Engineering GREAT the IMI Way

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As we enter 2016 I expect it is obvious to all our employees that the uncertainties in the global economy have had, and continue to have, a huge impact on the demand for many of our companies’ flow control products and services. Nevertheless, we have much to celebrate as the improvements we are making to our business gain momentum.

We are fortunate that the IMI group of companies has a diversified exposure to a large number of industries, geographies and markets. This provides a degree of resilience when compared to a number of our peers who have also been affected by slowing growth in important regions like the US and China and difficult conditions in significant end markets, including Oil & Gas. We need to respond in order to protect our business and our shareholders and better align our capacity to the market. This, unfortunately, has resulted in some job losses and a tightening of our belts across all of our businesses.

While none of us takes any pleasure in these actions, it is important to remember that our investment and improvement objectives remain centre stage and I remain absolutely confident that IMI will exit this downturn as a more competitive and dynamic business and realise our inherent potential.

So it is also particularly important in these turbulent times, where good news can be hard to find, that we take the time to celebrate the many successes which we have achieved in 2015.

Firstly, let me reflect on Hydronic Engineering, which is our shortest cycle business and as such is the first to exhibit the early benefits of strategic progress. The team delivered really well in terms of great new products and I am proud to report that over 10% of 2015 sales resulted from products which were designed and launched in the last two years.

In the first quarter of this year, the release of an innovative and exciting new range of actuators will add to these launches and market feedback has already been outstanding. I am pleased to report that our significant investment in new products resulted in Hydronic Engineering sales being up in the year, whilst revenues for a number of our competitors and the construction market as a whole, were down.
Progress to be proud of...

The other real achievement in Hydronic Engineering was the massive progress made in lean and the benefits that are flowing from improved productivity, improved responsiveness and reduced waste from all of their operations. The division’s Polish site is the first of all of the IMI manufacturing plants to achieve above the 85% world-class lean score, the benefits of which are immediately apparent in Hydronic Engineering’s working capital and profitability.

Peter Spencer and his Hydronic Engineering team are passionate about their next phase of development and have introduced ‘Policy Deployment’ to accelerate their efforts and focus their entire team on the key drivers for delivering their five year ambitions. I fully expect that, despite tough market conditions, we will again be toasting Hydronic Engineering successes in 2016.

Turning now to Precision Engineering where exposure to the difficult Chinese and Brazilian markets, coupled with slowing investments in Oil & Gas and the North American industrial markets, heavily impacted their results in 2015.

Sales were down in the year by 3% which impacted margins and profits across all of our geographies. These results, while disappointing, nonetheless mask the excellent progress from a range of initiatives delivered by the Precision team in the year.

Massimo Grassi, the new Divisional Managing Director, who has both substantial relevant experience and a significant passion for improving our business, joined us in the summer. Massimo is already tackling the challenges and attacking the opportunities which lie ahead.

The division embarked on an ambitious programme of improvement activities which were packaged as its ‘FIX8’ project and included complexity reductions, standard quality systems, improved market analysis and the acceleration of lean, just to name a few. The impact of these actions has been huge and they are vital to the achievement of our five-year ambitions.

Product rationalisation included the elimination of nearly 300,000 obsolete and duplicate products, which helped unblock our IT systems and rationalise purchase materials. Precision Engineering in the United States took the lead in building a global quality system, which is now embedded across all the IMI Norgren businesses and the lean programme advanced apace with average scores improving from 46% at the start of 2015 to 59% at the year end.

The benefits of all this work are starting to show, with improved on time delivery, quality and inventory turns across the division. During the year, the divisional team also completed a fundamental review of its markets, competitors and the areas of opportunity for growth. This work has provided a clear roadmap of the new products that we need to develop to grow the division’s competitiveness.

With this new product roadmap in hand, the division has now institutionalised the advanced quality planning procedures and adopted the new product development initiatives, which have proven so successful in Hydronic Engineering and we can all look forward to seeing some great new Precision Engineering products hit the market in the early part of 2017.

In Critical Engineering, it was an enormously difficult 2015 with oil prices now less than a third of where they were just 18 months ago and capital spend declining in our most important markets.

We know these headwinds cannot continue for the longer term with population growth, urbanisation and continued development of the emerging markets all featuring in the mix. Roy Twite and the Critical Engineering team see this period as an opportunity to hone our technical skills, realign our footprint closer to our customers and add great new businesses to the Critical Engineering stable.

These actions have resulted in some terrific achievements in 2015 with some very visible benefits, which will be even more evident as the market recovers.

The new world-class manufacturing plant in Korea was a major success and that business now boasts the highest lean score of all the businesses in Critical Engineering.

The US IMI CCI team developed and introduced the Group’s first Obeya project management system, which tremendously improves the control and visibility of even the most complex new project, and has now rolled it out across eight of the division’s businesses around the world. The improvement in on time delivery, management of costs and smoothing of workload across the major functions of the business is having an immediate and significant impact.

Critical was also the first of the three divisions to successfully launch its new fully-integrated ERP system which went live in the Czech Republic and Austria in August 2015 and will now be rolled out in Japan and Sweden in the first quarter of 2016. The benefits of the timely and integrated information which the system brings are already evident in these businesses’ results.

I was also hugely impressed with my and the Board’s recent visit to Miroslav Beneš and the Critical Engineering team in the Czech Republic, where their value engineering and product teardown activities are making a real difference to our competitiveness in the market. Not only did this initiative look great in concept but, together with lean, it resulted in some great new orders being secured, which otherwise would have been lost.

Without question one of the other exciting Critical Engineering activities was the acquisition of Bopp & Reuther where the division took the keys at the start of 2015. The integration was very successful and while markets have been similarly difficult for Bopp & Reuther the company now looks and feels like an integral part of the IMI family.

I hope you can see from the above commentary that there is a huge amount of improvement being undertaken with very real and important successes being delivered across every area of IMI.

The investments we continue to make, while some of our peers appear to be retreating, will prove to be significant differentiators when the market recovers and I thank each and every one of our employees for your personal contribution in making IMI GREAT.

Mark Selway
CEO IMI plc

Full details of the 2015 results, including the webcast of the presentation to the City, are available at www.imiplc.com/investors
Olkusz site achieves world-class lean score

WRITTEN BY Piotr Szczupak, Lean Champion. Olkusz IMI Hydronic Engineering

In January 2016, the Hydronic facility located in Olkusz, Poland was proud to have achieved 88% in its lean score: officially reaching world-class status! The Polish manufacturing site has consistently been at the top of the IMI lean league table and it is the first within the Group to achieve a world-class lean score.

How has the factory in Poland been able to achieve this? “The key to improvement lies in getting everyone involved in the process” said Grzegorz Gonet, plant manager. “With a thorough understanding of the processes in the factory and armed with the lean tool box, the team has been able to deliver significant improvements since the first audit back in 2014”.

One such example has been the planning and layout for the new building inaugurated in August 2015 for the production of the TecBox line (steering modules for pressurisation vessels). From the start it was important that the team create a highly visual layout for the factory and the health and safety of all on site took priority. On the outside heavy goods vehicle traffic is separated from smaller passenger cars to reduce the risk of accidents. New parking facilities especially for trucks make it easier to evacuate in an emergency as well as being easier to manoeuvre into.

On the inside, the building took three months to bring up to the IMI standard – with new flooring, ceiling and windows to ensure a comfortable and safe work environment. The production cells are set up in a U shape, allowing the short and fast flow of components to the designated areas as well as reducing the barriers between components and finished goods warehouses. This manufacturing set up allowed the team to open up additional space for the R&D lab.

Our congratulations to the team for all their hard work.

Investing in increased cyber-security

WRITTEN BY Martin Carroll
Group IT Security Director
IMI plc

Cyber-security incidents are on the rise globally, with high profile companies such as Sony Global, Target in the USA and Talk-Talk in the UK suffering at the hands of cyber-criminals.

Being able to counter cyber threats, and to deal effectively with any incidents with minimal disruption to our day-to-day operations, is a critical requirement in today’s business world.

As a result, IMI has committed, over the next three years to improve our cyber security capabilities at HQ and across the divisions by implementing a common IT security solution across the Group to ensure we have a safe and secure working environment.

Threats fall into two main categories. The first is the security of our business systems and their ability to withstand attacks from outside the company. The second is the security of our data internally, whether from accidental loss or malicious theft.

