

Welcome to the first edition of our customer newsletter 'UpClose'.

Closer to the customer



Kevin Spencer
Managing Director
Weir Minerals Europe

As the name suggests our newsletter marks part of a new pro active approach by Weir Minerals Europe to strengthen our communication with you the customer.

The driving force behind 'UpClose' has been our recent Customer Survey. As listening and questioning are critical to effective customer service, this has provided a sound basis for us to strengthen our customer relationships.

As we seek to become more responsive to your needs our first edition provides you with insight into the way in which we have responded to the survey findings.

The findings have given us confidence that we offer a strong core product offering whilst demonstrating that there are key areas in which we can still do more to improve your overall experience.

As a result I have implemented a process of continuous improvement to ensure we continue to deliver total satisfaction with our key customers.

This program recently began with a series of workshops undertaken with our regional territories which resulted in an in depth review with my executive management team.

The findings demonstrated that the following areas are critical to meeting your needs and delivering overall satisfaction ...

Product Value

Service

Ordering & Delivery

Communication

These critical areas are now the focus for four business improvement teams that report directly to myself. As well as focusing on the big issues we are also ensuring that we work on delivering immediate benefits which will improve your overall experience of working with Weir Minerals.

I would also like to encourage you to continue to provide us with your feedback on how we are performing in delivering what matters to you most. Whether your feedback is good, bad or indifferent we want to hear your views so that we can continue to work hard to provide total satisfaction.

Finally please read on and enjoy this issue of UpClose, which looks at the work being undertaken in response to the customer survey findings, ensuring we act on what matters to you most.

Weir Minerals Europe
employees celebrating the
award



Breaking News ...

Major Award for Weir Minerals Europe



We are proud to announce that Weir Minerals Europe Limited has been awarded the Queens Award for Enterprise in recognition of our "Outstanding performance for International Trade".

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Major Award for Weir Minerals Europe



THE QUEEN'S AWARDS
FOR ENTERPRISE
2008

Every year UK companies are invited to apply for this prestigious award and all applicants are thoroughly audited with only a small percentage receiving the award. For 2008 only 86 companies received the award in the category of International Trade.

For the period covered by the award, sales for the company grew 48% in total with export sales growing by 60% during the same period.

Weir Minerals Europe exports to over 50 countries and has offices in eleven countries outside the UK, all with their own personnel. Other markets are covered by agents and distributors managed from Todmorden. All this activity is supported by strong marketing and engineering teams at the company's headquarters in Todmorden, Lancashire where their state of the art production facility is also based.

During the past five years we have invested heavily in the development of our production facility in terms of equipment and people, with the implementation and development of a production system reflecting Lean Manufacturing techniques. This philosophy is very much customer driven geared to ensure projects are delivered on time and has resulted in an on time delivery performance of 95%. Training programmes and implementation of best practice across the world ensure continued improvements in both quality and efficiency.

Weir Minerals Europe Limited Managing Director Kevin Spencer sums up the achievement over the past years –

“This award is in recognition of the work put in by all employees both in Todmorden and overseas as well as our customers, suppliers and others connected with the company. There have been a number of changes over the past 5 years to get us where we are today and our employees have taken these changes on board and supported us throughout”

Not just slurry pumps

Solutions for customer critical process applications

Being part of a global force such as the Weir Group brings with it a range of added benefits never before available to our customers. The combination of greater investment and a more extensive range of specialist slurry processing equipment for some of the most critical process plant applications, means that today's Weir Minerals is much more than a pump company. Weir Minerals is a specialist provider of high performance slurry processing equipment, which includes a range of slurry pumps, hydrocyclones, valves and wear resistant linings.

Today the Warman brand is instantly recognisable around the world for setting the standard in slurry pump performance and each of the other products deliver the same high performance you have come to expect from our pumps. In other words, the Weir Minerals brand stands for world class performance in a range of customer critical slurry applications.

What is less recognised is that the Weir Minerals offering includes a range of world beating products built around an unrivalled capability in materials technology and engineered hydraulics. Slurry pumps, hydrocyclones, slurry valves and linings are often critical to the success of a process plant and frequently represent the difference between a successful operation and a failing operation. Combined they can enable you to reduce the down time in your highest wear applications, ensure the maximum recovery of material and ensure the highest levels of operational efficiency.

Our chosen product offering is part of a deliberate customer focused strategy to ensure we develop the products that remove the pain from where it impacts upon you most, whilst delivering it for the lowest total lifetime cost. This ensures that you receive both the performance benefits to ease the pain in your everyday operations whilst maximising your return on investment.

