

The Latest News from Elcometer around the World





We all know how hard it has been over the past 18 months, but let's take stock of what we have achieved!

BLAST - SPRAY - INSPECT - TEST

by Michael Sellars, Managing Director

Welcome to the first editon of the new Elcometer Newsletter. A lot has changed since the last edition of elconews, and not just the extra grey hairs or the lockdown weight gain, Elcometer has changed a great deal.

We have expanded our product range through acquisitions; Abrasive Blasting Equipment (Blastline - UK), NDT (Dakota Ultrasonics - USA) and Spray Equipment (Sagola - Spain), allowing Elcometer to offer a comprehensive range of equipment to customers across the whole coatings process:

Blast, Spray, Inspect, Test - whatever our customers need, Elcometer have it!

With so many new products nearing completion, 2022-23 is going to be a very busy and exciting year, across all four business divisons:

- Blast Equipment
- Spray Equipment
- Coating Inspection
- NDT Equipment

I have always been proud how everyone at Elcometer works together to get the best out of each other, going the extra mile to help colleagues and customers whenever and wherever they may be.

COVID-19 and working from home (WFH) has had a considerable impact on us all, not just in terms of sales - which I am delighted to say have recovered strongly over the past six months - but it has also affected the relationships we have with our colleagues, customers and suppliers around the world.

The last 450 or more days have made communication much harder, and I hope that our new e-news magazine will go some way to help keep us all in touch with each other.

Our products might be world class, but people buy from people - and it is the relationships that are built up over the years which makes a good company a great one.

Thank you to everyone for your exceptional support during this incredible era.

enews@elcometer.com

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Our long-term aim is for each business division to have product management, marketing, technical and R&D dedicated support.

GROWTH AND RECOVERY

by Nick Ball, Sales Director

Despite the setbacks of 2020 the commercial team is focused this year on growth and recovery, we have restructured our team into "business divisions" which is our first step to instil global co-ordination and end user focus for our core product lines. These changes will allow us to drive sales forward and, more importantly, allow us to concentrate on developing the product ranges for the future.

Our long-term aim is for the following business divisions to have dedicated product management, marketing, technical and R&D support:

- Blast Equipment
- Coatings Spray Equipment
- Coating's Inspection Protective Coatings
- Coating's Inspection Industrial Finishing including Physical Test Equipment (PTE)
- NDT Inspection Equipment

With this approach in mind, Elcometer offices will be refocusing & resourcing to support sales activity and subsequent sales growth of each division. We plan to ensure, as a first step, that we have division sales champions at local level and will resource in the 2021-22 plan to have marketing support in the larger offices.

Our commercial objectives are to accelerate sales growth by:

- Business division activity (sales leadership, product range development)
- Geographic expansion
- New distribution channels
- Key account management of both distribution & end user
- Sales activity tactics (push-pull) directed at end user industry segments
- Lead generation & pro-active product push out activities to offices/ distribution channels



ABRASIVE BLAST EQUIPMENT

by Nick Ball, Sales Director

Professional HP is our unique High Performance 15 bar abrasive blast machine (ABM) that not only allows for faster return to service of large infrastructure assets but is groundbreaking in its ability to allow long blast hose runs from abrasive blast machine to surface preparation area without loss of blast pressure which leads to improved productivity.

To demonstrate this we are now into our second year working with Spencer Coatings on the Erskine Bridge project. The Erskine Bridge is a main highway linking Glasgow to the North West Highlands of Scotland, built in 1971 and 1.32km (4330ft) in length, the bridge spans the River Clyde. Its design is a cable-stayed, box girder suspension bridge comprising of 11,700 tonnes of steel with a tarmac roadway.

Major refurbishment is underway on the structure which will take over four years and a key consideration when selecting the Elcometer Professional HP range for this work was the need to place the ABMs on the shoreline for ease of operation as well as

This year represents a step change for our blast equipment division as we plan new additions to the product range which will allow us to offer products from the entry-level "Contractor" range to the premium "Professional" and "Professional HP" range.

safety as the bridge is in constant use by road traffic. This in itself poses challenges as elevation from ground to steel deck is 40 – 60m, which often results in pressure loss for traditional surface blasting machines.

By working with the Elcometer technical team, we have installed two Professional HP 15 bar ABM units, which allows blasting of the deck at up to a 60m elevation but also 500m across the horizontal deck surface. This prevents pressure loss and maximises productivity to provide the Spencer Group with improved blast efficiency, increased preparation speed and reduced grit usage.

Spencer Group Project Manager, Joe DiMauro said, "Elcometer offers the only ABM which can meet the challenges of this demanding project. Running with a 560m (1837ft) blast hose would not have been achievable with competitive products available on the market today".

Product Range	Key Features	Customer Needs
Contractor	High quality entry level 12 bar, 1¼" airflow, standard valves & remote control valves (RCV)	No concern for productivity gains No concern for pressure loss No concern for grit use
Professional	12 bar, 1½" airflow, upgraded system including best in class media valves and RCV	Reduced operational downtime, compressor efficiency gains, reduced grit use, improved speed of blast
Professional HP	High Performance 15 bar, 1½" airflow, upgraded system including best in class media valves and RCV	Professional ABM plus: Long blast hose lengths without loss in performance at the nozzle

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SPRAY EQUIPMENT

by Peter Bloem, Global Divisional Manager - Coating Spray Equipment

Elcometer's acquisition of the paint spray equipment producer Sagola completes our strategy to Blast | Spray | Inspect | Test it all by Elcometer.