During the first year of the programme, our focus is on improving desktop and laptop security. This will include the introduction of up-to-date anti-virus, internet and email protection; data encryption on laptops; detection of unauthorised computers connecting to the network and, intrusion detection.

We will also update our electronic perimeter protection and establish a Security Operations Centre which will help us proactively monitor and report on IT security, as well as assisting us in addressing detected vulnerabilities or incidents.

A pilot programme to validate our Year 1 deliverables commenced in December 2015, and will be followed by a Group-wide deployment this year. Substantial testing will be done prior to each rollout to ensure any disruption to the user community is minimised. The rollout timeline is still under development and we will share this with you once finalised.

In the meantime, please stay vigilant to any strange activity or requests as the cyber-criminals will continue to attempt to access our cash and sensitive data. If you do have any questions about the programme, or any security concerns, please contact secure@imiplc.com
Introducing a standardised ‘milk-run’ at Alpen

IMI Precision Engineering’s Alpen factory in Germany is split into two main areas - a 100% ‘make to order’ cylinder factory and the European Distribution Centre (EDC) including a logistics operation. The team is always looking at ways to improve its efficiency.

Before starting the lean journey, the assembly area was split into several cells which were fed by a ‘push’ system out of the machining area. Having analysed the situation using a value stream map along with a spaghetti diagram of the material flow and people movement, it became clear the site needed a significant review of its layout if it was to move from a ‘push’ to a ‘pull’ operation. We needed to reduce operators’ walking distance by implementing an efficient milk-run concept, where the assembly parts are delivered direct to each workstation. We had a decentralised logistics structure which was not efficient. Front-line operational employees were spending excessive amounts of time on non-manufacturing activities.

To improve the flow of materials, we initiated a lean improvement project team, which quickly identified the need for a ‘tugger train’, to supply the whole manufacturing operation. We involved all relevant departments and the works council, asking for employee feedback from the start, to ensure their views were captured. Operators know their machines and processes best and really helped us get it right to shape their future workspace. The transport of standard parts is now organised with a two-bin Kanban system, which ensures the continued availability of component parts used in the manufacturing process. Materials are transported from logistics to production by the tugger-train with finished parts similarly collected and shipped to the goods receipt area of the European Distribution Centre. Workers now do not need to leave their cells for material handling. The use of pallet trucks and trolleys is reduced and the tugger-train drives a fixed route in a defined cycle time.

This project has reduced logistics-related tasks by 24%, reduced floor stock by 53% and reduced the floor space requirements by 40%. The customers’ experience is also enhanced with an improved delivery performance. This has been a GREAT Alpen team effort.

Dimce Fidanovski delivers key components and collects finished actuators from the assembly lines at Alpen using the new tugger train.
Whilst we never want it to happen, when an emergency occurs, we need to be prepared to react immediately and follow the correct procedures.

Unfortunately, often precious time is lost while checking what the correct course of action is, what steps should be taken and who should be notified.

IMI Hydronic has been pioneering a solution – the IMI Emergency Response App!

In April 2015 IMI launched an easy to use world-wide emergency response procedures for all its sites – including what to do in the first hour in various situations, a list of all employee duties and the emergency contacts that should be notified in the event.

In August 2015 it was agreed that IMI Hydronic would lead the creation of an Emergency Response App – a supporting tool for site leaders during emergencies. This was launched across the three divisions in December 2015 and now the Health & Safety Emergency procedures are really are only one touch away!

Available to selected users at each site and designed both for iOS and Android OS, the app guides the user through the first hour of a specific emergency situation. Users can follow the short and comprehensive instructions and call their emergency contacts straight from the app.

“The aim of the app is to help reduce the stress caused during an emergency by offering clear guidance on what to do and speed dialling to the most important numbers” said Ian Morris, Operations Director, IMI Hydronic Engineering. “When an emergency happens, we need to act instantly, and now we have a great tool to help us”.

Value Stream Mapping (VSM) allows us to focus on a product family rather than on traditional departments. Simply put, rather than having a machining department and an assembly department, we have a value stream for the product, which owns the processes. The VSM approach allows us to strip away any silo mentality of departments enabling us to focus totally on making improvements to the product family. This approach aims to increase quality, reduce lead times and improve productivity through the elimination of waste.

The value stream for the Globo included implementing a new structure focusing on ball valve production. Where previously there would be different department leaders who took responsibility for the product range at different stages of its production, now there is just one team. This has vastly sped up implementation time of projects which not only helps us ensure top quality to our customers, but also enables us to become more competitive at the same time.

The Globo was set a clear road map through the use of the Value Stream Mapping lean tool. This showed a holistic journey of the production of our ball valves, from sand being used to making the cores needed for casting to the final leakage test to ensure customer satisfaction. It highlighted areas which even members of the team who have been working with the product for over 30 years had never seen. The team felt they had been enabled to ‘learn to see’.

Since this road map was made, daily Kaizen meetings are held with both office and shop-floor employees increasing motivation, response time, team spirit and creativity. Through better planning we have reduced stock at external suppliers by over 50% and aim to reduce this to zero for local Globo – reducing our throughput time in the process.

We have increased our on-time delivery rate and lowered work-in-progress whilst maintaining the high quality product naturally expected by our customers. Implementing this VSM has allowed us to react quickly, improve fast and work together with customer focus at the forefront of our minds.
How better internal data is helping our external competitiveness

WRITTEN BY Ian Johnson
Chief Financial Officer
IMI Critical Engineering

Accurate, consistent data that is easily available helps us to run all the parts of our business more effectively. A new programme that is rolling out across IMI Critical Engineering is showing that the benefits of a ‘Single Point of Truth’ for data doesn’t just improve efficiency internally – it helps make our offering to customers more competitive and compelling too.

So far, IMI Critical Engineering has rolled out its new enterprise resource system (ERP) to half of the target 8 pilot sites. IMI CCI Brno and IMI CCI Vienna installed the system in June last year, and IMI CCI Japan (Kobe) and IMI CCI Sweden in Saffle went live in early February this year. The planned cost savings for 2016 are significant.

The situation at IMI CCI Brno was typical of the problems faced by many of our sites. There was no single system and data was managed through excel spreadsheets. Data entry was manual, which is inefficient and sometimes inaccurate. Many customers had multiple entries on the customer database resulting in the wrong credit limits and making cost control and transparency very difficult. There was little consistency – for example a single part could have up to eight part numbers.

Miroslav Focht, President IMI Control Valves EMEA explains “When you talk about this system my first thought is - what a great change! We’ve now got better control over everything from material management to production processes and project management.”

Perhaps most importantly, the benefits of the system are also being felt by our customers. Miroslav Beneš, Managing Director, IMI CCI Brno explains: “The benefits of the system can also be expressed by the way our customers perceive us; how professional we are at handling projects, at manufacturing, how stable and robust our costs are.”

Once the system has been rolled out to the initial 8 sites the intention is to roll out the system to other sites as legacy systems require upgrading. IMI Critical Engineering chose a standard out-of-the-box system by IFS to make the wider global roll out easier.

Seattle aiming to be a world-class organisation

The IMI Precision Engineering business based in Seattle, Washington in the US was acquired by IMI in 2005. Interestingly, the original business was founded in 1976 by two engineers who made model rockets!

The Seattle team of 200 focuses solely on the commercial vehicle sector, manufacturing and shipping over 1000 part numbers used in almost every part of a large truck across five product value streams: air, fuel, solenoid, powertrain, and electronic assembly areas.

We’re working hard to achieve our goal of being a world-class organisation and while our service levels are good, we recognise the need to continuously improve as our customers raise their expectations. Customer engagement and feedback receives significant focus and this is evident in our net promoter score (NPS) – the division’s highest 2015 average though Q3 at 58.

IMI Z&J Düren upgrade on track and on budget

WRITTEN BY Metin Gerceker
Managing Director, IMI Z&J
IMI Critical Engineering

The €7.4m upgrade of IMI Z&J’s Düren facility involves refurbishing manufacturing halls which are over 100 years old, building new offices, and upgrading equipment.

The new head office building has been built, and the roof erected, windows and doors are being installed, which will allow interior fitting out to continue in all weathers. The offices are due to be completed and handed over in May 2016.

