

The mill of the future

On Sunday 21st September Ocrim held their fourth annual open day. The event commenced with an open debate held 'amongst friends' in the industry. Chaired by Maurizio Monti, president of ANTIM (Associazione Nazionale Tecnici dell'Industria Molitoria), fellow participants included:

Carmine Caputo - Chairman of the Board of Directors of Molino Caputo. Molino Caputo has a long history in the Neapolitan territory; today it has reached its third generation specialised in manufacturing a wide range of flours for professional use present both in the Italian and International market.

Carlos Mejia - Executive Chairman of the Group GUMARSAL from September 2007. Mr Mejia has held positions in upper management of the Group FAMOSSA (El Salvador) as Directorate General of Corn Flour and President of Distribuidora Nacional SA. He currently manages the business and affairs of the Group GUMARSAL, processing and marketing rice, bean, corn flour, wheat flour, food balanced and others. Mr Mejia was born in San Salvador where he studied Business Administration in Brazil and San Salvador.

Kelly O'Brien started working at Rogers Foods in 1979. In 1985 he became Head Miller. In 1997 he was promoted to Milling Manager. Rogers Foods built a new flour-mill on a green field site in 2004. When that plant opened Mr Kelly became Plant Manager. In 2010 he was promoted to Operation Manager, to oversee both of Rogers Foods mills. Mr Kelly has been active with the IAOM and has served as Chairman for his district 4 times and served on the IAOM Board of Directors for 6 years.

Guezout Adel Toufik is the owner of the company Ouled El Karmi of Setif, which was founded by his father and then, later, managed independently by Mr Adel. This company has a flourmill of 120T commissioned towards the end of the nineties and a durum wheat semolina mill of 100T commissioned in the early years of the new millennium (2001-2002); both plants were produced by Ocrim and are located in the industrial area of the city of Setif.

Marco Galli - Director of Ocrim Technological Office since 2006. Now at 54 years old he has grown professionally within the company but also with major market experience. For some years he was also the sales manager for the North American market.

the debate



Carlos Mejia

M.M.: Alberto has taken up a great responsibility. I am a miller moderating today's panel (Monti is the President of ANTIM and a flour mill technical consultant). I am here today in my capacity as a miller, not a university professor. Millers have come from all over the world. The purpose of today is to enrich us and share ideas with other millers.

We wish to encourage other Italian millers to share and exchange ideas, therefore we are very thankful for the opportunity given to us today. Exchange is necessary in order to gain. Milling is not an art, but a science. It is essential that we look towards how we can use the milling plant in the best possible way coupled with the human resources of a company.

It is therefore a pleasure to moderate a round table discussion in an international context. I would like to start with this first question, what do we mean when we think about the mill of the future?

K.B.: With regards to the mill of the future what always remains important is the issue of traceability. When wheat and flour are sold there will be stricter controls over that as time goes on. Energy consumption is also an important topic, there is always a need for mills to be so much more energy efficient.

C.M.: I think it is important to focus on the future likewise, it is important to focus on the present moment. In terms of technology we are advancing a lot. I think to start with we should focus on some of the basics. We must take advantage of the science we have available to us without disregarding the basics. We need to look at technology in a local context. For example, in South America the technology available will be different to that of technology in Europe. In every country there are different levels available and this is a fundamental concept, we must adapt to such technology.

G.A.T.: I think it is important to keep a high level of quality and use the best possible raw materials.

C.C.: I have a different vision. I think the mill of the future has got to have a soul; it has got to be made up of the product. I think this is the story of the milling industry in Italy. Not only is it about technology but it is also about the

flour and the quality of the flour. We should do that with passion. That is what has always characterised us.

M.G.: Every country's own culture related to flour and bread are all equally important-even countries which do not have the tradition of bread making or pasta. There are also the issues of flour quality and the automation of machines. We should strive to always have our final users satisfied. We should focus upon the input of the users themselves, input should come from them.

I cannot see great technological innovations occurring. I imagine that the same existing technology will be used but food safety must be a prerequisite. We must pay attention to the fact that poor people are the people who eat the most bread.

A mill is a great investment. We must look at advantages we can obtain in plant technology. The mill will be built in line with our demands and needs. The mill of the future must be studied and created with the best possible technology because in 20 years time it will become old. We cannot start with old technology.

Technology can benefit us to the greatest possible level, however, the approach of the miller and entrepreneur must change. It is not such an impossible cost to cover if the machine comes with all of the necessary tools. The mill of course cannot do without automation.

M.M.: On the concept of automation is it a tool to do without? Obviously the issue of automation raises the fact of more millers being out of work. What do we mean by automation and can we do without automation?

K.B.: With regards to the training of millers the concept of automation is getting much more difficult, particularly with regards to the operation of computers and PLC's. These are things we have never had to deal with in the past. In my opinion, the fundamentals of milling must be remembered.

C.M.: This is an important point. Automation is now something that is everywhere be it from the mobile phone in our pockets to the fact we can operate a machine with a remote control. To what extent can we implement the automation in our plants? In every country there are



different conditions. Not all countries have the same willingness or need to keep technology progressing. It remains in the context of the country itself.

G.A.T.: We need to ensure that specific training is given in order to handle such technologies. We are collaborating with the EU to implement training programmes in all sectors. For example, specific training related to their fields and training related to their fields. Also collaboration programmes between universities and industry sectors. We need to try and train young people.

