THE RESTART, THEREFORE, BUT WITH A LOT OF CAUTION.

In these last months positive and negative news took turns. Probably the most critical phase is overcome, but the restart will be slow and a strong uncertainty climate remains. Signals are not missing internationally, considering that the principal economies have restarted marching and the volume of international business is definitely increasing. Surely these are precarious conditions for the moment, but at least, these are in net contrast in comparison to the negative whirl which one year ago overwhelmed the production world. The world economy shows improving signals, nevertheless “the uncertainty on the effective force of the economic restart remains” which seems to be supported by the reconstitution of provisions and temporary measures adopted by Governments. Also in Italy “restart signals emerged”, but strong critical points remain. Besides, the strong price increase of raw materials could give a negative influence to this phase. Particularly the mechanical and electro-mechanical fields show volume deductions definitely higher in comparison to the national average. Balance sheet of 2008 already showed the first signals of the crisis; those of 2009 – in the closing phase – will reveal the real situation: it is easy to foresee a radical change of the productive economy at all levels. MOTORI BONORA SpA maintains its strategy, consolidating the “manufacturer” tradition, always more turned towards special requirements of the reference market. For this reason we go on investing, aiming to further reinforce our technical-productive organisation, under the forecast of new challenges that the radical market changes are imposing to us.

diego.bonora@motoribonora.com
our mission

TECHNICAL SOLUTIONS CUSTOMIZED TO THE CUSTOMER’S REQUIREMENTS

Our working Team looks with particular carefullness at the Customers’ demands. Chiefly nowadays that we are facing a decisive evolution of the reference rules.

According to the special applications, our technical department offers its support to the Customer, experiencing the most adequate solution, always aiming at a proper relation between performances and costs.

This allows to establish a tighten co-operation appointed to last in time and to supply a highly reliable products range.
IN THIS NUMBER WE ENTERTAIN THE OPINION OF A SUPPLIER

Valentino Nabissi
Mangino Director
VENETA PRESS SpA – Brendola VI

What consequences will have in your opinion the current economic trend on the consolidated chains customers-suppliers?

The relationship customer-supplier has always been an important factor for the company and surely the current economic trend obstructs its stability, despite the working cooperation years. To face this difficult period of conjuncture, companies are using all their resources, trying to amortize the negative effects of insolvency and critic situations. In this phase even the historicity of the business relation may fail but however it is necessary to try to find the best compromise to face the difficulties.

How do you see the strategy to point at customized products in your business field?

As a company, we started principally with the production of die-casting products in aluminium for electric motors produced on our drawing, creating a wide range of components for the different sizes typologies. Along the years the request from our customers to realise products on their own drawings has been increasing, both in the motor field and in others, and being the customer’s satisfaction one of the principal goals of our company policy, we activated ourselves to adequate our technical commercial and productive structure. This enabled us to improve the products quality and to be more competitive on the market.

How important may be the involvement of the supplier already in the project phase?

We believe that the choice to involve the supplier in the project phase for the development of an equipment/component, both on our drawing and on drawing of the customer, is very important.

In our company reality, during the project process, the supplier is part of the ‘PROJECT TEAM’ which develops the following activities:
- in the starting phase there is the evaluation of the basic requirements of the project, the feasibility from the structural point of view (mould duration, material type employed for the construction of the equipment….), productive (adaptability to our plants, technical dimensional features of the part ….), economic;
- during the project, the activity is concentrated in the examination of the project, bringing the necessary improvements in order to avoid problems in the moulding phase;
- in the final phase the developed activities concern the checking and validation of the project.

How do you judge the relation with Motori Bonora Spa in the development of new projects?

The business relation with Motori Bonora is consolidated since years and this makes the communication activity easier and quicker, both for the normal routine and for the future outlooks. Till now, the developed projects, such as components on drawing of the customers with manufacture of equipment, have been realised with particular co-operation between the parties and with positive results.
“OPEN GATES” IN THE COMPANY MOTORI BONORA TO SPEND ONE DAY WITH YOU.

We are convinced that in the radical changing phases, as the current one, a tight co-operation relation between Supplier and Customer may represent a decisive aspect to face the market changes properly.

Therefore we wish to invite you to send us your inquiries. We will propose you the most adequate solution according to the requirements of your applications.

And more. We invite you to contact us to organise your visit to our factory. You will have the opportunity to see our structure and go deeper, directly with our team, into any problem connected to your projects.

Contact us at the address porteaperte@motoribonora.com.

We will provide to agree the first mutual useful date.
MOTORS CONTROLLED BY INVERTER

The asynchronous three-phase motors produced by us can be operated by inverters of different types, such as V/F linear, vectorial with “sensorless” open ring; besides, applying an encoder or a resolver, our motors can be operated also by vectorial inverter with close ring, obtaining so excellent performances on the torque and speed control as far as energy saving is concerned.

Thanks to a continuous research towards the employment of always more suitable materials, of a better working process and relevant inspections, thanks to the employment of more innovating technologies and more updated test methods, it was possible reaching high performances of the motors, concerning torque, efficiency and temperature containment.

Upon request we can foresee a “reinforced” insulation system, aiming to protect better the motors from voltage spikes caused by the inverter and its relevant fittings. These voltage spikes can be higher or lower according to the inverter quality and to the respective switching frequency, besides all fittings places between inverter and motor.

It is difficult to represent the torque and power performances of the motors when these are operated by vector inverter, because these values are depending mostly by the main inverter adjustment.

Instead, in case these are operated by V/F linear inverter, we can represent indicative performances (not binding for the manufacturer), intended for an employment in continuous duty and for motors with nominal frequency 50 Hz., shown in the diagrams. The required torque to the shaft can be increased transitorily and indicatively up to 170% of the nominal one in the frequency range from 10 to 50 Hz, and up to 100% to the frequency of 100Hz.
Employing self-ventilated motors at lower frequencies in comparison to the nominal ones, due to the reduced ventilation flow, it is necessary to reduce torque and power at the shaft, so that the temperature of the windings does not reach dangerous levels for their own integrity. (See diag.1 and diag.2).

Adopting the servo-ventilation system which can grant an air flow at least equal to the one of the self-ventilated version in nominal conditions, the motors can develop the nominal torque also to reduced frequencies without reaching overheatings dangerous for the integrity of the insulation system. (see diag.3 and diag.4).

Employing a motor 230/400V 50Hz. D (230V) connected to an inverter supplied at 400V, opportunely adjusted so that the full voltage (400V) is delivered at the frequency of 87Hz., you can obtain a constant nominal torque till the frequency of 87Hz., with a power delivery of 173% in the range from 87 to 100 Hz. (see diag.5 and diag.6).

Accepting a torque and power reduction, requiring the motors with a refined balancing, these can be employed at higher frequencies than 100Hz, up to a maximum of 200 Hz., adopting polarity and solutions so that the maximum rotation speeds are not exceeded as indicated in the below tab.1.

<table>
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<th>63</th>
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