Work in the manufacturing halls continues, involving a combination of roof works, floor repairs, structural extensions and alterations, and new equipment, such as gas heaters, roof and smoke ventilators.

The upgrade will enable leaner manufacturing standards, by moving equipment and reorganising activities to improve flow.

It will also create capacity for growth, including some support for IMI Th Jansen, which is outsourcing its manufacturing and assembly from St. Ingbert-Rohrbach, near Saarbrücken.

The IMI Z&J upgrade is part of Critical’s investment in improving the quality and efficiency of its manufacturing sites which includes new world-class facilities opened during 2015 in Houston, USA, and Paju, Korea.

We’ve been working hard on the lean and quality culture - reinforcing a zero defect mentality. We always aim to meet our promises and that is the culture here. Fast response to inquiries or quality concerns is the expectation; acting with a high sense of urgency. On-time delivery has been at or near 100% for several years and our 2015 productivity averaged 96%, which we are really proud of – a GREAT team effort.

We have a very strong team and our employees really play their part, going the extra mile to deliver their best.

David Shrader’s role as Design Engineering Director has been critical to our success - he’s focused on growing the business with new product development and our continued focus on supplier development is contributing too. We are successful but never complacent – lots to do, but some really good progress on our journey to world-class.
New product development

WRITTEN BY Chris Prince
Global Engineering & NPD Director
IMI Precision Engineering

New product development (NPD) is a key enabler for growth in our five-year strategy, and within the Precision Engineering division we have identified 19 crucial development opportunities for 2016.

These require significant capital investment and therefore a rigorous NPD process is essential to ensure we deliver the best customer solutions as effectively as possible.

The new process we now use brings together a cross-functional team at the start of each project and has four key milestones aligned to the advanced product quality planning (APQP) process which was successfully launched at the beginning of 2015. NPD sets time, cost and quality targets which drive project success, offering the following benefits:
- Reduced time to market – by using a disciplined product development process and allowing more work to be done in parallel
- Reduced resources used – as NPD requires greater reusability of designs and knowledge which, together with our value management initiatives, leads to shorter lead times
- Early verification of the design – using prototypes to enable our sales teams to reconfirm the product parameters identified in our ‘voice of the customer’ work.

It is vital that team members collaborate so project tasks progress smoothly and in parallel. This means that before the design is complete, purchasing negotiations with preferred suppliers can start and the manufacturing plant can work with engineering on manufacturing and assembly processes. Input from sales is also really important from the start enabling ‘voice of the customer’ to verify the market demand and price is right.

Standard reporting is essential and there are three documents within the NPD process:
- A Procedures Manual – for the work plan and financial targets
- A Matrix – which tracks project deliverables
- A Fast Track Report – which manages project costs against Procedures Manual targets.

There are 12 NPD projects currently underway which have acted as a pilot for the process. Each has a cross-functional team, executive sponsor and dedicated project manager ensuring accountability. All participation meetings identify and resolve issues quickly and effectively.

Projects are already clearly benefiting from this cross-functional approach and strong teamwork ensures the project deadlines are also met. From our pilot projects we’ve seen situations where the team has also successfully addressed customer requests for specification changes, supplier capability issues, and technical challenges. This degree of flexibility and responsiveness is only made possible by our new disciplined and collaborative approach – and is a key competitor differentiator.

We’ll keep you updated on our progress in offering customers GREAT new products – a true enabler for growth.

IMI’s new treasury system improves risk management and lowers costs

Over the past 18 months Group Treasury has worked to develop and implement a state-of-the-art treasury system.

The system enables us to fully manage the Group’s foreign exchange exposures, cash movements and inter-company funding balances through a single database accessible by both the individual businesses and the central treasury team. After piloting in the spring of 2015, the new system went fully live last summer and is now being used by about 50 subsidiaries across the globe.

The system was deployed ‘off-the-shelf’ with full integration into our trading systems, banking platforms and information systems. This integrated solution provides a much stronger control environment by reducing the amount of manual activity. Subsidiaries can only instruct the Group Treasury team via the system, and the system access is restricted and controlled by secure tokens and passwords for all users.

Because all information is now held in a single database, Group Treasury can now internally offset certain business exposures, thereby reducing the level of external hedges required to manage the residual amounts. This reduces third-party transactions by up to 75%. Based on the initial months in operation, it is estimated that the system will save the company over £800,000 per annum through reduced trading expenses.

Additionally, the new system drives improved compliance to our Treasury policies by providing monthly visibility of each company’s hedge position against its updated currency forecasts. This has provided a good number of benefits already but, more crucially, gives us a base from which to continuously improve.

The new system is just the start of the lean journey for Group Treasury but has helped deliver some tremendous improvements already.
ERPr Project GENESIS – pilot implementation well underway

WRITTEN BY David Cockram
ERP Project Manager, IMI Hydronic Engineering

A meeting in November 2015 saw the official kick-off for Hydronic’s pilot implementation of its JD Edwards ERP system - Genesis.

The meeting took place in Olkus, Poland, one of the two pilot site locations (the other being the Hydronic head office in Eysins, Switzerland). Both pilot locations are planning to go live in April 2016.

Local management and key users were given ‘the keys to the project’: an explanation of the methodology and what activities key users can expect to be involved in over the coming weeks and months, including how and when they will be interacting with the project team.

The kick-off meeting followed validation of the IMI Hydronic Engineering ERP Core Model which contains 278 business processes within 9 ‘End to End’ processes. This validation took place in Olkus during October 2015, with a follow-up session in November specifically for manufacturing and supply chain, where the project team demonstrated a subset of these processes to Key Users and key stakeholders from across the organisation.

In November and December, key users in Olkus and Eysins worked closely with the project team to identify any gaps between the validated core model and the local needs of Olkus and Eysins. These gaps were reviewed and those which were approved are now under development during the 10 weeks of core model testing, which started in the middle of January 2016. The outcome following this testing and development phase will be to provide one complete solution for both locations.

For more information or to ask a question to the project team, please contact genesis@imi-hydronic.com.

Hands up for a safety first culture

Our leadership ‘Safety First – Safety Always’ culture proved very successful in 2015, with a good set of results showing an improvement of 31% in recordable injuries.

When we look at the same comparison for first-aid only injuries, we have done even better with a 37% improvement – a great set of results across the Precision Engineering division. In 2015, 73% of all Precision Engineering injuries were hand-related with the primary root cause being unsafe behaviour.

This year, our ‘Safety First – Safety Always’ leadership culture remains focused on no lost-time accidents, and protection of the environment, underpinned by continuous improvement and excellence through HSE lean. Our sites share storyboards that foster effective HSE programmes and processes and more emphasis has been placed on heat mapping of hazard spotting and near-miss incidents, and by assessing this data we can identify leading indicators of hazards which must be eliminated. The expectation we have of every employee is that they demonstrate safe behaviour consistently on a daily basis. Unsafe behaviour is unacceptable. If our brain is engaged with what our hands are doing, then our mind is in the right place.

SAFER Sam
This year, SAFER Sam has hurt:

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Brežice site improves machining performance

WRITTEN BY Alberto Tureikis
Divisional Head of Lean and Sanja Predovic, Procurement Manager, Slovenia, IMI Hydronic Engineering

Despite already being second in the IMI Group lean performance ranking, IMI Hydronic Engineering’s plant at Brežice in Slovenia is keeping up the pace of its transformation and has achieved outstanding results on its machining performance OEE (Overall Equipment Effectiveness) related to its core and most critical processes.

The team at the plant is investing substantially in total productive maintenance (TPM) implementation and at the same time reducing change-over times by more than 50%, reducing customer lead times and increasing flexibility.

Machine breakdowns, originally responsible for more than 8% of loss in production capacity have been reduced to below 0.1%, helping Hydronic to sustain its sales growth targets.

Responsibilities have been clearly defined and assigned, with operators now inspecting, lubricating and providing proper surveillance and care for their machines. In addition to this, professional maintenance based on machine conditions, ensures predictive maintenance is carried out on time to minimise costs and repair times.

Brežice site improves machining performance

WRITTEN BY Randy Cutler
Divisional HSE Lead, IMI Precision Engineering

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<tr>
<td>Back</td>
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<tr>
<td>Leg(s)/Knee(s)</td>
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<td>Foot/Feet</td>
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<tr>
<td>Others</td>
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Racing ahead on the Rationalise road!

