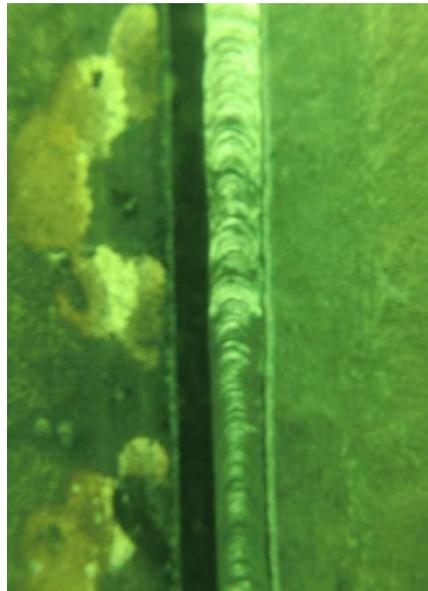


We must first apologise for the delay in publishing this newsletter, but it has been all hands to the pumps from the start of 2013. I trust the long awaited British Summertime is fast approaching and we look forward to the many bright and sunny summer days ahead; well we can dream can't we. Talking about dreaming, sometimes dreams do come true. We are delighted to be able to announce through our Greek training partners Marex, in particular the skills of Mr. George Maroudas, that we can confirm, through a series of welding trials, that we have recently proven the Barracuda Gold electrodes have passed class 'A' weld quality through both destructive and non-destructive tests. Class 'A' quality welds, according to AWS D3.6M:2010 may be described as welds having comparable qualities to surface dry welding qualities. Class 'A' welds are the highest quality standard of welding available under the AWS D3.6M:2010 underwater welding standard. This really proves how far both we have come and how far wet welding has come from those early days when we first started the development of the Barracuda electrode and tried to show industry what was possible when class 'B' weld quality was regarded as something special. You can read more about this inside this newsletter.

Marex are our Greek training partners in Athens and they also act as an independent Diving Contractor and they have recently been invited by Maagan Marine & Diving Works Ltd in Hiffa, Israel, to demonstrate the capabilities of top quality coded wet welding. Maagan is one of the largest engineering companies in the region, with a number of major assets, including the main port in

Hiffa. Mr. George Maroudas visited with the aim to show how a fully trained and experienced diver would be able to weld underwater in a timely and cost effective manner, with no loss of quality. We are delighted to be able to report that Marex has secured this major welding project, using Barracuda Gold electrodes, over stiff competition from other contractors



and other welding products, but he and Barracuda won the day; well done Marex for a job well done. The photo above shows one on the

completed test welds; we are not worthy George!

We welcome a new customer; **Oakwood Fuels**, who sent two of their welders for qualification testing to BSEN 287-1 for TIG



welding of butt welds in pipe on stainless and carbon steel; well done to James and Richard.

It is true, from time to time, that we do get some very strange welding requests, but we have to admit this one is a bit outside the norm, even for us. We were recently asked to repair weld a musical drum; suffice to say we did it and we understand the drum is working well and in plays in tune! **Morrisons** has again asked that we





undertake all their formal welder training and qualification testing requirements. We are delighted of course to again be of service to them. It might not be your first thought to think of a supermarket and welding, but Morrisons own and operate all their own HGV's and they undertake all own repairs. We note that Morrisons have been a valued customer for over 15 years and long may it continue.

Piranha safety switches have seen a big increase in sales so far this year. We are delighted to see a significant increase in sales, with orders coming in for all over the world. We are even making sales to the USA which has always been a difficult market for UK and European companies. We have been manufacturing these systems for over 14 years now. The Piranha 400 amp safety switch, which is available in three different models, provides a safe and convenient way of isolating the current and voltage



from the diver and meets CE directives, Underwriters Laboratories and Canadian Standards Association approvals. Once again we have been requested to assist **Flexitallic** in operator qualifications to BSEN 1418 for their flash-butt welding operations. Flexitallic, one of the worlds major valve and gasket manufactures to the offshore industries and one of our local jewels in the crown of Kirklees industries has now hit the big time in an international awards show in Florida USA. We would like to offer our congratulations to Flexitallic, who won the award for integrity assessment in corrosion control. The award was presented to Mr.