Sagola's diverse spray equipment product range presents Elcometer and our distribution channels exciting opportunities to expand into more markets. These can be found in the following market and coating sectors:

BODYSHOP

• Car Refinish Coatings

INDUSTRIAL

- General Metal Coatings
- Wood Coatings
- Plastic Coatings
- Speciality Coatings

PROTECTIVE

- Asset Protection Coatings
- Marine Coatings
- · Concrete Linings

TRANSPORTATION

- Truck & Bus Coatings
- Aerospace
- Automotive OEM Coatings
- Coatings for Leisure and Recreational vehicles
- Agricultural
- Rail

CONTRACTOR

- Decorative Paints
- Traffic Coatings

For Industrial, Protective, Transportation and Contractor product ranges, Elcometer will be developing the range to supply the market through our global distribution network and offices.

For Bodyshop products Sagola are global suppliers across the world and Elcometer will be their representative in Elcometer office countries.

A phenomenal amount of work has taken place in the background by Tracy Salt from our product management team. Tracy has been working hard alongside our Sagola colleagues in Spain to complete the Bodyshop product integration for the Elcometer sales office network.

The Sagola 4600 Xtreme continues to impress painters with its independently proven paint savings while complying with SCAQMD 1151 and EN13966 paint transfer directives.

Apart from part numbers being updated to follow the Elcometer format not much else will change.

The Marketing Department, led by Catherine Lund-Barker produced an excellent catalogue for our Sagola Bodyshop Refinishing product lines. This is available for download by navigating to Request a Catalogue (elcometer.com)

Our Spray Equipment website is now live. Additional product pages continue to be added to the overall growing content of www.spray.elcometer.com. Product operation and parts manuals will also be available to download from here. The site is your resource platform for all developments within our spray equipment division and product range. For those who prefer to gather content while on the fly; we invite you to follow us on our dedicated business social channels on LinkedIn (Sagola by Elcometer) & Instagram (@sagolabyelcometer)

Along with Mark Vickery, UK Automotive Account Manager, I have been meeting Automotive Coating Producers across the UK to demonstrate our range. The Sagola 4600 Xtreme continues to impress painters and industry colleagues with its independently proven paint savings while complying with SCAQMD 1151 and EN13966 paint transfer directives.

For the sake of not "self-certifying" transfer efficiency, we commissioned independent notifying bodies to test and confirm the actual material transfer efficiency of the Sagola 4600 Xtreme.

Contact your local Elcometer Regional Manager to arrange a 'Try Before You Buy' demonstration of the Sagola 4600 Xtreme to experience first-hand how this spray gun will save you paint and maintenance costs against your current spray guns. If you have any questions or require assistance, please get in touch with me. I am here to help: Peter.Bloem@elcometer.com



PROTECTIVE COATINGS INSPECTION

by Nick Ball, Sales Director

Coatings cover a very large range of diverse uses with many different requirements and functions, these coatings can be categorised as protective coatings & industrial finishes. Here at Elcometer, we have a wide range of products for both sectors.

Protective coatings are generally paints or coatings defined by their protective, rather than aesthetic properties, with the most common use of protective coatings being selected for corrosion control of steel or concrete.

Most of Elcometer's inspection equipment range is used to test protective coatings and the Commercial team are constantly looking into the changing needs of global trends.



The use of renewable energy increased by over 3% in 2020 as demand for all other fuels declined, this is a global trend we can take advantage of.

One such area of growth has been renewable energy, whose use increased by over 3% in 2020 as demand for all other fuels declined. This has been driven by a 7% growth in electricity generation from renewable sources.

Here in the UK and Europe wind power in extreme offshore environments is on the increase and to ensure coatings can be applied correctly in these hostile conditions there is nothing more important than the Elcometer 319 Dewpoint Meter.

This gauge allows our customers to monitor environmental conditions, such as relative humidity, air, surface and dewpoint temperature to ensure they are at an optimum for coatings application.

The marketing department has recently produced a series of videos explaining the importance of measuring climatic conditions and the different ways in which it can be done - take a look here.

The series includes a video showing exactly how the Elcometer 319 Dewpoint Meter works. If you haven't already, give it a watch.

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WHAT IS CORROSION?

by Matthew Davison, NDT Division Manager

Corrosion is a natural process - converting refined metals into a more chemically stable form, such as oxide, hydroxide or sulphide. The material is destructed by a chemical and / or electrochemical reaction with the environment.

There are two types of Corrosion: **Uniform Corrosion:** also known as

Common Corrosion, is smooth wall loss over a larger area, often reddish in colour.

The **Elcometer MTG range** is ideal for measuring this type of corrosion.

Localised Corrosion: such as porosity, pitting, cracking and laminations. This is best measured with an A-Scan capable gauge like the **Elcometer CG70** or the **Elcometer CG100**.



Why use an A-Scan to detect corrosion?

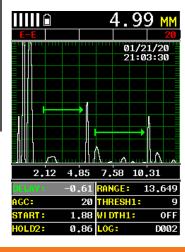
The NDT gauge generates an electronic signal pulse and sends this pulse to the transducer. The transducer converts the electrical signal into a sound vibration signal. The sound vibration signal passes through the material under test until it hits a back wall or a defect. The signal is then reflected back to the transducer and converted to a measurement reading by the gauge.