WRITTEN BY Alan Cooper
IT Project Manager
IMI Precision Engineering

In 2015 we outlined the 8 priorities of IMI Precision Engineering’s FIX8 agenda that ‘TOGETHER’ will provide a solid platform for the business to grow. We needed to FIX the basics. The ‘R’ in ‘TOGETHER’ represents Rationalise - we need to reduce significantly and standardise our product offering.

Our Rationalise Team reviews and revises the Precision product portfolio so it is more closely aligned to market needs, easy to understand, can be effectively supported and does not incur excessive cost. To help achieve these goals the FIX8 Rationalise project seeks to radically reduce the number of part numbers to create room for growth and enhance our customer offering. This simplification is measured in the reduction of part numbers – over the past 10 months the team has worked hard to take the number from 450,000 down to 155,000 with more reductions to come.

Reducing part numbers on this scale prompted many questions and we recognised conference calls and bulletins would be ineffective in getting the positive message across. The team therefore took the lean ‘Go to Gemba’ approach, to see first-hand the issues and concerns being raised by our sales teams. From this, the European road trip was born – a trip that took the team out to ten Precision sites across Europe to present our approach to the sales teams, take questions, and improve understanding on both sides. Team members with experience of product management, logistics, data control, purchasing and IT delivered the sessions conveying the messages of business simplification, creating room for growth and offering benefits such as reduced manufacturing costs; reduction of raw material and work-in-progress stock; fewer quality issues from legacy products with old tooling and out-dated manufacturing methods; easier to find the right product to satisfy the customer and releasing engineering time to focus on delivering new products.

We experienced great participation and buy-in from the local sales leaders who often did the translations for their teams. As always, when you get face-to-face with teams there was great dialogue and it enabled us to allay many of their concerns.

FIX8’s ‘Transform’ – making quality work on the shop floor

WRITTEN BY Zdenek Sitar
Divisional Quality Manager
IMI Precision Engineering

In IMI Precision Engineering we knew we had to improve product quality across our businesses. We had to take more notice of what customers were telling us and respond to any concerns. Expecting customers to be satisfied with waiting up to 60 days for a product issue to be addressed is not acceptable. These are fundamental problems that FIX8 initiatives are designed to address.

The FIX8 ‘Transform’ programme includes the Factory Floor Quality System which is designed to keep problems from ever reaching our customers, and ultimately prevent recurrences. We’ve developed quality standard operating procedures (SOPs) – these define and standardise the work required within the factory floor quality system with aligned metrics, reaction plan requirements, and visual management. We are also using a technique called Gemba walks (Gemba is a Japanese word which translates to ‘the real place’) to help management quickly and clearly understand, monitor and drive progress. Effective lean and quality go hand-in-hand and really enable improvement.

It’s all about the engagement of great people, using well-defined methods; easier to find the right product and quality issues from legacy products with old tooling and out-dated manufacturing methods; easier to find the right product to satisfy the customer and releasing engineering time to focus on delivering new products.

We experienced great participation and buy-in from the local sales leaders who often did the translations for their teams. As always, when you get face-to-face with teams there was great dialogue and it enabled us to allay many of their concerns.
IMI Critical’s isolation valve team secures valuable orders for new US LNG plant

WRITTEN BY Ken Phillips
Sales Manager - North America, IMI Orton and IMI Truflo Rona
IMI Critical Engineering

Through close cooperation and collaboration, the isolation valve business within Critical Engineering has been able to capture five significant orders totalling $27m from CCJV, a joint venture between CB&I in the US and Chiyoda of Japan for the initial three trains of the Cameron Liquefied Natural Gas (LNG) plant project owned by Sempra Energy in the US.

Cameron is the largest LNG plant project currently under development in the US and provides IMI Critical Engineering with a strong reference in this growing market.

By ensuring that all technical, commercial and legal discussions were held through a single and common point of contact, IMI Orton and IMI Truflo Rona won five packages from CB&I in July 2015.

Due to strong project performance to date, with an initial 771 ball valves delivered on time despite an aggressive delivery timetable starting after 16 weeks, further volume call-off orders have since been awarded.

This exceptional delivery performance has been helped by the support provided by IMI Truflo Rona Italy, also part of the isolation valve business that had agreed to help by producing some of the small size valves from the initial package. This has provided Truflo Rona Belgium with much needed additional capacity.

It is expected that another two LNG trains will be approved during 2016, further increasing the potential value of this project as capacity at Cameron LNG grows from approximately 15mtpa through three trains to almost 25mtpa through five trains.

Congratulations to IMI Orton, IMI Truflo Rona and the isolation valve sales team in Houston, US for being awarded such a large project through collaborative and effective resource management.

IMI Hydronic scoops major award

WRITTEN BY Zakiya Yusuf
Admin & Finance Executive, Middle East
IMI Hydronic Engineering

IMI Hydronic Engineering was honoured to receive the Manufacturer of the Year Climate Control award – a true testament to the team as reputable, innovative and knowledgeable partners.

At the 2015 Annual Climate Control Awards ceremony which took place in the United Arab Emirates, the theme of 2015 was ‘Inter-connected in thought and execution’. The philosophy behind the theme was the need for the HVACR industry to work as a cohesive industry to achieve energy efficiency, resource conservation, reliability, good indoor environmental quality, food safety and ease of installation, operation and maintenance.

“It is a splendid result for IMI Hydronic Middle East to win this award and a pleasure to be recognised in the presence of the key stakeholders related to our industry” said Biren Patel, Managing Director, IMI Hydronic Engineering Middle East.

“The solution approach taken on several key projects throughout the region and the effective use of our key resources i.e. the Hydronic Training Centre and Engineering Support Centre were instrumental in gaining loyalty and wins on esteemed projects.”

Biren Patel, Managing Director Middle East, IMI Hydronic Engineering, receives the award

LNG process and storage plant under construction
Delivering GREAT indoor climate for the children of Alder Hey Hospital

Alder Hey is one of Europe's biggest and busiest children's hospitals, providing care for over 200,000 children each year. The new hospital building, designed with the help of children and young people, has 270 beds, including 48 critical care beds for patients in ICU, HDU and burns.

This massive project in Liverpool, UK, required an accurately controlled, energy efficient hydronic system. With numerous suppliers jostling for the project, the decision came down to product excellence, flexibility and production capability. The level of expertise, know-how and support that IMI Hydronic Engineering offered for such a technically difficult and high visibility project ensured that the team in the UK came out a clear winner.

Officially inaugurated in August 2015, the hospital was finalised after three years of hard work. Approved by the UK Department of Health and HM Treasury in 2012, the consortium challenged with delivering the project was tasked to design and build the most sustainable 24-hour hospital ever built. The hospital generates some 60% of its energy on-site. This means efficiency is key. The hydronic heating and cooling systems consume 20% of the overall building energy consumption, so it was critical to get the HVAC system functioning as efficiently as possible. Additionally, from an investment perspective, the client was looking for a solution with real staying power, a solution to keep the system optimally balanced, and more importantly, under stable and accurate control for the lifetime of the hospital.

IMI Hydronic Engineering worked with the hospital design engineers as a strategic partner, and through exceptional planning and use of cleverly designed products, savings of 30% were achieved. Our UK Hydronic college expert supported the design team with balancing expertise, hydronic calculations and component selection. Through a series of planned training sessions, the team proposed to make the design implementation, installation and commissioning effective. The IMI Hydronic Engineering bid provided on-site support and technical troubleshooting, something the competitors were not able to offer.

Precision is voted a leading innovative rail supplier in China

Last year, the leading Chinese railway industry magazine ‘Rail Transit’ released the list of its top 50 innovative companies in the Chinese rail industry, and despite standing alongside such companies as Alstom, CRRC, Siemens, Knorr-Bremse, IFE, Schneider and leading local Chinese rail companies, IMI Precision Engineering was the only motion and fluid control company to be bestowed with this honour.

The award is not only focused on product innovation but technology and management innovation as well. It’s highly likely that these top 50 companies will continue to lead the way in the Chinese rail market and drive innovation in the sector.

The awards cover a broad range of suppliers to the industry including railcar builders, system suppliers and component vendors supplying braking systems, doors, pantographs, HVAC and signals to name but a few.