A further significant benefit is that unlike turnkey project suppliers, our focus upon the areas that matter to you most ensures that you do not compromise the overall performance of your plants in some of the most critical areas.

European Sales and Marketing Director Michael Graham explains:

"We view our products in the same way as our customers, seeing them not in isolation but as part of a chain. In doing this we recognise that a chain - the customer's process - is only as strong as its weakest link.

This philosophy ensures we address the areas that cost the customer time and money. Our specialist approach to these critical applications means that all our development time and effort ensures we deliver maximum performance where it counts most. This is something that a turnkey provider just cannot deliver. With their focus and resource diluted across a plants entire process it inevitably limits their ability to target key areas. This is why today so many of the world's major operators specify our high performance equipment in their project briefs to provide them with the competitive edge".

Concentrating upon customer critical applications requires a large amount of dedicated resource to ensure the continuous development of materials and product innovations. This is where being part of a world leading global operation really counts and enables us to invest millions of dollars in our four global Centres of Excellence for Research and Development. This combined with a people development programme to ensure we recruit and retain some of the keenest minds in process and slurry technology today, ensures that the products you receive today are unrivalled.

So if you are looking to extend the wear life in severe applications like your mill circuit, make efficiency gains with your process pumps, dewater your mine or transfer slurries by long distance pipeline our Warman and Geho brands provide you with unsurpassed performance. Remember the same level of world class performance you have come to expect from our pumps is also available across our Cavex hydrocyclones, Vulco wear resistant linings and Isogate slurry valves. Together our ranges work to ensure we deliver some of the most efficient and effective slurry equipment solutions available anywhere in the world today.



Michael Graham

*Sales & Marketing Director
Weir Minerals Europe*



The total dewatering range

From the name you can **Trust**.



Simon Jones
Mine Dewatering
Business Manager,
Weir Minerals Europe

We can now offer a complete mine dewatering product range which meets duties from open pits to the most demanding deep mine application.

Our customers have been consistently telling us that they wanted a mine dewatering brand they could trust to deliver:

- consistent performance
- minimum downtime
- maintained efficiency

Your main driver was offsetting increasing maintenance costs and rising energy prices. Not only this, you told us that the convenience of a single source of supply was now more important than ever. Built on your brief Weir Minerals has developed an unrivalled range of centrifugal and positive displacement products.

Our range starts with the SJ submersible pump designed for medium to abrasive dewatering applications, this is one of our smallest but most demanded products. As duties become ever more

demanding with greater heads our range takes you from vertical turbine pumps through to single and multistage centrifugal pumps. At the top end of the range we have piston diaphragm high lift pumps, which can replace an entire series of pumps at low or high solids concentrations for deep underground applications.

With short 'off the shelf' lead times for our entire submersible SJ range of pumps and spare parts including the 55Kw version, quick delivery is one word we do not use lightly. European Mine Dewatering Business Manager Simon Jones explains:

"For the submersible dewatering market convenience doesn't stop at a single source of supply. It means a rapid turnaround in delivery to site of both pumps and spare parts. In today's buoyant market this is a challenge we are absolutely determined to meet. With this in mind we have built a robust logistics chain with European distribution centres and this is supported with an after sales service capability to meet the customers needs".

CASE STUDY - Tara Mines, Ireland

Material upgrades extend slurry pump life and reduce ownership costs

In 1977 the original pump was lasting 15 days, in 1979 it was replaced by a Warman pump. With continual improvements in materials technology the pump life is now over 250 days, 16 times longer.

Tara Mine is an underground ore mine in Navan, Meath, Ireland. It employs trackless mining, state-of-the-art technology to extract lead/zinc ore from up to 900 metres below the surface.

The largest zinc mine in Europe and the fifth largest in the world, Boliden Tara Mines Limited, is looking for continued growth in the years ahead.

The original concentrator was designed to treat 7,000 metric tonnes of ore per day for an average production of 400,000 metric tonnes of zinc and 70,000 metric tonnes of lead concentrate.

Originally fitted in 1977 with a pump from another manufacturer, Tara Mines found that it suffered from excessive wear, delivering 124,000 tonnes of dry solid every 11 to 15 day, at which point it needed a new impeller and set of liners. In 1979, Weir Minerals fitted a 14/12 Warman Series 'AH' Heavy Duty Slurry Pump with Nihard liners.