The time the signal takes to travel and return is converted into a thickness reading. This is how the Elcometer MTG reads general thickness and uniform corrosion.

However, localised corrosion can create several return echoes and it can be difficult to determine which signal is the correct thickness. The A-Scan helps determine the correct signal to monitor and will identify small signals that may be a potential concern.



Localised corrosion can create several return echoes and it can be difficult to determine which signal is the correct thicknes, this is when A-Scan should be used.



GLOBAL NEWS

UNITED STATES OF AMERICA

BY JOE WALKER, VP, ELCOMETER INC., USA

There has been a change in the US which will have benefits for Elcometer worldwide. NACE International and The Society of Protective Coatings (SSPC) have combined to serve the global corrosion and coatings industry. The combined organization is: AMPP, the Association for Materials Protection and Performance.



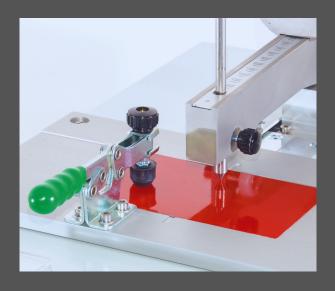
AMPP: FOCUSED ON THE PROTECTION OF ASSETS THROUGH STANDARDS, EDUCATION, CERTIFICATION, AND CONTRACTOR ACCREDITATION

Elcometer has been a corporate member of both SSPC and NACE for decades and actively participates in standards committees, training, education, and technical presentations. The merger of these organizations will greatly reduce the duplication required to serve the surface preparation, coatings and corrosion markets which comprised most of the respective memberships of SSPC and NACE.

AMPP currently has 40,000 members, is active in 130 countries, with offices in the US, UK, China, Malaysia, Brazil, and Saudi Arabia with training centres in Dubai and the US. Elcometer will continue to be active in AMPP – as we were with SSPC and NACE. For more information visit www.ampp.org

GERMANY

BY MARKUS BIESS, SALES & BRANCH MANAGER, ELCOMETER GMBH



The German Office have recently secured a sale of the **Elcometer 3000 Motorised Clemen Unit** to a company which specialises in the production of coatings for mineral construction components such as concrete slabs and tiles and protective coatings for production facilities. They also offer digital printing solutions on substrates such as concrete, aluminium, wood and plastic.

The company test 10mm concrete slabs with UV-resistant lacquer for its resistant to scratch. Previously, the company tested their products via an external test laboratory that used a pencil hardness tester.

Now the company is able to test their products in-house to the standard of DIN EN ISO 1518 2019-10 (Part 1 - determination of scratch resistance with constant load) using the Elcometer 3000 Motorised Clemen Unit - achieving reproducible results automatically.

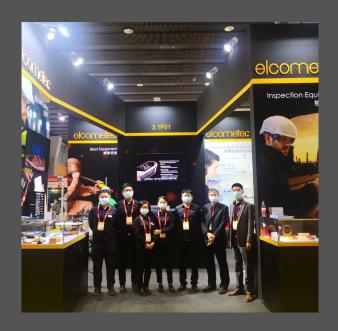
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EXHIBITION UPDATE

After the majority of our planned exhibitions were cancelled throughout 2020, due to the pandemic, we were delighted to be back exhibiting at the end of the year.

Our chinese distributors exhibited China Coat 2020 demonstrating our coating inspection gauges, laboratory and physical test equipment and abrasive blasting range!

The booth looked great and we are now looking forward to our upcoming exhibitions; the SEMA Show, where Elcometer Inc will be exhibiting our range of Bodyshop Spray Equipment for the first time in Las Vegas, USA in November and AMPP Coating+ 2021 in California, USA in December.



UNITED ARAB EMIRATES



We are pleased to announce that Ankur Tiwari has been promoted to General Manager for Elcometer UAE!

IN HIS NEW ROLE, ANKUR WILL BE RESPONSIBLE FOR ELCOMETER'S COMMERCIAL, TECHNICAL AND LOGISTICAL ACTIVITIES IN THE MIDDLE EAST.

Ankur joined us in 2016 as General Sales Manager and was instrumental in forming the initial commercial team in the region along with setting up the UAE office. Prior to that, he worked for an Elcometer distributor and has 18 years of experience in the UAE Scientific and Engineering Equipment industry.

We are sure you will join us in congratulating Ankur on his promotion.

Got a story to share? Let us know by emailing enews@elcometer.com to feature in the next issue of eNews.



Elcometer Asia has welcomed two new members into the team.

By Jerry Tan, ASEAN General Manager

This year, Elcometer Asia has welcomed two new members into the team: Ginny Yap and Hanapi B. Suhdi.

Ginny joined us last January, working alongside Serene Lim as our newest Sales Administrative Support. Prior to joining Elcometer, Ginny held several positions in her past employments, the last as a Personal Assistant.

As the second-youngest member in the team (JJ Fong still retains the title of the youngest!), she has brought a new perspective of "Work-Hard-Play-Harder" and self-improvement to the team. As a matter of fact, Ginny is currently our Covid-19 Safety Management and Measures Officer, ensuring the team adheres to the various safety guidelines and protocols.