Precision has been working closely with leading railcar builders and system suppliers to develop high-quality and high-performance products ensuring the trains are both reliable and safe. Newly-developed technology contributes to making trains greener by reducing CO₂ emissions whilst giving train passengers a reliable and comfortable train journey.

It’s a significant achievement for Precision to be recognised in this important region and we are definitely on the right track!
IMI CCI opens new service and repair centres in Saudi Arabia and the UK

After-sales service and repair is a key part of IMI Critical’s long-term growth strategy. During 2015 IMI Critical Engineering successfully opened new service and repair centres, one in Aberdeen in the UK and, in conjunction with local Saudian Arabian partner Al Najim Saudi International, a new service and repair centre in Jubail, Saudi Arabia.

The facilities will play a pivotal role in IMI CCI’s ambitions to accelerate growth not only in the Middle East, but also the Oil & Gas and power industries in and around the North Sea and Scotland. IMI CCI is working closely with Al Najim in the operational management of the Jubail facility, including technical support and expertise. The new facility supports the installation of valves in the Kingdom, as well as after-sales and service for the complete range of IMI Critical Engineering products. Services include inspection, upgrade, full valve recertification and testing, in addition to turnkey outage support.

Amer Refai, Regional Senior Director of IMI CCI said: “Following extensive consultations with our clients in the region, the need for a new repair centre became apparent and we were quick to respond to the opportunity”. Fabio Giove, one of Critical’s most experienced Valve Doctors added: “At the opening we were able to showcase our valves in action, thanks to a ‘demo unit’ of a complete turbine bypass valve driven by a Quicktrack/FasTrak commutable positioning system. Customers were delighted with the speed of response of our equipment and the technological and diagnostic capabilities of our devices, as well as the wider facilities we now have to offer”.

The new Aberdeen facility includes machining, repair, testing and field service support capabilities, as well as demonstration units and boardroom presentation areas for customers.

IMI CCI celebrated the official opening with a client reception attended by key customers and partners from the industry including Conoco Phillips and BP. Attendees had the opportunity to see for themselves the latest choke valve which combines our proven DRAG® velocity control technology with the best grades of tungsten carbide and positioner technology. This combination of technologies produces high capacity and excellent precision in the required and actual movement of valve stems. Visitors also attended presentations from two of our renowned Valve Doctors® - IMI CCI’s Applications Engineer, Ronald Simon, and IMI STI’s Engineering Director, Flavio Tondolo.
Critical duo rise to ‘Dragon’ challenge

IMI companies ‘act as one’ to deliver for customer

IMI companies ‘act as one’ to deliver for customer

IMI companies ‘act as one’ to deliver for customer

Several IMI companies joined forces to put together a package of valves and actuators for China Petrochemical International (Nanjing) Company, demonstrating the real commercial value to IMI of ‘acting as one’.

The package of valves and actuators was destined for use in China Petrochemical’s coal liquefaction process, and included a host of IMI technologies, including:

- 24” cryogenic butterfly valves from IMI Orton (Critical Engineering)
- quarter-turn actuators from IMI STI (Critical Engineering)
- IMI Norgren filters and regulators (Precision Engineering)
- IMI Maxseal solenoids Precision Engineering) and
- positioners (Precision Engineering).

Roy Twite, Divisional Managing Director of IMI Critical Engineering said “This project really shows how, by sharing our skills, knowledge and facilities we can improve customer service and achieve real commercial benefits for IMI. It’s a win-win situation.”

ARIANE 5 contract powering our growth

Arianespace is the world leader when it comes to launching vehicles into space and our customer - Snecma, is a market-leading engine manufacturer supplying cryogenic propulsion systems for Ariane 5 launchers, which transport satellites into space orbit.

IMI Precision Engineering in Poole UK recently secured a long-term order worth more than £10m to supply Snecma with 33 flight sets of cryogenic electro-valves for the second stage HM7B engine on the Arianespace Ariane 5 launcher.

The contract included nearly a £1m investment in new machine tools, assembly, training, and inspection facilities. The factory investment is going through a qualification process and improvement work should be complete by summer 2016. Valve product delivery started in July 2015 and will continue until 2021.

This contract is great news and we’re very proud of the confidence, trust and close working relationship that has been established over the years between our Poole-based team of specialist engineers and the Snecma team.

This Snecma contract and required investment will help our Poole business to continue to prosper, and we are delighted that our innovative and high-quality solutions are core competitive advantages which are well recognised in the global markets of aerospace, defence, nuclear energy and Oil & Gas technologies.
IMI Hydronic invades Dallas Cowboy stadium

The AT&T Stadium in Dallas, Texas (home to the Dallas Cowboy American football team) was a great location for IMI Hydronic Engineering North America to host their top 25 IMI Flow Design customers.

The successful event served to emphasise IMI’s commitment to grow the North American market. Several of the IMI Flow Design representatives are experiencing record growth and were excited about what IMI has been doing to improve the business. The event, in November 2015, focused on how IMI is using lean to better serve them as customers, and IMI’s global commitment to new products, including the pre-launch of the ‘Harmony’ valve – the first pressure-independent control valve for the IMI Flow Design channel. Also announced was the marketing campaign, ‘Why Sweat It’ that uses digital marketing and analytics to drive targeted customer penetration.

Below are comments from some of the participants;

- Bob Barczak, from Emerson Swan (Boston & New York state) stated “I see seriousness, dedication and passion from the IMI Flow Design leadership and their teams. They will make things happen!”
- Matt Miceli, from CFM Company (Denver), stated, “Thank you again for a great Sales Conference. I really enjoyed it and learned a lot. It was a great venue with great people and was very well put together. We are starting to see the benefits of lean in the field”.
- Julian Howett, from Olympic International (Vancouver, Canada), stated, “this was the best manufacturing company sales meeting I have attended, thank you to the IMI Flow Design team for a great event.”

The positive tone of the event was a major change from last year’s event, where inventory and operational issues caused the Dallas plant’s on-time delivery to slip into the low 80th percentile. Now, with the lean improvements, the Dallas plant’s on-time delivery record is often in the 90s and several distributors commented they are feeling the positive difference.

Some of the customers also took the time to tour Hydronic’s nearby Dallas facility. One manufacturing rep raised a recommendation on how shipment boxes could be better labelled to increase efficiency at the customer’s job site when correlating shipments to the customer’s purchase orders. This idea was vetted by the IMI Flow Design team and immediately implemented. This fast implementation served to generate positive buzz amongst the manufacturing reps that when lean is done right, immediate customer benefits can result.

Kieran Griffin, Head of Engineering for IMI Hydronic Engineering also played a key role during the event. He not only provided linkage to Hydronic’s global product strategy, but also led sessions on ‘Voice of the Customer’ regarding the new ‘Harmony’ valve.

The sales and marketing team has embarked on a pilot digital marketing campaign to improve recognition of the IMI Flow Design brand, setting the foundation for generating key customer leads for the Harmony valve launch in 2016.

IMI CCI Sweden secures new contracts

IMI CCI Sweden has secured a series of significant new contracts around the world, in many cases, beating off stiff competition from rival firms.

An order for 24 type VLB turbine bypass valves was awarded to IMI CCI Sweden by the National Contracting Company (NCC) of Saudi Arabia for use on the Al-Qassim power plant project.

In the US, IMI CCI Sweden secured a contract for six off-boiler feed water control valves and a number of water valves. The valves are destined for use in a gas-fired combined-cycle plant of 1000 MW in Pennsylvania.

Meanwhile, in China, a customer who had bought competitor valves and was unhappy with them, turned to IMI CCI Sweden for help to secure replacement valves rapidly. The company was able to offer valves which the customer had already ordered for another project, Shiliquan, and to manufacture a new set of valves for Shiliquan.

Danish-firm Burmeister & Wain (BWSC), has placed orders for turbine bypass systems destined for three biomass-fuelled power plants in the UK at Widnes, Snetterton and Tilbury. The company usually commissions other suppliers for small steam valves, so the team was delighted when the order was extended to include orders for applications with pegging steam and vacuum ejector control. The Tilbury order is the eighth power plant in a row for which BWSC in Denmark has ordered bypass systems from IMI CCI Sweden.