At the end of October 1979 the Warman pump had run for 133 days with a tonnage throughput of 901,421 with the sole replacement of a throatbush at 584,356 tonnes, and a yearly saving of over £80,000 in maintenance costs.

The pump liner material was subsequently upgraded to A05 Hi-Chrome which resulted in another step change in life. With the introduction of the latest improved wear resistant alloys the pump is now fitted with A61 HYPERCHROME® liners with a life of over 250 days.



At your service

Simply, we are driving to reduce the customer's costs ensuring that the often talked about, but rarely seen, win-win relationship actually happens.



Paul Marshall
European Service Manager
Weir Minerals Europe

Lower operating costs and reduced downtime are areas most often cited by our customers as being the two key areas they are continually striving to achieve. Limiting unplanned downtime can be a major factor in meeting production targets and keeping operating costs to a minimum. However, it is equally important that products are fully optimised to ensure that parts are replaced in a timely manner thus providing our customers with true value for money.

Recognising the importance of these two areas, Weir Minerals Europe has developed a maintenance programme suited to meeting the individual requirements of our customers with the aim of providing bottom line benefits and total customer satisfaction.

During the past three years Weir Minerals has worked extensively with a number of our key customers to understand what matters most in terms of service and more importantly, how to meet those requirements. This work has expanded to include some of our key accounts throughout Europe.

Recognising that no two companies or working environments are identical, we have developed a programme that is designed to meet the service/maintenance requirements of all our customers. These available options include everyday repairs and equipment health checks through to full service contracts that optimise your system performance and remove the every day operational problems associated with unplanned downtime ultimately delivering bottom line benefits.

Paul Marshall, European Service Manager explains: "Traditionally the whole aspect of product

maintenance has been one of a reactive rather than a pro active approach – there was a problem, we were contacted and a solution was eventually found. This neither suited the customer or ourselves and resulted in the development of our "Total Care" programme.

This new programme has seen our service team field operatives become closer to our customers and subsequently improve our total understanding of their operation which in turn helps us improve our service levels".

The "Total Care" programme allows the customer to choose from the health check agreement which includes regular site visits through to the more advanced Peak Performance agreement that includes provision of all labour at a fixed monthly cost. Whichever specific agreement customers choose they can rest assured that they will always receive our commitment to quality service, reduction of unplanned downtime and lowered operational costs.



Weir Minerals "Total Care" engineers on site carrying out regular health checks, routine pump maintenance and planned pump overhauls.

Delivering our commitments

In a rapidly growing market, one aspect of service always comes up as critical to the customer – delivery.



Dramatic growth in the minerals market fuelled by strong economic growth in the developing world has created levels of demand previously unseen.

Weir Minerals pro active approach to addressing this has been to introduce a number of planned measures to ensure you receive your goods on time. Whether you are a site operator undertaking plant maintenance or a multinational plant builder installing a new project, getting what you want when you need it is all important.

“UpClose” talks to Weir Minerals Lean & Logistics Director, Peter Thompson, about the measures he has undertaken to ensure you get your deliveries on time.

“The key operational issues which needed to be addressed were forecasting, capacity alignment to demand, and schedule adherence within each of the individual steps within the processes. Get one of these wrong and the customer will not receive their delivery on time.”

Peter continues; “considering each in turn starting with forecasting, this is central to building sufficient capacity. In order for Weir Minerals and its partners to capitalise on the dynamic and growing market place we needed to create sufficient capacity to produce what is required when it is required. If we wait until the orders actually arrive then begin the installation of new processes, equipment and people we will miss the opportunity”.

Central to effective forecasting has been the efforts of the sales team to get closer to the customer so that the business has visibility of up coming demand. Weir Minerals Sales team has worked hard during the later half of 2006 and 2007 to understand the market and provide quality information for the operations team to develop a facility capable of meeting the future markets requirements. As a direct result capacity has increased and with it flexibility in the factory enabling the average on time delivery to jump from 75% in 2007 to 98% in 2008.

With improved forecasting in place, the next step was to develop the processes that would deliver the capacity improvements to meet the forecast demand.

Weir Minerals utilise Lean techniques such as Root Cause Analysis to resolve process problems and Kanban to provide level loading on the facility as

central to the improvements made. As a result of the changes made we now have a European facility that produces 35% more today than it did 2 years ago. This growth in available capacity has aligned the business much more closely with the demand of the customers.