M.M.: When we talk about the mill we should differentiate between what is important (flexibility and markets, for example, Australia, Brazil, USA) it is a change we must be at the forefront of. The change is so rapid that we cannot keep up. We must adapt to millions of different types of customers, training and consumer requirements. Mills should also last approximately 20 years.

M.G.: This is an interesting topic. What is automation? It is giving extra support to those operating the mill. For example, with paper in the milling plant-everybody

takes notes. This helps people working in the mill to prevent damages are avoidable instead of repairing. Equally, when it comes to traceability how can we tackle an issue as important as this without traceability? For example, with real time traceability at every stage we are able to know where we are and what is being done.

Automation and people should integrate with each other. It should present a way for people to make the most of the tools and the management of energy consumption in order to manage their costs. We cannot



make the same quantity with the roller mill with half of the energy consumption. Knowing we can have a higher capacity, we can also lower the capacity. The mill must not necessarily produce 300 tonnes all the time. Automation offers the possibility of energy saving and more possibilities with regards to training and education there are now more possibilities but with it, always more chaos. The end user may find himself a bit lost.

C.C.: The consumer should be trained to interpret the quantity of information he receives. There is a need to understand the end user, their demands. The function of the training ultimately is to protect the Italian products.

Audience member: On the topic of training, I largely agree with what has been said. I would add one more remark. In relation to the automation of the machine, particularly the roller mill, we now have innovative machines using cameras and calculus skills ensuring optimum results. When we think about the automation of machines, we can think about the automation of a car that is

extremely efficient and reliable. If there is a fault, it lies with the manufacturer. The same should apply to mills. Millers need to be able to trust manufacturers of mills to be able to see them as reliable partners.

Automation is also useful for traceability and energy consumption. These are aspects that need to be included. What is very encouraging for the future is the concept of a team working together for the benefit of the future with more efficient, innovative eyes. For example, at present we know very little about soft wheat mills. We need to have real-time online results.

Also true of the mill of the future is the ability to find a compromise. We don't want the miller of the future cleaning the floor. Millers will need to have the ability to manage and handle normal functioning. It is evident we need more training. The miller of the future needs to have different skills and competencies.

M.G.: In sum, what do we mean by training? It encompasses process handling, data handling and processing and all of the sequences involved in plant handling. We are increas-

ingly seeing demand coming for the online handling of the process.

C.M.: I would like to go back to the example of the car presented earlier on. Too much automation is not necessarily the best possible option. We need to be able to receive demands and needs of the parties involved. Every mill has got its own needs. We shouldn't prioritise. For me, it is important to have some automation at all levels.

Milling is a science and knowledge should be shared. Everybody should be able to share this knowledge. The first thing to do is enrol in an organisation of millers that hold 2 conferences a year in order to talk about new technologies available. We all need to improve, stop and consider the manufacturer as someone to talk to. They are there for our advantage but we should also consider them as a partner. Let us consider them as our number one partners. With the duration of mills lasting for more than 20 years let us make them our number one partners. We are here to debate and share everyone's point of view.

M.G.: What about the duration of machines?

G.A.T.: We are now pushing machines to the limit. This is not an excuse coming from my part. We are often not seen as partners. There is much competition in the field and in the sector. We are pushing machines to the maximum level possible. 20 years is a long time for a machine to last. It is a question I would be interested in putting to the audience.

I am also convinced there is much to do in the human interface. We have plants all over the world in different time zones, we are always on call and we always try to solve problems. Those who know the process should guide the automation.

C.C.: On the topic of training and achieve a better understanding of our clients? I think it is important to better understand what the miller of today will want in 20 years' time. Cost is also an issue.

M.G.: Quality is very meaningful in this case. We are seeing new operators in the market. They are businessmen mostly interested in the profits we can make in two, three, even four years time. We must respond to any kind of demand or need.

M.M.: What exactly does collaboration with manufacturing mean? For example, is its purpose to test a product or machine that hasn't been tested yet? Would you be available or willing to do this? Secondly, in your view, do you think manufacturers of plants are able and willing to understand your needs?

K.B.: Innovation is important. New products are always great to try. We do have to be very careful. There are no issues with trying out new processes.

C.M.: I think it is necessary to take more risks even and even to take on some of the level of the risk to put to the test new machines that can help us to do our work better and faster. We are part of a link in a chain. We must be available to test what can come from the manufacturer. We must display some level of open-mindedness.

C.C.: It is fundamental that the mill of the future takes that direction. We need to combine two needs, that of the traditional miller and that of the builder and manufacturer. We must look at super-specialisation for multi-national companies and specialisations for niche manufacturers. The company is fundamental.

M.M.: How important is an after sales service? Personally I think a good after sales service is good value.

K.B.: An after sales service is one of the most important things. You need to be able to get a quick response.

C.M.: When you sell technology it is important that you can then help the buyer. Once they sell technology they must be with the buyer all the time.

C.C.: It is a fundamental element and the roadmap for the future. It is easier for us today for manufacturing companies to interact. Nowadays it is much easier to establish that kind of common relationship.

M.M.: In all, to summarise we all share the same problems, ideas and our job is a beautiful one. We can go up a level but we need to have the help of technicians, millers, manufacturers, then we can put all of our efforts together and build the mill of the future. We must choose the best possible solution taking into account advantages and disadvantages.

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Below: Alberto Antolini
- Ocrim MD (left) talking to Gianluca
Galimberti, the Mayor of Cremona