Russ Currie at the annual National Association of Corrosion Engineers (NACE) international conference, held in Orange County Conference Centre in Orlando; well done Flexitallic.

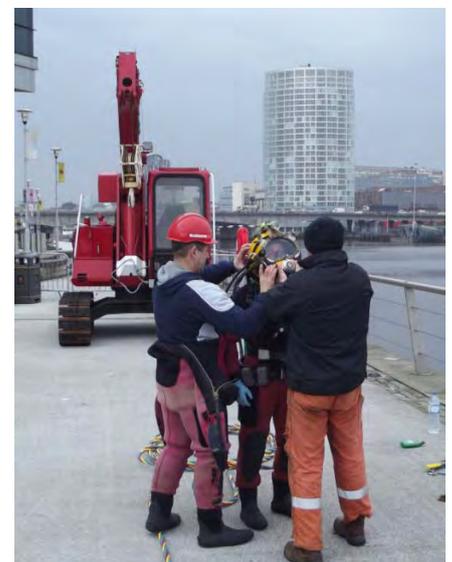
We are pleased to have been of service again to **NG Bailey**, the UK's leading independent engineering company, specialising in major mechanical and electrical engineering projects. This time we were asked to provide expertise in training of their brazing operators, as well as qualification testing for their stainless pipe welders. The photo shows brazers working on joining copper tubes together in a

fixed pre-assembled module. Allowing it to be delivered to site and is fitted to other modules,



thus, saving considerable costs and manpower as well as saving all the problems of having other trades on-site, all climbing over each other to complete their work.

We had another trip to Belfast earlier in the year to undertake formal welder qualification testing of **ABCO's** divers, who were welding on anodes at the Odessey marina in Belfast harbour. Three divers were tested in accordance with BS4872-1 welding standards. BS4872-1 is an ideal standard to measure a welders ability, without the need for the company to have a formal pre-approved welding procedure in place. It is what we call a class II standard, but still provides a very useful measure for clients to identify appropriate levels of ability and skill of the welder-diver; well done boys.



We are now delighted to be able to offer full wet instructor training for our **Weldcraft-Pro** course, utilising our new diving tank, which has been installed this month (May). This now allows us to fully implement all aspects of necessary training for diving schools running our **Weldcraft-Pro** welding programme. In order for diving schools to deliver the **Weldcraft-pro** training course, it is mandatory that all instructors meet the minimum standards of knowledge and skills to deliver this training and we are pleased to be able to offer this all in-house under one roof. Our MD David Keats has asked me to say a special thank you to **Robbie Roberts** and **David Williams** for providing us with this dive tank, allowing us to fully evaluate demand while keeping costs under control. We would also like to offer a special word of thanks to **Red7 Marine** for assisting with all necessary diving equipment and risk assessments, allowing us to comply with ACOP regulations. We are looking forward to welcoming our **Oceanus**, who are based in Barcelona and have agreed to send their instructors for training this year. We would like to remind all diving customers though, that our diving system is only available to commercial diving contractors and/or dive schools. We have no plans on running the **Weldcraft-Pro** course at our training centre and any UK commercial divers will need to contact our UK training partners, Professional Diving Academy (**PDA**) who deliver all diver training in the UK, on our behalf. The **Weldcraft-Pro** programme is presently available in the following countries; Sweden, Belgium, Greece, USA and hopefully very shortly, Spain. Please visit our website at www.specialwelds.com for full