Finally meeting schedules has provided the critical link in the manufacturing process. With each process being dependant on the previous, both in terms of quality and timing, Peter points out the importance of getting each stage right. “If the second step receives poor quality or late material from the first it has no chance of delivering to its customer on time. The importance of ensuring schedules are met is focused upon in every production meeting. Each individual production element knows if they have met their promises to their customer. It’s the sum of these performances that determine our success in meeting the customers’ needs”.

Peter concludes that teamwork is the one vital ingredient to the improvement in lead times. “Whilst the three items I focused upon are all important it is the commitment from all the individuals involved that is the difference between success and failure. This is where Weir Minerals believes its key strength lies. The whole team from operations through to sales and marketing has played its part in the improvements being seen, everyone is empowered to comment and improve things”. It is this that will continue to ensure that we deliver the high level of delivery on time that Weir Minerals is now able to offer you.

New impeller cell incorporates latest lean principles

“The changes have been well received by all personnel and we look forward to the benefits flowing through to our customers”

The Warman Slurry pump is world famous for reliability, long life and lowest cost of ownership. One key element of its success is its use of state of the art materials technology. The wearing parts are manufactured from a range of abrasion resistant materials. The robust nature of these materials creates issues in the down stream machining. One component in particular that requires skilled manufacturing methods is the impeller, particularly the machining of the impeller thread and dynamic balancing.

Lean Manager, David Cockayne, explains, “The journey taken by a typical impeller around the Todmorden plant from casting through to final painting took in excess of 900 hours and in this time the impeller could travel up to 1.5 miles. This distance does not include the 30 mile round trip to the dynamic balancing subcontractor. The levels of handling and transportation through the process created too much waste in the form of inventory and waiting. By building a purpose designed impeller cell located directly between the foundry and distribution centre this transport was reduced by over 70% and waiting times can now be visually managed under one roof.”

Within the new impeller cell Weir Minerals have installed state of the art machine tools to form a One Piece Flow unit that will machine and dynamically balance all Warman impellers with thread sizes over 75mm. Recent hard metal machining developments will allow Weir Minerals to progressively move away from thread coring and grinding to more efficient machine thread cutting techniques which provide the opportunity to adopt mass centring. This involves moving the impeller thread to the centre of the

physical mass rather than grinding material from the outside diameter to balance the impeller.

The final layout of the cell was developed by a small highly focused team identifying the project work that was necessary to meet operational objectives.

Tony Locke, Manufacturing Director, summarised its impact. “Creation of the new impeller cell has enabled our manufacturing team to see the flow of product through to our customers. A simpler process route and lower inventory levels mean that lead times are shorter, on time delivery will improve and we can more easily respond to the changing needs of our customers”.

A significant change is in the supervision of the cell. Instead of the traditional cell supervisor we have appointed a value stream manager whose role is to oversee the whole impeller process to ensure product flows in an optimal way through to our customers.

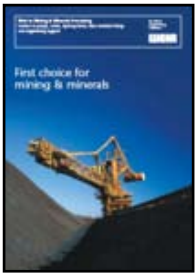
The changes have been well received by all personnel involved in the process and we now look forward to the benefits flowing through to our customers. The new standards we have created within the impeller cell are the standards by which the whole Todmorden facility will be measured.



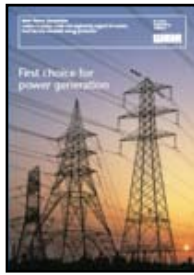
Tony Locke
Manufacturing Director
Weir Minerals Europe



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Sump Pumps



CVX Cavex
Hydrocyclones



WS Isogate
Slurry Valves



SJ Submersible
Dewatering Pump

Feedback...

Tell us what you need.

We now hope you appreciate how seriously we are taking becoming closer to you, our customer.

This newsletter is just the beginning of what we hope will be a long and mutually beneficial partnership, an unbeatable partnership.

We always value any feedback, on this newsletter, on our products, and most importantly on your experience of doing business with Weir Minerals.

Let us know, visit <http://feedback.weirminerals.co.uk>

WARMAN® Centrifugal Slurry Pumps

GEHO® PD Slurry Pumps

HAZLETON® Specialty Pumps

FLOWAY® Vertical Turbine Pumps

LEWIS® Vertical Chemical Pumps

BEGEMANN® Centrifugal Process Pumps

CAVEX® Hydrocyclones

ISOGATE® Slurry Valves

VULCO® Wear Resistant Linings

For further information on any of these products or services contact your nearest sales office or via:

www.weirminerals.com

These are just a selection of our Industry and Product brochures, visit <http://brochures.weirminerals.co.uk> to request copies.

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