WRITTEN BY Jake Zender
VP of Sales, Marketing and Customer Service, Americas
IMI Hydronic Engineering

WRITTEN BY Martin Valfridsson
Managing Director, IMI CCI Sweden
IMI Critical Engineering
Precision achieves preferred – supplier status with Heidelberg

WRITTEN BY Jörg Heller
Key Account Manager, Continental Europe
IMI Precision Engineering

IMI Precision Engineering’s team in Continental Europe has reached a major milestone by attaining preferred supplier status for Heidelberg, one of the world’s leading suppliers of sheet-fed litho and digital printing equipment and services.

We’ve worked hard to satisfy all the requirements of Heidelberg’s rigorous certification requirements, ensuring our products are of the required quality, at the right price with excellent delivery performance. Our competitors were keen to win this business so the pressure’s been on from the start and we’ve really delivered. We supply Heidelberg with over 200 different products including valves, special actuators, regulators and air manifolds and our Fellbach team co-ordinates deliveries from Precision factories across Continental Europe.

IMI Precision Engineering worked closely with Heidelberg to build relationships and ensure issues were resolved quickly and permanently. Huge strides were made in product quality with continuous improvement and lean making important contributions.

A cross-functional team, coupled to excellent collaboration between the many development and production sites was a key feature in delivering the results, and regular reviews on how we can improve our team-work make for a GREAT team performance.

IMI CCI has the power in Chile

IMI Critical Engineering is helping to optimise performance and output at one of South America’s largest power plants.

The Mejillones facility, located on the Chilean coast in the country’s Antofagasta region, has produced power from a combination of coal, diesel oil and natural gas since 1995, with an annual output of around 3 million megawatts. The Mejillones facility provides power to a number of mining facilities in the region, where unscheduled stoppages are expensive and highly undesirable.

At Mejillones, some of the installed competitor valves were suffering from erosion, cavitation, flashing, and unanticipated shutdowns, with the most critical valves being the worst affected.

The facility owner E-CL, a major player in the Chilean energy sector, approached Critical’s IMI CCI business for a solution. Having assessed the application requirements, we recommended the complete replacement of the valve.

The solution recommended was IMI CCI’s patented DRAG® technology which is proven in effectively controlling the velocity of fluids, avoiding leakage, cavitation and flashing, protecting the pump and optimising plant efficiency. The customer adopted this solution based on these advantages and the fact that IMI CCI already had a significant and proven installed base of valves at Mejillones.

Since installation, unanticipated shutdowns resulting from valves have been eliminated, whilst the level of control during start-up has exceeded customer expectations.

WRITTEN BY Warren Ferguson
Director of Business Development, Americas, IMI CCI
IMI Critical Engineering

Juan Pablo Villamil of IMI CCI commented: “This is a major facility where valves in key applications were suffering the effects of age and poor operating conditions, resulting in high levels of downtime. The incorporation of control and recirculation valves featuring patented DRAG® technology was the obvious solution and has proven highly effective in resolving these issues and delivering uninterrupted processing.”

A spokesman for E-CL added: “The IMI CCI valves are delivering precise control during both start-up and normal processing, drastically reducing the likelihood of stoppages and minimising the possibility of damage to pumps, drums and other systems components.”
In 2015 IMI Hydronic Engineering won a number of significant contracts with the newly-launched Eclipse thermostatic radiator valve. Thanks to its revolutionary Automatic Flow Control technology packed into a compact size, it’s the perfect valve for renovations of existing heating systems. No complex calculations are necessary, it’s simple and fast to install and provides automatic hydronic balancing and great energy savings.

One of the first projects to get off the ground was in France – at the SciencesPo Undergraduate College campus in Reims. The departmental building is a Grade A national listed building which posed significant technical challenges for the installation of the new heating and cooling system – how to upgrade and achieve modern norms without damaging the architectural legacy of the building.

The contractor, Service Technique de la Ville de Reims, were thrilled when Hydronic introduced them to the Eclipse valve. Over 230 valves were delivered in the first wave of improvements and there are more to follow in the first quarter of 2016.

Similarly, management at Vivawest Wohnen GmbH (one of the largest housing associations in Germany, which owns and manages over 120,000 residential properties) recognised the new Eclipse valve as a ‘milestone in thermostatic hydronic balancing’ and were keen to test the benefits in one of their estates.

The first project was at the Neue Stadtgärten estate in Recklinghausen, which included 369 flats and uses thermostatic control systems to regulate room temperatures. The new Eclipse product, together with IMI Hydronic Engineering’s leading position in the thermostatic control sector, and its proven track record of delivering energy-efficient solutions helped secure this major contract.

The time and cost savings during installation at Recklinghausen amounted to 65,000 EUR and the new Eclipse product will result in reduced energy bills for the tenants. Everyone benefits from this new technology and Vivawest were so impressed that they are now looking at further renovation projects where they can apply the Eclipse technology benefits.
The University Hospital Frankfurt at Goethe University was founded in 1914, and with 32 specialist clinics and 20 research institutes, it attaches the utmost importance to providing the best possible medical care for its 49,000 yearly patients. Its research centres ensure that any scientific research performed by the Faculty of Medicine can be quickly incorporated into therapeutic practice.

The performance of the heating and cooling system is paramount in providing the best indoor climate for both the patients and 4000 nurses, doctors and staff. Any system failure or downtime could be critical to a patient’s health.

With dirt being one of the primary causes of heating system damage or malfunction, keeping the system clean is paramount to ensure that system failures are avoided, of particular importance in this hospital due to an ageing pipe network. With this in mind, the team at IMI Hydronic Engineering worked with the hospital’s service and technical teams to design a tailor-made solution, and a special custom-made Zeparo weighing 1.2 tons was built and installed on-site with special equipment, including a crane.

The gigantic Zeparo dirt and sludge separator is not only able to remove dirt but also magnetite (black iron oxide) deposits which are caused by oxygen ingress and can be very damaging to pipes and critical investments such as boilers, pumps and valves. By removing both dirt sludge and magnetite, the heating system’s longevity is assured.

Volker Gengnagel, Area Sales Manager at IMI Hydronic Engineering commented “We have a long-standing relationship with the customer who has used other Zeparos before, as well as IMI Pneumatex pressurisation systems. We were one of the few suppliers who could provide this type of solution.”
Reaching out to Latin American customers

WRITTEN BY Ricardo Suppion
Manager, Latin America
IMI Hydronic Engineering

As the world’s fourth largest event for all sectors of the HVACR industry, the 19th Febrava (International Refrigeration, Air Conditioning, Ventilation, Heating and Air Treatment Trade Show) recently brought manufacturers and buyers together in Brazil.

With the event’s key focus being the exchange of knowledge and market updates, boosting industry figures as well as revealing new market trends, IMI Hydronic Engineering’s Brazil team took centre stage in exhibiting new technology and innovation. They proudly presented our full set of load balancing valves, including the new TA-Compact-P, TA-Compact-T, TA-Pilot-R, Zeparo Cyclone and Eclipse.

Despite the current economic challenges facing many businesses in Latin America, a huge number of visitors, from small business owners to large corporations across a variety of industries attended the event. They were all welcomed on the stand by our team who demonstrated Hydronic’s range of technologies and the importance it plays in hydronic systems.

President of IMI Hydronic Engineering America, Dave Roland stated, “I have appreciated what I have seen; this type of event is important because you can analyse the market, read it and understand how it works. This kind of insight is invaluable for our business.”

Latin America Director, Hernani Paiva, believes the show was also a great opportunity to highlight once again the new MI Hydronic Engineering brand, and said “These actions are important to strengthen who we are: the only company in the market that offers solutions for systems with engineering support, not just products.”

IMI Hydronic Engineering Brazil delivered a widely attended seminar on energy efficiency titled ‘Hydronic technology for new systems and retrofit’.

Critical secures large contract in central Africa

WRITTEN BY Fulvio Menini
Sales & Marketing Director, IMI Remosa
IMI Critical Engineering

The order includes catalyst slide valves and isolation butterfly valves for the US$9bn refinery which is due to come on stream in 2017 or 2018. Once complete, Dangote will have the capacity to process 500,000 barrels of crude a day.

“I’m really pleased with the collaboration we are achieving across IMI Critical, and the success achieved in this award is a direct result of it. For IMI, this project is the largest in Central Africa, and that will make a real difference in our approach to securing upcoming projects in the region.”

IMI Remosa worked closely with Ajit Sreekumar, President, IMI Critical Engineering India, to arrive at a price and terms that secured the contract.

