



Ensitech: 'change the way you do business'

In 2016 Ensitech first featured the Cover Story of *Managing Aging Plants* magazine. The company then celebrated their 10th anniversary and utilized this moment to look back at a number of successes as well as to make plans for the time ahead. With one of the company mottos being 'change the way you do business', there is no doubt in my mind the company must have made a few changes since the last time we talked. I decided to take up contact again with Clive White – who moved from being General Manager to the more strategic role of CEO at Ensitech – to learn all about developments in the past two years. Enthusiastic as always, he tells about their continued successes and exciting plans for the future.

By Jolanda Heunen

Australian-owned manufacturing company Ensitech produces high-quality products that provide an efficient and safe alternative to dangerous industrial practices. The business was started in 2006 and over the years earned a reputation as global leader in the area of metal surface finishing. Mr. White is an electrical and electronics engineer

by trade and one of the inventors of the TIG Brush®.

Providing solutions

Ensitech offers high value solutions, consisting of products and services for cleaning stainless steel welds. "We sell into a mature market where customers are not used to a high degree of

customer service, which is one of our differentiators," Mr. White starts. "We address as many of the needs of the end customer as we can, including their economic and ecological needs. Often this means being able to prove capability, as well as providing relevant product information and technical knowhow."



lem: removing discolouration from a stainless steel weld. Mr. White explains how the device works: "The TIG Brush® combines three things – heat, electricity and chemistry – to create an environment on the surface of the metal that removes contaminants (such as Fe+ ions on stainless steel) and promotes the formation of a strong oxide that will protect the metal surface from further corrosion."

Surface finishing

The TIG Brush® technology not only cleans but also passivates stainless steel without the need to use dangerous chemicals. Together with their Surface Finishing System, Ensitech created a comprehensive range of products for pre-weld fabrication, post-weld cleaning, and surface finishing of fabricated metal products.

Asked when and why it is needed to 'finish' the surface of stainless steel products, Mr. White tells: "Stainless and aluminium are relatively volatile metals that react quite quickly with air. Fortunately, the resulting oxide acts as a barrier to prevent interaction and ends up protecting the metals from further oxidation. However, with manufacturing techniques such as welding and cutting, this protective barrier is damaged." The TIG Brush® has been designed to restore this layer while cleaning the surface of the metal and removing any weld heat tint. "In doing so, in 'cleaning mode' the surface of the metal is left completely as machined, which is a huge benefit, especially if the manufacturer has put effort into giving the surface a certain look," Mr. White emphasizes. "From the users' point of view, a brush that

has been wetted with cleaning fluid is swept across the surface of the weld or the metal surface and the restoration of the protecting oxide occurs almost instantly."

Product range

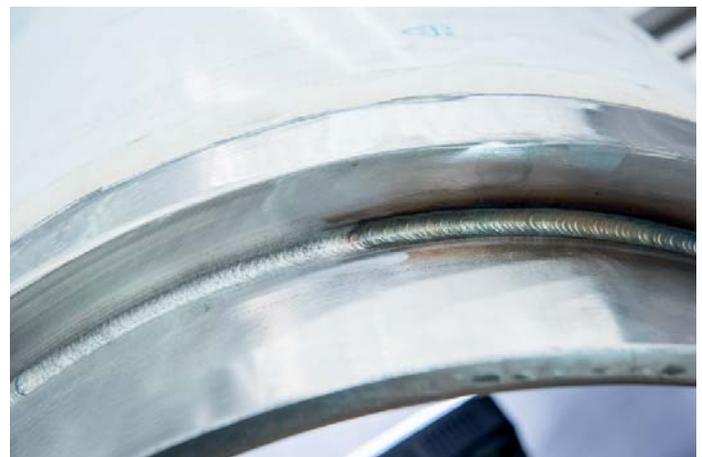
The TIG Brush® range starts with the TBE-440, which is an economical model for occasional work or for welds that have a light heat-tint. The flagship model is the TBE-550, which is a general-purpose machine that is more powerful than the TBE-440 and is

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packaged with more accessories. "The fastest and most powerful weld cleaner is the TBE-700, which can clean all types of welds in all conditions," says Mr. White. This model comes with all sorts of accessories, such as a PROPEL Torch®, a Quad Brush, and Ensitech's Marking and Etching Kit.

This year Ensitech are launching a new product called the SSALLY (SS stands for Stainless Steel and ALLY for Aluminium). According to Mr. White, it is the first weld cleaning solution that effectively cleans and polishes aluminium. "The SSALLY has automatic fluid delivery, and fluid is provided to the customer in landfill friendly recyclable

The TIG Brush® is a Stainless Steel Weld Cleaning System Ensitech both invented and manufactured. It is a safe and efficient device that was created as a solution for a specific recurring prob-



These 'before and after' images show the immense effect of weld cleaning.