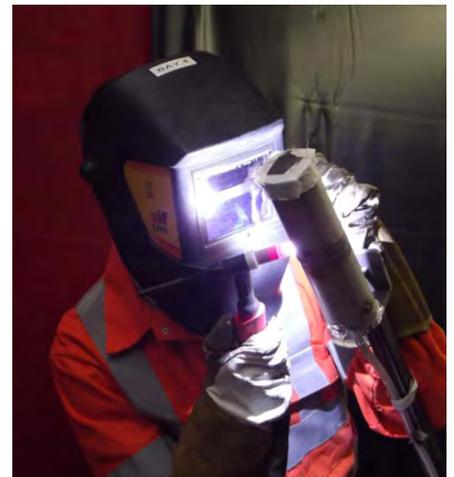


details of this course. Any diving schools outside the UK that would like to be considered to run the programme, should in the first instance, email us on sales@specialwelds.com **Divewise (D-Tec)** in Belgium have also been very busy running **Weldcraft-Pro** welding courses, with five busy classes so far this year. All **Divewise (D-Tec)** divers undertake their qualifications to ISO 15618-1, which is a class 1 welding code. Although, do bear in mind that a class 2 option is also available (BS 4872-1). Remember the **Weldcraft-Pro** is the **only** independently assessed educational programme that follows the **EWF/IIW** underwater welding guidelines and is accredited by the UK's largest engineering awarding-body, **EAL**. **D-Tec** also has approval by the Netherlands Welding Institute for the **Weldcraft-Pro** course and is being used as the minimum benchmark of welding skill/knowledge by local industry and is often sighted as a mandatory training requirement for diver-

welders in this region.

Our training provider in Sweden, **Gothenburg Fire and Rescue** training school is undergoing changes and has split away from the fire department and has now gone it alone. The new business is now called **UBF Yrkeshögskolan** (vocational College to the likes of you and me).

We recently undertook specialist onsite welding of four large water tanks, each holding 10000 litres, up in the roof of St. Lukes hospital in Bradford for specialist maintenance firm, **Tobyjen**. This work involved welding a number of large



diameter manways into the tank sides, in order to provide additional emergency evacuation, during inspection.

We once again provided welding procedure approval to **Sulzer Boothams** for MIG welding of duplex stainless steel material and an underwater welding procedure for **Reel**. **TIP Europe** have once again sent us their welders for TIG training and testing on stainless pipe, as have **CTS**, **CE. Bennett**, **Westfield Engineering**, **South West Metal Fabs**, **FEM**, **NextGen Wind Power**, **Steeple Associates**, **Energas**, **Custom Fittings**, **VTC Aerospace Systems**, **Craven Fabs Changer**, **Hydraulics**, **JG Fabrications**, **Weldfast** and **B&A Door Solutions**, not to mention dozens of private individual welders who have attended our training centre for training and certification services. Remember, we are the only accredited school in the country with an in-house **Zurich** approved welding surveyor. We offer a wide range of training and certification services to the welding industry; including MMA (both rutile and basic electrodes) TIG, MIG/MAG, FCAW, oxyacetylene welding and cutting; including safe operating procedures.

We are pleased to bring to the market, in association with **Marex**, our brand new welding flip-up lens assembly. The assembly is made from a tough, hardwearing lightweight POM-C plastic (Polyoxymethylene) material, which is non-conductive and has been designed and developed using CAD/CAM technology, to optimize the design and reduce the need for maintenance. The assembly fits all Kirby Morgan band masks and helmets and allows for easy use (even with gloves) to flip-up with just your thumb. A very clever press fit system allows for quick

and easy fitting of the welding filter/lens, yet will hold it in place quite securely with no danger of it coming out. It's light and strong and is designed to be used with our auto-darkening filters (allows the two UV sensors at the ends of the solar panel to trigger properly, unlike other assemblies on the market. We will be advising customers of the price and availability shortly.



We have seen increased sales in the **Chamfo** plate and pipe bevellers so far this year. These bevellers offer a low cost, yet precise method of beveling plate and pipe for weld preparation and there are 3 models in the range. The largest beveller, which is still a hand held tool, allows for putting a 35° weld bevel on steel, stainless

and aluminium materials of over 30mm wall thickness. We carry the full range in stock and to learn more about these unique products, please visit our website for more details.