Thanks to close collaboration with colleagues in IMI CCI India, IMI Remosa has secured a large order for slide and isolation valves for the Dangote refinery in Nigeria.
IMI Critical showcases its expertise at PowerGen International

WRITTEN BY Mike Semens-Flanagan
Director of Strategic Planning
IMI Critical Engineering

IMI Critical Engineering companies presented their new branding and innovative products at the PowerGen conference in Las Vegas on 8-10 December 2015. IMI Critical used the exhibition to showcase its entire range of products and services on offer to the Power industry. This was also the first time Critical had showcased IMI Bopp & Reuther products in the USA, with a nuclear valve on show along with videos and brochures.

On the stand were products from:
- IMI CCI – cut-away operating valve to demonstrate DRAG® and IMI STI FasTrak
- IMI Bopp & Reuther – nuclear gate valve
- IMI Fluid Kinetics – silencer
- IMI CCI – desuperheaters
- IMI NH – valve

More than 21,000 industry professionals attended PowerGen International where innovative and cost-effective solutions for maintaining, operating, and building new power generation were discussed and were on show.

IMI CCI Sri City approved by NTPC

WRITTEN BY Maureen Tan
Marketing Director, IMI CCI Asia and India
IMI Critical Engineering

IMI CCI Sri City has become the first Indian severe service valve manufacturing company to be approved by National Thermal Power Corporation (NTPC) Limited.

The approval grants IMI CCI India permission to manufacture high-pressure and low-pressure by-pass, start-up valves and boiler fed water pump (BFP) recirculation packages.

Following five years of extensive work and considerable investment, IMI CCI’s Sri City operation successfully achieved the necessary approvals. The localisation project began when NTPC, India’s largest central government power producer, decided to add 20,000MW to its generation capacity. As part of a strategy to develop and support domestic manufacturing, NTPC and the Government of India (GOI) specified that boiler, turbine & generator (BTG), and other plant equipment and accessories required to build the 20GW additional capacity, should be manufactured in India in phased stages. IMI CCI India worked with IMI CCI Switzerland to complete the necessary legal, compliance and other formalities required to qualify IMI Sri City.

“Congratulations to the whole team, in India and Switzerland, who worked so hard to win this approval.” said Aij Sreekumar, President, IMI Critical Engineering India.

Improving supply chain efficiency for a major Dutch wholesaler

WRITTEN BY Bennie Holtrop
Global Demand Manager
IMI Hydronic Engineering

Last autumn a team from IMI Hydronic Engineering started working with Technische Unie in the Netherlands with the goal of continuously improving our supply chain process.

Technische Unie is by far the largest wholesaler of heating, air-conditioning, plumbing and electrical components in the Netherlands and sells items from all three of the Hydronic product brands – IMI Heimeier, IMI TA and IMI Pneumatex.

In Holland, Technische Unie is known not only for its enormous product range, but also for its high standards in logistics and e-commerce. Customers can place orders via the web portal up until 7pm and still receive guaranteed next day delivery. Of the 70,000 orders Technische Unie receives daily, 50% arrive after 3pm.

One major goal of this customer is to ensure a delivery service level above 97% on average across the entire stocking assortment. This measurement is done based on OTIF (On Time In Full at orderline level). To achieve this they not only have a fully automated warehouse with over 90,000 stocked products (in total they sell around 280,000 different products) but also need excellent relationships with their suppliers – including IMI Hydronic Engineering.

All items are classified according to their priorities and have different service levels associated with them. Suppliers are then scored according to their performance. Since the start of lean implementation at Hydronic plants, Technische Unie have noticed a marked improvement in our delivery service levels.

“We have been impressed at the performance of IMI Hydronic Engineering, not only in terms of delivery, but also in their long-standing co-operation with us. We have been able to work together to implement a wide variety of activities to improve our logistics flow. This is what it takes to be a preferred supplier” said Johan van den Brink, Manager Supply Chain Efficiency, Technische Unie.

The improvement process was a great opportunity to look at our current performance, and use our lean tools to further increase service levels and co-operation. Over the coming months Hydronic will work to update product labels to allow the use of barcode scanning upon delivery and align master data between our two companies.

“The progress towards lean has made a significant improvement in our service levels, which means that we can now focus more on new projects to deliver growth together, rather than just tackle day-to-day problems” said Gerrit Van Doorn, Head of Sales, Netherlands, IMI Hydronic Engineering.
Sky high with TA-Compact P in Romania

The recently launched TA-Compact P control valve for on-off control has been an immediate hit with customers from all over the world with over 500,000 valves being sold in just the first five months.

The Bucharest One development is one of the latest project wins, featuring not only TA-Compact-P, but also the full range of control valves and actuators from IMI Hydronic. The unique features of this pressure independent control valve – true flow measurement, differential pressure control, as well as superior performance, convinced LSG Group (HVAC contracting company) to install over 3,500 TA-Compact-P valves in the landmark Bucharest One project.

At 130 metres high, this office tower located in the heart of the dynamic Calea Floreasca / Barbu Vacarescu office district in North Bucharest, is the second tallest building in Romania. The building is mixed use, including a retail area on the ground floor and 69,000 m² of office space. The property was designed with energy efficiency in mind and was even certified with LEED Platinum Green certification. Amongst other elements, highly-efficient HVAC systems are a must to gain LEED certification. TA-Compact P was an obvious choice to help achieve this goal. Fully independent of system pressure fluctuation caused by other units, the valve limits overflows and helps save a vast amount of pumping energy, helping to reduce the energy bill and contribute to the efficiency of the HVAC system.

“We were impressed with the services and support offered by IMI Hydronic Engineering, and the ability to measure flows in the system. The new TA-Compact P gives us great insight into what is actually happening in the system – a unique feature for these types of valves” said Liviu Nan, Team Leader HVAC design department, LSG Group.

This project represents a significant success for the local sales team and means that both the tallest (Sky Tower with IMI Pneumatex water quality systems) and now the second tallest buildings in Romania – both have IMI Hydronic products installed.

IMI divisional cross-selling – an effective way of increasing sales volume

The IMI Hydronic Engineering central Russian office (located in Moscow) is also home to the IMI Critical and IMI Precision divisions.

All three are fully integrated under one legal entity which allows more effective management and cost minimisation as well as enabling technical cooperation on a wider scale between the divisions. This cooperation often leads to the discovery of new cross-selling opportunities with existing customers and has been particularly effective in oil and gas industry projects. During the last year alone, concerted efforts of Critical and Precision employees has led to joint participation in milestone projects such as Yamal, Rosatom and Lukoil.

A thorough analysis of the Precision product range allowed the Hydronic team to identify some key products suitable for use in public infrastructure projects such as Precision’s Buschjost globe valves, brass fittings, and solenoid valves. It was noted that in almost every project specification there were several solenoid valves which remained ‘undetected’ and were outsourced to competitors who had such valves in their product ranges. There are seldom more than two or three such valves in a single project, but if we take into account the total number of projects worked on by our technical specialists in a single year, the quantity of solenoid valve opportunities ‘ignored’ adds up to a rather significant sum.

Having identified this gap, Hydronic and Precision technical experts used information on similar competitor products to define a pool of the most widely demanded solenoid valves suitable for use in HVAC systems as well as fire suppression systems for public infrastructure facilities. Detailed technical documentation, special price quotes, and cross-reference sheets were presented to IMI Hydronic Engineering employees and announced to all the company’s distributors.

Interest was immediate and just a few weeks after the announcement, IMI Hydronic Engineering specialists completely redesigned a mall in the city of Barnaul, Siberia, in cooperation with a distributor. This resulted in the sale of more than 50 of Precision’s Buschjost solenoid valves in addition to the typical Hydronic products for the HVAC system.

These examples show just how important the interaction and cooperation of the three IMI divisions can be for generating additional sales volume.
February 2016 saw the launch of a new IMI online learning system – IMI Learn.

As a dynamic international business, we need to continue to develop IMI Group standards and our talent with appropriate support materials and training. It makes sense to not duplicate effort and information wherever possible; do things once and better share best practice.

Replacing existing University and learning systems in Critical and Precision, the new IMI Learn system will connect employees across all divisions providing learning opportunities to support their development. A key tool for collaboration, the new system will be launched directly from the IMI intranet and will enable employees to learn about relevant divisional products and technologies to enhance their understanding. A project steering group with representatives from all divisions and HQ has guided the configuration of the system to meet business needs.