TIG Brush models: TBE-440, TBE-550 & TBE-700

bags that the customers can fill for themselves using the Ensitech Filling Machine,” Mr. White tells.

Case studies

Industrial facilities can benefit greatly from the solutions that Ensitech offers. “Stainless steel and aluminium are both metals that can result in beautiful artefacts when assembled skilfully, and in a perfect environment these metals will produce results that last for a very long time,” Mr. White sketches. “Unfortunately, wear and tear, physical damage and contamination from the environment can encourage corrosion to take place, which often shortens the life of the article. By using the portable TIG Brush® equipment to restore the metal surface and remove contamination, the life of the plant and equipment can be substantially extended – in some cases indefinitely – for a fraction of the cost of replacement.”

Mr. White could give many examples of when materials were replaced when in fact these could have been cleaned using the TIG Brush®. “One example I was personally involved with,” Mr. White starts, “was regarding a balustrade

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along a popular beach in Sydney. After only a couple of years the balustrade was already showing signs of surface corrosion and a high proportion of welds needed to be restored.” A cus-

tommer of Ensitech’s approached the council with a proposal to completely restore the balustrade by using the TIG Brush® equipment, but they were informed there was no budget for work along those lines. “But there was a budget to replace the balustrade within a year,” Mr. White remarks. And when asked how much replacement would cost, the answer was that it would be more than one million dollars. “The cost of completely restoring the balustrade however was less than 5% of that.” Another situation is one of the many case histories in which the TIG Brush® was successfully implemented. “One particularly successful implementation is the use of the TIG Brush® equipment by a well-known automotive manufacturer for the cleaning of stainless steel accessories for their vehicles,” says Mr. White. “Before the use of the TIG Brush® there was an unacceptably high level of complaints and returns from customers, due to corrosion that occurred from damage which was the result of the extremely harsh environments that vehicles encounter – in particular those encountered by off-road vehicles. Since the adoption of the TIG Brush® equipment, the number of parts that have been returned due to corrosion has been reduced to zero.” When thinking of utilizing the TIG Brush®, one should take into account that the device produces sparks on the surface of the metal, and therefore cannot be used in an explosive environment. “Apart from that, the TIG Brush® can be used in any environment – even an enclosed one – provided appropriate precautions are taken,” Mr. White states. “The Safety Data Sheets recommend that the appropriate PPE equipment is



Before weld cleaning



After weld cleaning

used, and that the TIG Brush® be used with ventilation."

Expansion continues

From its headquarters in Western Sydney, Ensitech both manufactures and supplies TIG Brush® products worldwide. All raw materials for the TIG Brush® are sourced from local Australian suppliers and the machines are manufactured in Australia as well. All of the TIG Brush® machines are tested extensively before they are shipped to the rest of the world.

After exporting to various countries in Europe, Asia and the Middle East, Ensitech received many enquiries from US companies for their products.

"We aim at a growth of thirty percent by introducing new products and refining our training and product delivery methods."

And when five distributors wanted to be involved, an American headquarter was started in 2013 in Chicago. The USA success story has continued since. As Mr. White puts it: "We now have five staff members in Chicago, we signed an agreement with IWDC – the fourth largest distributor of welding products in the USA – and we now enjoy a customer base of 800 stores."



Exciting plans

On the technical front Ensitech are incorporating the very latest technology to aid in conducting remote equipment demonstrations and provide immersive customer training. "IoT technology is also being incorporated into the SSALLY® and future machines in order to provide customers with the ability to interactively prevent problems, fine tune efficiency, track productivity, and allow a wide range of acquisition strategies," Mr. White tells. On the marketing front, in the coming twelve to eighteen months Ensitech sets out to grow their export business.

"We aim at a growth of thirty percent by introducing new products and refining our training and product delivery methods," Mr. White states.

The company is committed to continue investing in the US and Canada, as well as to utilise their growing strength in this region to enter the South American market. "We also plan to further expand in Europe and are currently in negotiation to establish a European distribution facility," Mr. White continues. "We also see opportunities in Asia opening up to us through the new contacts we have established in this region." Ensitech will work closely together with these new partners, as well as seeking to establish the brand even further through the attendance at major trade shows in these regions.



The latest TIG Brush model 'SSALLY' offers fluid delivery for cleaning Stainless Steel and Aluminium.

Did you know?

Ensitech's motto 'change the way you do business' is exemplary for how the company always strives to find new ways to do business and therefore investments in Research & Development are constantly made. The motto reflects their values of safety, efficiency and innovation which is crystallised in Ensitech's continuous strive for keeping training guides and manuals up-to-date with the most recent information on new products and their technologies.