

John Courtenay, Managing Director of MQP, Limited talks to Aluminium Times

John Courtenay, Managing Director of UK-based MQP, Limited, a provider of innovative equipment for the aluminium industry, explains his approach to business



John Courtenay

I am aware that your organisation, MQP, Limited, is a youthful enterprise. Can you explain how it was formed and provide an insight into its products and services?

In 1999, when Foseco's Casthouse Aluminium business unit was sold by Burmah Castrol, I was forced, after expending 32 years developing my career within the Foseco organisation, to take stock of my working life and ambitions. I soon came to the conclusion that the change presented me with a unique opportunity to fulfil my lifelong ambition to run and manage my own company. So in 2000, I set up my own organisation, and embarked on a new working life as owner and Managing Director of the new company, "MQP" — "The Melt Quality Partnership".

I had already decided that the guiding philosophy of my new enterprise would be to develop and introduce innovative technology for casthouses worldwide, with the overall aim of improving quality and reducing operating costs. The MQP company mission statement endorses this commitment and also emphasises the need to develop close partnership relationships with key customers and suppliers in order to achieve shared business objectives. One of the first innovations to be introduced was the Opticast System which is a unique technology and methodology for the in-line control and optimisation of grain refinement. Collaboration with BDH Industries Inc. of Canada resulted in the introduction of the patented Proxipro system, an environmentally-friendly, induction-based, liquid metal level sensing system for casthouses. In 2005, MQP launched BatchPilot, a novel patented system, also, developed by BDH Tech of Canada, for accurate electronic measurement of furnace heel weights and transfer weights based on the principle of measuring changes in the furnace hydraulic-cylinder pressure with furnace tilt angle. More than 20 of these systems have already been installed in casthouses in Canada, Australia and Europe.

One of MQP's objectives is to promote environmentally-friendly solutions and the Refinal range of fused granular refining agents provides an effective alternative to chlorine fluxing in the furnace to remove alkalis and inclusions. We have established Refinal as a market-leading product brand worldwide and this activity has excellent synergy with the STAS rotary flux injector. The RFI, together with Refinal fluxes, provides the ideal product and application system for furnace stirring and fluxing. MQP through its relationship with STAS, and as their European agent, plays a significant role not only in the introduction of the RFI/Refinal system, but also other advanced STAS casthouse equipment, using Alcan casthouse technology, such as the Alcan Compact Degasser.

How long were you employed with Foseco and what activities were you engaged on with them?

I was employed by Foseco from 1968 to the year 2000. Much of the time I was based at the Foseco International offices in Birmingham carrying out Central Marketing and Technology roles. These involved

technology co-ordination and transfer to Foseco companies/customers worldwide, necessitating extensive international travel. I also worked for three periods overseas in line management positions in Foseco Operating Companies in Canada (1970–1973), Japan (1980–1983) and Italy (1989). From 1968 to 1990, all of my work was connected with Foseco's steel business, but I then switched to Foseco's aluminium business. From 1990, I was solely concerned with the worldwide aluminium industry and when the Foseco Aluminium Business Unit was formed in 1996, I was appointed Marketing and Technology Director. This gave me an overall responsibility for developing and promoting Foseco strategy and products for aluminium casthouses around the world, providing me with a detailed insight of up-to-date casthouse technology at that time.

Setting up your own company is challenging. In the first two years most new companies fail. What is unique about your company and its products?

In forming the new company, I wanted to take advantage of the general knowledge and experience of worldwide business I was fortunate to gain in my long (and I like to think successful) career at Foseco. I also wanted in particular to follow the principles used in setting up Foseco's Casthouse Aluminium Business Unit in the mid 1990's. Accordingly, MPQ has been set up to operate as a truly international business through a small, highly-motivated network of experienced people supported by strategic alliances, partnerships and research at leading academic establishments.

As I said earlier, I decided at the outset that the guiding philosophy of my new company would be to develop and introduce innovative technology for casthouses worldwide, with the overall aim of improving quality and reducing operating costs. We would focus solely on innovation and exploiting novel technologies to provide casthouse solutions. I firmly believe this unique strategy is working and is recognised and appreciated by our customers around the world and perhaps goes a long way to answering your question as to what is unique about our company and products.

Would you choose two products from your portfolio and explain the benefits they provide.

The Opticast System, which is a unique technology and methodology for the in-line control and optimisation of grain refinement, was one of the first innovations to be introduced by MQP. Originally developed from research carried out at Stockholm University, it has now been successfully adopted into routine production at several aluminium casthouses. The Opticast system is capable of achieving significant reductions in the level of grain refiner additions in casthouses without the risk of ingot cracking. The main benefits to the casthouse are cost reductions, which can be substantial and ongoing, and quality improvements in the final product due to decreased boride additions and cleaner metal.