In her family of 4 siblings, Ginny will never say no to tasty food and wine, besides her other love for baking and travelling.



Hanapi, our newest member, joined the team in early July as our Warehouse Assistant, assisting the team's most senior member, Jimmy Lim. Hanapi was a Paint Lab Technician with one of our customers, whose main business is in the supply of paint equipment, in Singapore for over 2 decades.

Well-respected in the industry, he is going to be our support in spray equipment sales, as well as performing his role in maintaining our warehouse, ensuring goods are always delivered on time to customers.

Away from work, Hanapi enjoys the quieter side of life – some serious reading and spending time with his wife and daughter.

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DISTRIBUTOR NEWS



ELCOMETER TEST LAB IN AUSTRALIA

Our distributors from across the world, Phillro Industries, now have their very own 'Elcometer Test Lab' – a dedicated space for recertification and calibration of Elcometer inspection equipment.

Their new signage outside their office looks great!

GOLD IN SOUTH AFRICA

Congratulations BAMR Pty Ltd on being appointed an Elcometer NDT Equipment Gold Distributor. The consistent hard work by each member of the team at BAMR has truly paid off, with them being the first to reach Gold within our NDT distributor programme!

"I am very pleased with all my team and their dedication which has allowed us to reach gold - we are proud to be part of the growing NDT distributor programme. We feel that the NDT range Elcometer offers will be a great benefit to our customers." said Graham Duk, BAMR

Well done to everyone involved on this great achievement! We can't wait to see more companies begin to join BAMR on becoming Gold Distributors.





After several demonstrations, the client found that greater precision of DFT measurements can be obtained using the Elcometer 456 and Scan Probe as well as saving time and reducing probe wear.

By Ankur Tiwari, General Manager, Elcometer UAE

The UAE Sales office currently supplies inspection equipment to all ship repair, vessel conversions, new building and offshore construction.

Most recently, they have received an order for 10 Elcometer 456 Top Gauges with Scan Probes to measure Dry Film Thickness (DFT) in accordance with SSPC-PA2.

Based on the requirements established in these standards, a minimum number of DFT measurements are made due to time constraints placed on the inspectors as well as limitations of the devices used to conduct the inspections.



The ability of an inspector to capture larger DFT data sets within the defined parameters may result in lower statistical variation of the data and higher confidence in the results. This should lead to fewer coating failures resulting from improper DFTs, thereby reducing maintenance costs.

After several demonstrations, the client found that greater precision of DFT measurements can be obtained using the scanning method over the traditional SSPC-PA 2 method along with time-saving and less probe wear.

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Elcometer is the manufacturer of choice and our team have worked hard to ensure we keep that record going.

By Neil Beswick, UK & Ireland Sales Manager

The UK Sales Office has recently embarked upon a project directly with the Ministry Of Defence. Elcometer inspection equipment is being used to create 'Maritime Anti Corrosion Kits' for the entire UK Navy surface fleet.

After work carried out by our Field Sales Executive Rachel Proud, the first kits have already been bought by the MOD and initial 'train the trainer' courses are set to commence this month.

Eventually, all 79 surface vessels will have Elcometer inspection equipment on board when they deploy. As these deployments can be for as long as 12 months, it's vital that there's an ability to identify and stop corrosion while on active duty.

We also supply inspection equipment for other aspects of the UK Defence. In Scotland, we supply inspection equipment to both BAE Systems and their contractors as they make the most advanced surface vessels ever built.



Elcometer inspection equipment has been vital in building the new class of aircraft carrier at BAE Systems including HMS Queen Elizabeth and HMS Prince of Wales, which were both commissioned in the last couple of years along with many frigates and patrol boats.

In Barrow, Cumbria, we supply BAE Systems with inspection equipment for the Astute Class submarine project and the development of Dreadnought class submarines, which replace the Vanguard ballistic missile class submarines which have been inspected using Elcometer gauges since the 1990's.

In Preston, Lancashire our inspection equipment is being used as they build the F-35 Lightning and the Eurofighter Typhoon. In Washington, Tyne & Wear we have consistently supplied the munitions factory. In all these instances, Elcometer is the manufacturer of choice and our team have worked hard to ensure we keep that record going.



Since its introduction, a large number of Elcometer 200 litre Professional Blast Machines have been sold into South America

by Alastair Kearton, Regional Sales Manager - Coatings Inspection

The Elcometer Abrasive Blast Machines have been sold around the world to give the end-user a safer, more reliable and cost-effective method of completing their blast job.

Following an explanation of the efficiency, ease of use and robust nature of the Elcometer Blast kits by the Elcometer Technical Sales team, our distributors in Chile, Ecuador and Bolivia, (APV and E and E Equipment), have been successful in promoting the Elcometer Abrasive blast machines in the South American market over the cheaper, locally manufactured pots and other importers.



The Elcometer blast pots offer several benefits over other manufacturers, first and foremost is safety. The Elcometer pot is fitted with many safety features including construction from thicker sheet metal, safety cut off valves and a safety certificate well in excess of its normal working pressure - ensuring a safe working tool in the blast environment.

Elcometer also offers a full range of personal safety equipment which has also been sold into these countries. These are designed to give added comfort and usability for the blast operative which promotes greater efficiency.

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Fitted with precision valves, the airflow and the abrasive media feed can be optimized to achieve the exact air pressure and media at the nozzle and can be adjusted to allow larger nozzle sizes whilst maintaining airflow to maximise coverage and reduce blast time, saving time, media costs and clean-up costs.