Hammerhead wet-spot welding process finds new satisfied customers. The Hammerhead wet-spot welding process is an ideal low skill welding process that was designed for welding on anodes in nil visibility conditions, without the need for trained welder-divers. Although a low skill process, we do always recommend a basic introduction to the process set-up and operation. Presently all systems are designed for use with Arc-Gen 330SD diesel machines. This decision was made a few years ago, as in our opinion the Arc-Gen machine are the best for underwater welding and this model is a very popular hire fleet machine. However, nothing stands still and as new machines are introduced to hire fleets, we are looking at the changes needed to be made in order for it to be used with newer models. The next generation Arc-Gen machines



which the system will be made to work with is the new 300 AVC. The **Mahe** 4000 Delta Digital machine is the latest in MMA welding technology, particularly for suitable for underwater welding, as it comes with a range of OCV settings to provide the best possible safety protection to the diver. This new model is also available with the Hammerhead feature built in and according to the manufacture may be powered by welding generators. For the full range of Mahe welding machines, please visit our website.

Other products in our range, including **Barracuda Gold** welding electrodes, **Swordfish** and **Scorpion blue** cutting electrodes/lances, underwater welding **Stringers** and our **auto-darkening** welding filters are all showing strong sales. For more details on any of our products, please visit our website at www.specialwelds.com

The recent underwater welding trials mentioned at the start of this newsletter show **Barracuda Gold** now meets **class A** weld quality. During these trials, which were completed by our Greek training partners, **Marex**, who are based in Athens. We are absolutely delighted to be able to confirm a significant technical advance for underwater wet welding. Until now it has not been possible to produce class A wet welds. Under the AWS welding standard, a class A weld is described as a weld that is comparable to that of a dry weld in terms of strength and ductility. We would like to take this opportunity to offer our congratulations to **Mr. George Maroudas** for an excellent piece of work, as this really is quite something and offers a major advancement for all wet welding work. A copy of the welding report/findings are available for you to download from our website.

Simply go to <http://www.specialwelds.com/products/barracuda.asp> for more details. The photo bottom right shows the butt weld produced. All examination and testing was conducted by **GATS**, who are an accredited test laboratory. I know George would be happy for us to say a big thank you to **Mr. George Fyrigos**, head of GATS, for his expertise and kind assistance. An interesting video showing the testing of the all-weld sample is available on our website and is also on YouTube. We hope that this study will assist in educating insurance and class societies of the true potential for wet welding, which after all, is still the most cost effective method of underwater repairs and construction.

Sales in **Lastek** welding consumables continue to grow. Don't forget Lastek offer a full range of welding products for MMA, TIG, MIG/MAG, including fluxed cored wire, for mild steel, low alloy and difficult to weld steels, cast irons, stainless steel, aluminium and nickel, alloys, hardfacing. So if you are

dissatisfied with your current consumables, or supplier; please contact us, we'll be pleased to hear from you. Pls note our **summer holiday shut-down**. We will be closed for ten (10) days in August, starting on Friday 9th. Please make a note in your diary, as both production, warehouse and the office will be closed. **We would like to thank all our customers for their continued support and offer our thanks to the following for business so far this year; ICH Hytech, Calvert Site Services, PDA, CTS Group, BPN Explorer, Divewise-Tec, NG Bailey, Se Jin International, FEM, South West Fabs, Nex-Gen Wind Power, Terrossystem, Kaymac Marine, TMS, George Gradon Marine Services, The Underwater Centre, Shearwater, Chamber Oceanics, Oceanic Offshore, Pommecc, Dutch Diving, Spiro, Tecnosoud, Reel Group, ADS Diving, Macleod Pipework Engineering, Station Road Steam, J&E Overseas Technical Services, Sherburn Forge, NYD, 4-Recycling, Pommecc, H&K Kliff and Leask Marine.** Happy welding to one and all.