The three divisions that form IMI have similar high-level learning needs. Understanding the latest products and applications is important to make sure we learn from each other and offer customers the best solutions to meet their changing needs. On occasion, we need to share programmes across the three divisions where there is material that each can benefit from.

At launch the system will offer content on a range of topics, including:

- Products and Applications – Over 120 e-learning modules designed to help people learn about the wide range of products across the divisions and their applications, plus calendars of divisional face-to-face training schedules.
- Legal and Compliance – A range of e-learning modules designed to help employees to understand how they can ensure IMI operates ethically and within the law.
- Leadership and Management – Details of new programmes as we introduce them across IMI.

The IMI Learn platform will be developed further over time to effectively support IMI’s strategic plans to Fix, Focus and Grow.

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**Strengthening the IMI Board**

WRITTEN BY John Dean
Head of Investor Relations
IMI plc

Last August we were delighted to announce the appointment of Isobel Sharp as a non-executive director of IMI and member of the Audit Committee with effect from September 2015. She is also now a member of IMI’s Nominations Committee.

As part of an extensive induction process, including attendance at the IMI Group Executive Induction Programme, Isobel, along with other non-executive directors, attended a UK plc governance and refresher session, that was provided by KPMG. She has embarked on a series of site visits across all divisions of IMI to familiarise herself with the businesses and meet colleagues.

Isobel has extensive accounting and corporate governance experience. Most recently she was with Deloitte serving as the firm’s Senior Technical Partner. Further biographical details of Isobel can be found on the IMI plc website.

IMI Chairman Lord Smith of Kelvin commented “We are delighted that Isobel has joined our Board. She has a strong financial background and deep knowledge of accounting practices and corporate governance policies and procedures. In addition, having advised a number of FTSE boards during her career, she has wide ranging business experience.”

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**Head office and divisions join forces for half marathon**

WRITTEN BY Ruth Davies
HR Partner
IMI plc

Over the last few years, keen runners from IMI HQ have entered the annual Birmingham Half Marathon and combined their efforts to raise money for charity.

This year, a record 12 people from HQ, Critical and Precision formed a team and ran 13.2 miles one Sunday morning in October raising £2,400, for the Stroke Association. Everyone finished the course and impressively, finished either faster, or within 10% of their target times – an unprecedented level of performance against forecast! Congratulations to everyone who was involved and thanks also to the colleagues who gave up their time to support on the day.
Welcoming new graduates

WRITTEN BY Mari Docker
Global Graduate Development Manager
IMI Precision Engineering

It was great to see our 2015 IMI graduate intake finally join us in September; thanks to everyone involved in bringing them on board. They had a two-week induction at our HQ in Birmingham where they started building their knowledge of the business and their own skills through leadership presentations, workshops, site visits and practical exercises.

After this, the graduates returned to their home countries for local inductions and to then start their first work placement.

Of the engineering graduates, Precision has 13, Hydronic has 7 and Critical has 6. We also had a graduate starting in Human Resources and another in Finance at HQ. Here are some quotes on their experiences so far:

Fu Lin (IMI Precision, Singapore)
“What I enjoy the most in this role is that I can apply my mechanical knowledge and skills to a real product or a project to find a better solution or get things done on time to satisfy all.”

Carl Nevelius (IMI Hydronic, Sweden)
“The most rewarding thing is that I can feel and see my contribution to the business. I’m glad to find that my job is helping me going out of my comfort zone to learn new skills and try new things.”

Jongwhoon Park (IMI Critical, South Korea)
Please welcome your new team members and support them in this formative part of their career. As engineers of the future they’re really important to help deliver our Engineering GREAT growth agenda.

Intranet updates and expansion

WRITTEN BY Jacqui McKinnon
Marketing Communications Manager
IMI Precision Engineering

We’ve been working hard during the past year to develop the IMI Precision Engineering intranet – it is our ‘one source of the truth’, with regular news updates on how we’re doing, project successes, new standard operating procedures (SOPs) and other divisional updates.

Our divisional strategic improvement programme FIX8 is regularly featured to share progress and plans. The new intranet now hosts the image and marketing asset library to give easy access to a wealth of divisional imagery, and the latest sales support information.

More recently the business functional pages have been developed for Engineering, Finance, HR, IT, Legal, Manufacturing, Procurement, Quality and Sales & Marketing. These pages feature their own related functional SOPs and other information to help their employees work to the latest guidelines. IMI Group standards are defined for some functional activities – especially in areas such as Legal, HR and Finance, in which case there are links to the IMI content if these are the standards we need to work to.

This year we’re focusing on the regional 5-year strategies and making sure this content is developed and updated on the intranet to share our long-term plans and progress on our journey to “GREAT”.

Critical appoints new Head of Petrochemicals

WRITTEN BY Chris Battersby
Human Resources Director
IMI Critical Engineering

In December 2015 Andrea Forzi joined IMI Critical Engineering as Head of Petrochemicals – IMI Z&J (Germany, Houston & China), IMI Remosa, and IMI Th Jansen.

Andrea has over 25 years’ experience in industrial engineering, and joins IMI from the Weir Group, where he was MD and CEO of Weir Gabbioneta, a manufacturer of bespoke engineered pump skids for the Oil & Gas sector. Andrea has a degree in Mechanical Engineering, and speaks five languages.

Roy Twite, Divisional Managing Director, said “I’m delighted to have someone of Andrea’s knowledge and experience join us, and look forward to him driving the growth agenda in the petrochemical companies.” Andrea added: “I’m excited to join IMI Critical Engineering and am confident that I can help deliver its ambitious growth targets.”
IMI leadership and management development programmes

WRITTEN BY Sue Hall
Head of Capability Development
IMI plc

Last summer we announced the launch of our two new leadership and management development programmes. Both programmes enable sharing of best practice, collaboration across the business and focus on developing high-performing teams to achieve our ambitions.

The IMI Executive is fully involved in the programmes through attendance, presentations and sharing their own thoughts and reflections on leadership and management behaviours.

Leading the Way to Engineering GREAT

Two cohorts have already commenced the programme made up of three modules and a further one will commence during 2016. The modules cover Leading Performance, Leading Self and Leading Others.

Participants on the ‘Leading the Way to Engineering GREAT’ have a ‘teach back’ element requiring them to present and share elements of their learning from each of the three modules attended, with their own teams.

The picture below shows members of the first cohort working together. They recently completed the second module which focuses on execution, leading self and others through change, quality of thinking and developing resilient organisations.

Being a GREAT IMI Manager

The first 2.5-day workshop took place in November 2015 in the UK and was attended by a team of European managers/supervisors. Participants were delighted to receive presentations from Mark Selway, CEO on IMI’s strategy, ‘Lean in IMI’ from Peter Spencer, Divisional Managing Director of Hydronic Engineering and ‘Finance in IMI’ from Ian Johnson, Divisional Finance Director of Critical Engineering.

Hearing and observing senior IMI leaders’ passion for the business enabled managers to think about the critical role that they, and their teams, play in managing their business and delivering continuous improvement.

Presenters from outside the Group gave delegates specific tools to use in their own personal development. Content included how to develop and support high-performing teams through great coaching and feedback. Feedback has been very positive with one participant stating “Overall it was one of the best trainings I have ever attended”.

During 2016 workshops will run in the USA, Germany, China, Czech Republic and UK with many events being delivered in local languages.

Developing ALL our people

WRITTEN BY Louise James
HR Director,
IMI Hydronic Engineering

IMI Hydronic Engineering recognises that it needs to grow and develop people, in order to grow and develop the business.

This is true at every level. Our products are manufactured on the shop floor by our production workers, new products are developed by our engineers, and our sales people are our link to the customer. All these people are key to our success, and yet, historically, only managers and some office workers, had development plans.

In 2015, the Hydronic Executive Team made a commitment that every single employee would have a development plan by the end of the year. For some people, their plan will develop them for future roles. Too many of our senior roles have been filled externally, so this helps to develop our internal talent pipeline. For other people, their plan will develop them in their current role. This is a challenge in itself. Who is doing their job in the same way they were doing it three years ago?

The world changes very quickly, and we have to constantly develop our people to meet these changes. Perhaps most importantly, having a conversation with individuals about themselves, their work, and their future, ensures that our people feel valued.