By using high quality, engineered components the system has been designed to achieve no pressure loss from compressor to nozzle. With no air leaks every CFM from the compressor is used, meaning no wasted fuel costs.

Ensuring no pressure loss also means that hoses can be longer and the pot can be positioned further away from the area to be blasted, this is particularly important when blasting inaccessible areas such as bridges, a distinct advantage of the Elcometer pot over the competitive

pots. With many of the blast jobs being in remote areas of the country where mining, bridges and construction sites are located the increased reliability of the Elcometer pot has proven its worth.

The culmination of higher efficiency from the compressor, larger blast coverage from the nozzle and reduction in the time spent blasting, labour costs are also reduced.

The South American market has recognised the value associated with the Elcometer Blast machine offering lower overall running costs, allowing the initial extra purchase costs to be paid back in a minimal period of time, after which the full benefits can be taken for years into the future.

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DRY ABRASIVE BLASTING

by Steve Pollard, Customer Support Manager

Dry abrasive blasting is a process by which aging paint can be removed to condition the under coated material (referred to as the substrate) ready for the application of new paint. This is achieved by propelling an abrasive at high pressure on to the painted surface.

Blasting is seen in many different applications in everyday life - from restoring post boxes, classic cars or deburring components, to preparing the surfaces of ships and bridges before their new protective coatings are applied.

The concept isn't new - the blasting process traces back to a machine patented in 1870 to remove rust and paint. It was decided that hand tools such as grinders and sanders just weren't quick enough to remove paint from large areas and the blast process was born.

The Equipment

Air is supplied from a suitable compressor and this can be either connected directly to the blast pot or into an Air Distribution Manifold (ADM). The ADM acts as a large buffer of air which can be drawn off as required by an Abrasive Blast Machine (ABM). These are often used if more than one ABM is being used to blast so that air is distributed evenly to both machines.

Connected to the ABM are generally three **hoses**. The green and yellow hoses operate a **switch (dead man's handle)** controlled by the blaster to start and stop blasting, whilst the black thicker hose carries the mixture of air and abrasive.

The blaster controls the blast process by aiming the **nozzle** at the areas to be blasted and stripped of coating. It is essential the blaster wears **Personal Protective Equipment (PPE)** such as a blast helmet, suit, gloves and boots. The helmet is supplied with breathing air via an **air filter** which ensures that the blaster breathes quality and safe air.

Blasting is seen in many different applications in everyday life - from restoring post boxes and classic cars to preparing ships and bridges for new protective coatings.

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The Abrasive Blasting Process

In simple terms, a suitably chosen abrasive is poured into the top of the ABM and allowed to drop into the depressurised vessel and then the ABM is pressurised by the blaster. The abrasive falls through a control valve (grit valve) in the ABM and into an inverted 'T' shaped mixer where the high pressure compressed air propels the abrasive through the blast hose and emits it with high speed at the nozzle.

The abrasive blasting process requires hardened abrasive to impact the surface with high energy in order to prepare it for a subsequent coating. The preparation of the surface is to remove mill scale from bare steel or old coatings. An essential part of this process is to control the parameters so that a suitable profile is created on the substrate. A suitable profile offers a key for the new paint to adhere to, but if it is too big it becomes costly in paint whilst it being too small prevents the paint from adhering and creating a protective coating.

So how does the blaster know what the optimum profile should be for the paint system? This is published on the paint technical data sheet and then the correct abrasive is chosen and the blast system set up accordingly.

Setting up the Blast System

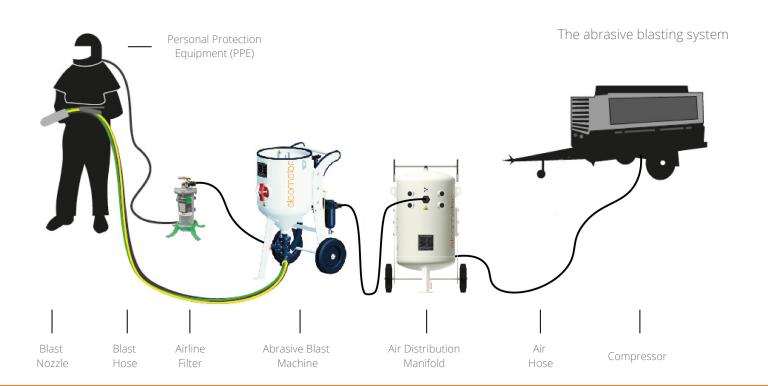
To remove protective coatings and create a profile ideally a pressure of 7 bar is needed at the nozzle.

In order to achieve this, the system needs to be balanced with careful choices made on the compressor capacity, pressure and the nozzle size.

The ideal scenario is to have a large blast nozzle to blast the surface quicker, however there are many design considerations - these will be discussed in future articles.

Elcometer have designed a series of ABM's that allow blasters to use larger nozzles and achieve efficient blast systems.

With carefully designed blast systems, the blaster can easily and quickly remove aging coatings ready for the new protective coating to be applied and the structure can be returned to service in good time.





Manufacturers have to ensure that there is consistency in meeting the designed engineering requirements.

