

# The Absorber



molecular

## Chairman's Column

### What Separates a Great Business from a Good Business?

A lot of today's companies have many good things about them. Whether they be attractive products, responsive customer service, easy to use websites or motivated staff. However they do not guarantee of continued commercial success or leading performance. What great companies have is all these **plus** a unique way of doing things. Sometimes referred to as 'corporate culture', the ability of an organisation to create a clear focus and enthusiastically drive to attaining that focus, is what sets them apart.

When we look at our own business, and introductions of new added value products of high margin, the importance of 'how we do things' can be clearly seen. A critical part of our strategy is innovation - the development and introduction of new products and improved processes. Successful innovation requires the participation and support of everyone in the business. This ability to be positively involved in areas of the business beyond our day-to-day responsibilities, is a key ingredient of the Molecular DNA, and will continue to drive the business forward toward great things in the future.

**Ian McKernan, Chairman, MP Group**



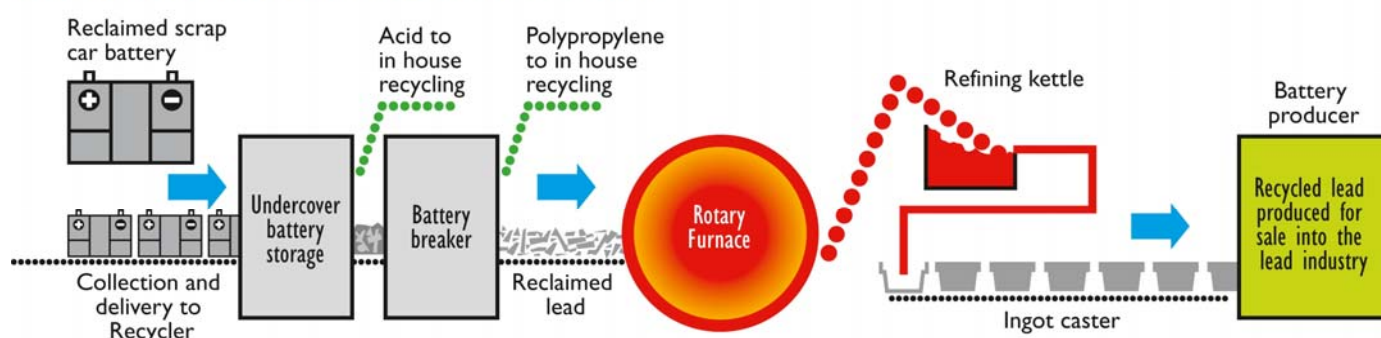
## MPL Reduces Cost of Disposing Waste & 'Goes Green' with Innovative Partnership

For many years, Molecular Products has had to pay for waste from its Soda Lime production to be disposed of. The rate of waste produced over a year can be in excess of 400 tonnes. In the past, it has cost over £70K to dispose of it.

Last year, an agreement was struck with a company called HJ Enthoven & Sons, to allow them to use our Soda Lime waste in their recycling process for car batteries. HJ Enthoven now collect our waste for free. There is now no cost associated with the cost of disposing all of the bulk Soda Lime Waste. The Soda Lime is used primarily in the furnace and with acid neutralisation, but there are plans to utilise it to produce by-products, such as Gypsum.



### The continuous cycle of used lead recovery accounts for over 60% of World Lead Production



HJ Enthoven is the largest single site producer of recycled lead in Europe. They now produce annually around 75,000 tonnes of lead products and have expanded their interests into battery strip production and recycling of the polypropylene components from scrap batteries. The company takes a pro-active approach to its environmental responsibilities.

There are approximately 30 million vehicles on the UK roads. Each has a lead acid battery. The industry is highly efficient, collecting over 95% of all spent batteries. Over 60% of all lead produced in the world comes from recycling operations, making lead the most efficiently recycled of any material.

**Mark Skudder, Purchasing Manager, MP Ltd**

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## Please Place Your Order....

[www.molecularproducts.com](http://www.molecularproducts.com)

Phase two of the website is set to go live, allowing Molecular Products Ltd the capability to take orders online, the website will even allow customers to pay online too.

The sophisticated system provides a simple and quick method for customers to place their orders as well as tracking and reviewing their order history. The system will be trialled on five of the top 20 customers first, to gain valuable feedback before making the system available for all.



Natalie and Jackie will be managing the online orders and processing them from start to finish, customers will be able to contact them direct if they require help with their online order



## Molecular Products Inc Improve Production Processes

Almost a year ago, MPI moved to its new location in Boulder, Colorado and celebrated the commissioning of its new production facility. When it opened, the new building and factory layout offered increased capabilities and enhanced efficiencies. Since commissioning, MPI's Operations Manager, John Green and resident Engineer, Matt Boucher, the team have not been idle. Building on the gains made at commissioning, they have implemented further enhancements to the system under the MPI process improvement program:

### De-ionized Water Batch System

- ✓ Automated process for measuring and dispensing de-ionized water
- ✓ Time savings for some zeolite processes is 96 minutes per 250 lbs