BatchPilot, developed by BDH Tech Canada, is a novel system for accurate electronic measurement of furnace heel weights and transfer weights in casthouses. It is based on the principle of measuring changes in the furnace hydraulic-cylinder pressure with furnace-tilt angle. A key feature of the system is its ability to detect build up of dross on the furnace lining and to take this into account in determining an accurate heel weight. The system, which is exclusively marketed by MQP, has been used in routine

production since March 2004, giving excellent results. To date, more than 20 systems have been installed worldwide. Improved yield through reduction in the number of under length and over length casts, together with increasing furnace productivity, due to a significant rise in the proportion of "right-first-time" composition casts, are providing excellent returns of capital invested.

Have you set goals for the future? What is your mission? Where will the company be in five years time?

We want to be in the forefront of technical development and firmly establish ourselves as a provider of unique casthouse solutions that raise quality, productivity and efficiency. Earlier, I mentioned that we were working on "new concept" aluminium filtration techniques and equipment and we envisage that these, together with further developments in grain refinement technology applied in combination, will deliver our objectives. To achieve this, we will continue to strengthen our co-operative links around the world. Therefore, our overall aim is to be in a position to provide a comprehensive and market leading casthouse technical package.

Much of your equipment and consultancy is centred around the casthouse. Can you explain what benefits there are in saving or improving a casthouse by just 1%.

This is a very complex calculation and to be meaningful, needs to be made for a specific set of circumstances in terms of product mix, premiums for each product and conversion costs. A good example of this type of calculation was given by Paul Van Zyl in a paper (1) presented at the Sixth Asia Pacific Aluminium Casthouse Technology conference. This showed that by re-focussing the product mix, the overall net premium per tonne for 215,000 tonnes of production could be raised from \$ 1 per tonne to + \$ 64 per tonne giving an increase in total net premium generated of \$ 14.4 million. This data is quite out of date now, but if we assume net premiums in the range of \$ 100 - \$ 150 per tonne then total net premium today might equal \$ 25 million on 200,000 tonnes of production and therefore an improvement of 1% would be equal to \$ 250,000. As an example, the savings in grain refinement costs that can be achieved with Opticast would be in the range of \$ 200,000 - \$ 300,000, thus equating to a 1% improvement.

Do you find there are common requests from clients concerning the casthouse. If so can you share these with our readers?

The recurring themes in questions from customers are focussed on increasing productivity, reducing costs and improving quality. There is a particular emphasis at the moment on increasing furnace productivity through reducing waiting times due to missed aim analysis and this is reflected by measuring percentage right-first-time batching as a key performance indicator.

What drives you to be successful? Are you a good manager? Do you delegate well and are you a good team player?

I have always been driven. I feel the need to achieve and I am not really happy unless I am engaged in activity that can produce a positive result and running your own business in my experience is the ultimate form of this. Ultimately, you are responsible for the end result and when it goes well there is no greater satisfaction — of course things don't always go as planned and the up and downs give you an acute sense

of reality! Of course I would like to answer yes to all the next three questions and frankly I think that you cannot, in the round, be successful if you are not a good delegator and team player. Really, I think you should ask my son Richard. Often entrepreneurs who start successful businesses in the later stages of development are not the best people to lead them because they can never let go. I believe that I have been fortunate in having had the experience of working at senior level at Foseco first, before becoming an entrepreneur and that this will stand me in good stead for the challenges ahead.

You are a small company. Who is helping you in the day-to-day work that needs to be done?

We are steadily assembling a good and highly experienced team. My son Richard, as General Manager, runs the business on a day-to-day basis, freeing me to concentrate on international sales and marketing. From the start, I have had the support of Clive Johnson, former Finance Director of Foseco Aluminium and now MQP Finance Director; and more recently other former Foseco colleagues, Mike Bryant (Marketing) and Barry Lightfoot (Sales) have joined together with Martin Taylor, former VP Marketing at STAS. We have established a worldwide network of agents and distributors that give us global reach and are now adding further direct sales and technical personnel to support them. A good example is Nicklas Kacker who covers Northern Europe, working out of Stockholm **Will you be at the Aluminium Essen Exhibition this year? If so, can you explain what your main objective will be?**

We will have a stand at Essen and we believe this is very important to be represented at such a prestigious international exhibition. Our objective is to present our latest technologies to both new and existing customers. Such trade shows provide a unique opportunity to meet with the majority of your international customers over just a few days to answer queries, discuss and progress new and existing business and reinforce and build relationships.

Finally, on a lighter note, would you like to provide an insight into some of your favourite things, sport and teams, films, books, the car you drive, holiday destinations — and perhaps the person you most admire?

My favourite food must be French. As far as sport is concerned, it is rugby and I support England.

My favourite film is *Pretty Woman*, starring Julia Roberts; singer/group, Eric Clapton/Cream and Robert Plant/Lead Zeppelin, and the book I would choose, *Animal Farm*.

My ideal holiday destination in Puerto Barus, Spain and I drive a Jaguar.

I greatly admire Winston Churchill, although I am not ready to meet him yet!

Reference

¹ Paul Van Zyl, "Productivity through casthouse rationalisation and organisational restructuring", Sixth Australian Asian Pacific Conference on Aluminium Casthouse Technology, 1999, 23 – 32

Reader Reply No.

2 Cross Heads please?