Gloss Limit Standards

by Chris Heron, Customer Support, UK

Regardless of the gloss level of the surface of a product, the manufacturer has to ensure that there is consistency in meeting the designed engineering requirements. For a product of high gloss, such as a motor vehicle, customer's perception of uniform gloss throughout the car body is critical, whereas for military vehicles it would be more beneficial to have a matt finish to avoid detection, For this reason, quality control requires a high degree of accuracy.

Gloss limit standards are acceptable tolerance levels as defined by the user allowing them to compare readings to pre-defined values or approved samples (standards) this allows the user to ensure that the product and parts have consistency, on a car production line for example.



Using the Elcometer 480 Glossmeter, you can save and store up to 40 different limit standards that consist of the nominal or target value that is required for readings and differential, low and high limits for gloss and haze. This then allows the user to take a reading that they deem as "good" and ensure the following samples meet the same standard.

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CONCEPT TO CUSTOMER

by Paul King, Director of R&D, UK

R&D at Elcometer is all about developing products. Innovation and research are, in the final analysis, all critical to R&D success, but in the end, it is the products we develop for the market that bring that success and motivate us all. And the story that goes into developing products is not just about R&D. It is an activity that brings many teams together across the company.

From manufacturing to purchasing, and from tech support to sales and product management, getting products from concept to the customer is the fruition of a cross-business collaborative effort.

The ongoing pandemic has of course been a challenge to us all. Many of us in the department here at Elcometer Manchester are working from home more often than not and spending more time than ever in front of screens. So when we see prototypes in our hands and the first operations of devices functioning after long periods of virtual design, it is a delight to see. It is the physical products that are the tangible reward for so much introspection.

The pandemic has even brought new opportunities to the R&D team. Forced to work more remotely and virtually than ever before, there has been a need to create collaborative tools and ways of working that have made us more agile, and these will benefit us long into the future.

To meet the business demands and strategy we are recruiting some more staff this year. To strengthen the software engineering effort, we had two new starters in July – Huw Harris and Atif Maqsood.

Other news, Mike Shanahan, a Senior
Design Engineer, has been with the
company for 25 years, so
congratulations to Mike on reaching that
milestone on the 1st July. And Simon
Coulton, one of our Product
Development Managers, tied the knot
and wed his partner Sofie at the end of
June, so best wishes to the happy couple!

Getting products from concept to the customer is the fruition of a cross-business collaborative effort.



£1.5 MILLION INVESTMENT

by Barry Holmes, Operations Director

In 2014 Elcometer Limited opened its new 19,865 sq. ft. purpose built machine shop extension. Since then there has been over £1.5 million of further investment including new, state of the art, computer numerically controlled (CNC) lathes, milling machines, a grinder and a wire eroder to complement the existing machines.

The latest addition to the suite of CNC machines, is a Citizen L20-XII (pictured above) sliding head lathe. This lathe features low frequency vibration (LFV) technology, meaning the machine servos are vibrated in the axial direction which causes the swarf to take the form of fine chips rather than ribbons. This greatly reduces the risk of entanglement which can cause damage to the machined component or accelerated tool wear.

The technology also allows us to run the lathe unattended as there's no need to continually remove entangled swarf. By investing in the latest machining technologies we can better control quality and cost, both of which are extremely important.

We also continue to develop our own, in-house, automated solutions. We've recently made upgrades to the foil robotic cell to increase capacity.

The Staubli robot picks foils from preloaded stacks, which are then blown with ionized air to remove static. Next, they are transferred to a precision ground vacuum table, here the foil thickness is measured at three different positions to ensure consistency. The measurement is performed by a SMAC linear actuator with a measurement resolution of 0.1µm and an accuracy of better than 1µm. The foils are then labelled with the measurement result in both microns and mils and a unique tracking ID. The robot then picks up the foil and places it in a set.

The robot manufacturer was so impressed with our application and implementation that they asked if they could produce a case study on it.

Since opening the doors to our purpose-built machine shop extension in 2014, we have invested a further £1.5 million on new machinery.

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QUALITY FROM START TO FINISH

by Scott McAteer, Group Quality Manager, UK

Elcometer's commitment to quality is reflected in our ISO 9001 Quality and ISO 14001 Environmental certifications. It is the Company philosophy to integrate quality into all aspects of the product - whether it be the initial product design or in our commitment to our customers.

Elcometer is committed to reducing its impact on the environment, including product manufacture, packaging, catalogue production and our waste management. All our products are lead and mercury free and, where required, CE and RoHS compliant.

Elcometer Limited's purpose is to ensure that we reflect our values and high standards for quality in the products we manufacture and the services we provide, as this is essential to our continued growth and success.

By aligning our quality objectives for product, sales and service performance and delivery, we are committed to exceed the expectations of our customers and to meet our statutory, regulatory or legislative requirements.

With focus on continually improving the effectiveness of the Quality Management System, Elcometer will maintain these high-quality standards as we design, manufacture and test our products by the most efficient means possible.

Quality is part of our culture, it's what sets us apart from everybody else.

OUR VALUES

by Nicki Campbell, Group HR Director

Having clear company values helps to ensure that we are all working towards the same goals. They also support the company's vision and shape its culture. Our Core values are:

- Pride We are proud of where we work and the work we do
- Ownership We take responsibility for what we do and how we do it
- **Ethics** We treat our customers, suppliers and colleagues fairly and with respect
- Achievement We believe that just enough is not enough
- **Focus** We know that if it is not acceptable to us, it is not acceptable to our customers
- **Initiative** We are encouraged to identify opportunities for improvement and offer solutions

During the last 12-18 months, particularly with the pressures of the pandemic, we have seen some fantastic examples of where individuals and teams have demonstrated these values and gone over and above to ensure the needs of our customers remain at the heart of what we do.