### TurboVac system improvement for transporting material from drums to process mixers

- ✓ Weekly cleaning schedule was implemented for the TurboVac filters
- ✓ 15 foot section of 2 inch diameter hose was replaced with 3 inch diameter hose to reduce friction and improve the volume of airflow in the system
- ✓ Airflow was improved through the pick-up wand by closing up the tip and covering holes that had been added. 38% improvement in time efficiency resulted

### Carbon Bulk Bag Unloading system

- ✓ Transports carbon material directly from super sacks to production mixers
- ✓ Eliminates need for drums during the production of acid gas adsorbing carbons
- ✓ Will use the existing TurboVac system
- ✓ Eliminates most material handling other than moving super sacks of raw material and drums of finished product

- ✓ Operated entirely from a single control panel at one location
- ✓ Encloses and captures the discharge of super sacks and eliminates the largest carbon dust producing process



More improvements coming very soon!

David Bostic, Sales Manager, MP Inc



## Ltd & Inc Join Forces at Submarine Conference



The SAMAP Conference (Submarine Air Monitoring and Purification) took place in sunny San Diego to discuss the technical issues facing people who work aboard submarines.



Mandy and Mike from the Technical Team at Ltd joined David Bostic from Inc and they met with key personnel from several Navies in the world to discuss how Molecular Products could help meet their requirements.

Denis Chitouras from the Canadian Navy gave an inspiring presentation on the success of the EO2-26H Oxygen Generator, giving recognition to the technical expertise of the team at Molecular Products.

The collaboration between Ltd and Inc was positive in communicating a global presence for the organisation.





## Molecular Products Dives In & Discovers the Difference with SofnoDive® 797



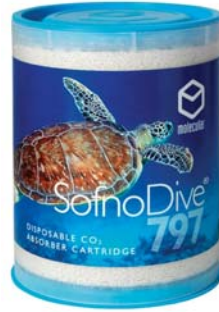
Following the launch of SofnoDive® 797 in 2008, Molecular Products have worked continuously to improve the manufacturing process of the single use canister. The product recall last year highlighted certain quality improvements to be made which have now been fully incorporated into the manufacturing process, resulting in an ultra safe, reliable canister for use in the Poseidon Cis Lunar MKVI Rebreather.



As the sole manufacturer of the fully portable, light weight canister, Molecular Products felt it was imperative to gain real-life experience of the product during use be-

neath the water. Employees from the Technical and Sales departments volunteered to take part in a 'Try Dive' evening organised through collaboration with Poseidon UK, Jack Ingle Technical Diving and Planet Scuba. The employees were keen to dive in and experience for themselves benefits such as low dust and good taste characteristics.

At a local swimming pool the group, who had varying diving experience, were trained on using the Poseidon MKVI Rebreather. Jack Ingle and Steve Manton guided the group through the fitting of the equipment and importantly how to change from open to closed circuit breathing before entering the water. The group were in agreement that the equipment was lighter and more comfortable to wear than expected. Adjusting the buoyancy was straightforward and the group were soon confidently roaming the depth of the pool.



of Sofnolime® 797, and most were surprised how simple it was to switch between open and closed circuit which was particularly comforting for novices. 'I found it easy to breathe and my original expectation of experiencing an unpleasant taste from the Sofnolime®, was wrong, I didn't find any difference from breathing fresh air!' John Organ.

Take a look at the Molecular Products group underwater using the Poseidon MKVI rebreather on the website.

[www.molecularproducts.com/poseidon-mkvi-video.htm](http://www.molecularproducts.com/poseidon-mkvi-video.htm)

SofnoDive®  
DISPOSABLE CO<sub>2</sub>  
ABSORBER CARTRIDGE 797



Dr Mike Clarke, Technical Manager

The feedback from the group after their 'Try Dive' was extremely positive. Everyone commented on the ease of use of the rebreather and the low resistance the canister provides. 'It was surprisingly easy to breathe and a very attractive option for divers of tomorrow' David Baines.



The group also highlighted the good taste characteristics

## Molecular Products Satisfies Stringent Safety Requirements from Canadian Navy



The EO2-26H Oxygen Generator was created to meet the requirements set by the Canadian Navy. The finished product in simple terms is the original EO2-26 placed inside a protective tin to provide increased security of the device during storage aboard the submarine. Following



rigorous technical development the EO2-26H boasts three core safety attributes in the form of seals providing enhanced safety, they are inside the cap, the cap itself and the outer tin. Together they provide

ultimate protection of the EO2-26 Oxygen Generator from damage and contamination.

An additional requirement from the Navy was to supply a training video for Submariners to learn



how to activate the oxygen generator when the submarine requires oxygen, either in an emergency or during routine operations. The video was carefully planned and executed with close collaboration with the Canadian Navy which resulted in excellent feedback and appreciation. Congratulations go to **Luke Belshaw (O2 Operator)** for starring in the video, Luke performed brilliantly and carried out each scene with confidence and professionalism.

The order of 600 EO2-26H Oxygen Generators has now been shipped. Molecular Products will go to tender for future requirements from the Canadian Navy.

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**Do you have a newsworthy article for the next edition of the Absorber?**

**If so email, phone or see Jo Shaw in the Marketing Department and share your news!**



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