive sector, and with a background of over a century, recognized at international level."*

Walking through the factory, it is clear that the quest for quality is also based on the investment made in technology: from design engineering all computerized, the static and dynamic test benches, the bench with the electronic head for dimensional measurements, which verifies the accuracy of infinitesimal measures of individual components or of a whole engine. *"The quality system that we have introduced – does precise however Ferri - is not something that descends from top management, but a functional and effective tool, which employees that do use have completely understood the need. The improvement is measured continuously: we have included indicators that are periodically reviewed, tested and calibrated according to the cases."*

*"The good thing – says Marco Bernardini, the external consultant of the company that has followed the path towards certification of Benelli - is that since we started doing this procedure they have improved, this means that people cast their work*

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goals towards those which are the targets identified by the company. This is consistent with what we had been asked by Ferri at the beginning: his main goal was not to certify, take the sheet of paper, here the work to be done was on the motivation of employees, there was a strong technical capacity, but lacked slightly of method."

The key of development to which Benelli aims, however, is the customer. Ferri insists on the relationship with almost every single customer: "Every complaint, every problem is our problem. There was a customer – tells Ferri - which had purchased a TNT899 in Germany, and the first thing he did was that to point the front wheel towards Pesaro. He immediately wanted to put at whip the bike, he arrived to Benelli, and we asked what problems he had encountered. None, he told us, he would not change anything ...".

But the obsessive care of the customer, at Pesaro, they want to put it above all when there are problems: "We have supported a client in the middle week of August (when many companies are closed for summer holidays in Italy) for a small mistake. We were able to give him assistance, we went beyond the usual excuse 'we are closed for holidays'. He was enchanted, and told us that no one had assisted him this way, and of motorbikes, even Japanese, which he did have before ...". Even if it has not for now a single-brand sales network, and can not impose a uniform certification for dealers, the certification achieved by Benelli also covers the management of the sales network, demonstrating that this aspect is considered decisive.

"Meanwhile we register that the market this year is in recession and sales of the Japanese bikes fall of 25%, we are in opposition and we're growing. In the future we will not allow inefficiency - says the quality manager - for us this certification is a starting point, not a simple task that we had to do so to get approval sticker. Certainly we plan to thoroughly review our relationship with the commercial network."

But to talk about the future of Benelli is inevitable to go back to the top management. Having bought a brand with a strong sporting tradition, the Chinese have thought of a revival in the world of racing, to win back the hearts of the fans? "Indeed yes," replies engineer Marconi. "With caution, restarting from the cross competitions. Since 2009 we shall test ourselves in some local competition. In 2011 we shall be celebrating the centenary of Benelli, and we're trying to figure out how to make our return to the tracks, the speed races. We have two projects open in the displacements 600 and 1000, then we must choose whether to enter into Super-Sport or Super-Bike. If I were to say, now I think more likely the 600, because the Super-Bike requires investments that we do not know if we would be able to support. We have the project of both the bikes, but we are ahead on 600, we are in the process of industrialization with the 4-cylinder in-line. While the 1000 is not yet ready. I will tell you an episode: the Chinese Ambassador was here and asked us when would we hire Valentino Rossi, who is almost one of our nearby neighbours. I've replied that we shall do it when China shall give us 25 or 30 million euros ... For now we have a turnover of 17 million. But the dream is there, how to deny it? Anyhow, we have time, I always say that he would be fine even when retired, he would be equally fast ...".

And if dreams are fuel for ambitions, Benelli can really go towards the future. ■