There are so many examples of this, it would be very difficult to single anyone out. Below, therefore, are some broader examples of how our teams have responded to these challenges and supported the business during this difficult time.

- Employees who had to remain on-site at our Production facility in Manchester, particularly at the start of the pandemic, when the situation was very uncertain and concerning. In doing so they showed great resilience and determination to ensure our products were still produced and supplied, with minimal interruption, giving us a clear competitive edge.
- Embracing new working practices on a worldwide basis all our office-based teams needed to adapt quickly to new ways of working; learning to adjust to working from home; juggling home and work constraints and adapting to technological shifts to ensure it was business as usual, so far as practical.
- Furloughed employees understood and responded to the critical need to adapt to the changing business needs and reduce our resourcing for a temporary period. This helped to sustain our success during one of the most challenging periods in our business history.

Whichever group individuals found themselves in, we recognise that for some this has been a very challenging and stressful time, so we would like to thank them for their resilience and support in helping the business to continue to operate during the pandemic.



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ELCOMETER

in the community

Earlier this year in May we had the devastating news of the Covid-19 surge in India, it was the second wave of the virus, there were approximately 400,000 positive cases a day in India, and tragically around 4,000 people were losing their lives daily to the coronavirus. There was a lack of hospital beds, medical supplies, and oxygen available.

Minaxi Patel, Production Operative, currently working on our CTG line in Manchester, asked if we could, as a business, raise money to support the BAPS Swaminarayan Sanstha (UK) who in turn raise funds for India. This is a cause that is very close to Minaxi, as she has family and friends in India. Minaxi arranged for donation buckets to be placed in the office/factory and notices around the building to see if anyone would like to make a donation to the Covid-19 Emergency Appeal in India.

Over four days, supported by Elcometer, we raised and donated a total of £1000.00

A big thank you to everyone who made contributions to the cause!

Our contribution will help the ongoing efforts of BAPS Swaminarayan Sanstha in India in providing critical health care and support to the needy and vulnerable suffering during the current coronavirus pandemic.

We are thinking of our colleagues, family, and friends across the World who have been, and continue to be affected by the pandemic.









Poster Competition

Last year we ran a competition with our local schools and our Elcometer family members to design and create an eye-catching poster to encourage employees to save energy and reduce waste.

We had some amazing designs sent into us and selected 4 winners across the two age categories; Reception - Year 2 pupils and Year 3 - Year 6 pupils.

3rd Prize went to Tomasz Buczek age 11 2nd Prize joint winners, Archie Biddle age 5 and Ruby and Alyssa (from Greenside Primary school) 1st Prize Poppy Biddle age 10

The winning designs will be distributed and displayed at Elcometer's facilities around the globe and featured on Elcometer's social media pages and website, which reach over 600,000 people per year.

A big thank you to all the children (and parents) who took part in the competition. We have some budding young artists!

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AN INTERVIEW WITH...

David Barnes, Group Technical Manager

How have you managed to continue supporting our customers during the lockdown?

Firstly hats off to those of you who have continued to work around the world and particularly in our factory in the UK, ensuring that we will have jobs to come back to, fortunately, the structure Steve, Chris and I put in place in mid-March has enabled us to support our customers and end-users to our usual levels remotely since that fateful day March 23rd 2020 when we were instructed to work from home for the foreseeable future.

It had been on the cards that at some point we would be working from home and I had asked Chris to arrange for each of us to have a kit of gauges so that we would be able to troubleshoot customer issues remotely. This was done and so having packed the vulnerable Mr Pollard off home a week earlier Chris and I joined him as remote workers on Tuesday 24th March.

So you each had a full set of Elcometer gauges at home?

No, it wasn't possible for each of us to have one of every gauge, but we all have an Elcometer 319, 456 and 224 and the other gauges had been split between us. It was at this point that I realised I had been given the gauges the other two didn't fancy!

Nobody knew how this pandemic was going to unfold, whether we would have work to do and how long we would be at home, 67 weeks later and we are still primarily stuck at home. We decided to take the opportunity, whilst things became a little quieter as the world learned to operate in the new norm, to finish some ongoing projects that had been hanging around for too long.

Chris, together with the recently retired Andy Foo, completed the "Orange Book" technical reference book for the Industrial and Physical test equipment. Steve took the opportunity to re-vamp the training we offer to both Elcometer and distributors. This may need to become a more distance learning piece given any ongoing travel restrictions that may follow from this prolonged period of lockdown.



And you?

It was decided that a series of webinars would be written to keep Elcometer engaged with our customers and I was heavily involved with the commercial team in planning, writing and recording these sessions. This involved writing presentations for Marketing to turn into slideshows, recording the voiceover on my mobile phone to be stitched into the presentation trying to make the presentations seem as "live" as possible. Credit to those who made my writings and ramblings make some sort of sense.

Many of you may not realise that a fair chunk of my work involves me working with outside organisations within the coatings industry representing Elcometer and furthering our involvement in the writing of standards and industry methods to ensure the best use of our products. This led me to being invited by PPG, one of the world's leading paint manufacturers, to give a live webinar to their technical staff located across the USA. It's a little surreal to be sitting in your dining room talking live to approx. 150 people some 3-5000 miles away about the best way to measure surface profile!

You work quite a lot with Standards Development Organisations, has this continued during the pandemic?

Some of you may recall the announcements on our social media channels about my appointment as Vice-Chair of the NACE Standards Board. NACE has now merged with SSPC, the other major organisation within our industry and a new Standards Committee has been formed which I sit on. This has led to many hours in Zoom meetings trying to achieve a smooth merger and the work continues, on USA time, unfortunately.

Anything relevant to Elcometer in the standards world at present?

The main focus for me on standards at the moment is trying to have the Saturated Filter Paper method written into ISO 8502, the major global Surface Cleanliness standard. This would be a huge boost for gauges similar to the Elcometer 130, many customers are pushing for this method to be in the standard which would enable them to carry out the tests more quickly and efficiently.

Surface cleanliness is a crucial aspect of the protective coating process. Primarily we are looking



David (back, left) with the AMPP's Standards Committee

for any soluble salts that may be present on the surface to be coated. Salt, as you may have noticed in your salt cellar at home, attracts moisture and corrosion can be accelerated by the presence of moisture so minimising any salt and hence moisture on a surface is preferable.

Paint specifications will give a maximum volume of salt allowable on the surface and the Elcometer 130, Bresle patches, The Elcometer 138 and CSN kits are some of the best ways to test for it.



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At Elcometer, we are very keen to support our growth plans through the development and promotion of internal talent

Development and Promotion of Internal Talent

We are very keen to support our growth plans through the development and promotion of internal talent. We are therefore very pleased to announce the following role changes and promotions. These changes will also help to support broader succession planning as the business continues to grow.



- Sonja Kokhan Export Sales Executive to Team Leader Customer Service (Distribution)
- Paul Ellis Machine Shop Labourer to Grinding Apprentice
- Jack Wilson Blasting Support Operative to Machine Shop Labourer
- Laura Pressdee HR Assistant to HR Advisor
- Elizabeth Rimmer Business Systems Manager to IT & Business Systems Manager
- David Skade Production Operative to Repairs Technician
- **Stephen Mein** Embedded Software Engineer to Senior Embedded Software Engineer
- Sue Hallam Stores Operative to Temporary Service Administrator

We are also pleased to announce that **Ankur Tiwari** has been promoted to the position of General Manager for Elcometer's office in Dubai, UAE.



At any point in time, around 10% of employees within Operations are participating in training programmes with external providers.

A Company is only as good as its people

At Elcometer we recognise the great importance of investment in our people. at any point in time, around 10% of employees within Operations are participating in training programmes with external providers. These programmes may be of a technical nature such as electronic or mechanical engineering or process improvement. There are others who are involved in management and supervision training.



The most recent members of our team to complete an external training program are **Morgan Perkins** and **Chris Pearson** who work in our Blast Fabrication team. They both undertook a three-year apprenticeship for level 3 multi-positional welding which was assessed by the Welding Institute (TWI). They both passed with merit and are now qualified to ISO 9606-1 and ASME IX standards. This was a very demanding course and we congratulate them on their excellent achievements.

Other members of our team are approaching the end of their courses and we will be glad to report on their progress in future editions of the newsletter.

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WHO'S WHO?

Welcome to Team Elcometer!

To support the business strategy and to reflect the growing sales in 2021 we have been actively recruiting in the first six months of the year.

So far, we have filled 22 positions, including 12 new roles. This demonstrates our commitment to making sure we have the right level of resource to meet our sales targets and bring in new talent to support our growth strategies.

We would like to formally welcome the following new starters who have joined the business so far this year:

- Production Operatives Hayley Yates, Nathan Johnson, Lisa Kirkland, Rebecca McDonald, Paulina Hajdus
- Stores Operatives Kyle Howard, Paul Seddon
- Regional Sales Manager Alastair Kearton
- Global Divisional Manager, Spray Equipment Peter Bloem
- Automotive Account Manager Mark Vickery
- Logistics Technical Lead Kelly-Marie Perry
- Application Software Engineer Gary Walton
- Machine Shop Deburrer Michael Roscoe
- Internal Sales Executive Freya Ashworth
- Semi-Skilled Machine Operative Carlo Mario Dalli
- Cleaning Operative Lisa Ikin
- Facilities Assistant Wayne Jones
- Embedded Software Engineers Atif Maqsood & Huw Harris







VACANCIES

We are still actively recruiting and currently advertising a number of vacancies on our website including Project Manager, Marketing Campaign Executive and Customer Support Engineer Apprentice.

Visit **elcometer.com/careers** for more information.





5 NEW CATALOGUES IN DEVELOPMENT
2 NEW WEBSITES PROJECTS
26% JUMP IN VISITORS ON ELCOMETER.COM IN JUNE

ndt inspection equipment

Here's what you've missed

by Catherine Lund-Barker, Marketing Manager

You may wonder what on earth Marketing have been up to since we have been working offsite - well, we have been busier than ever!

inspection equipment

As the business has developed through organic growth and acquisition we have started to split up our resource to focus on the different business divisions, so we can now blast it, spray it, inspect it and test it. We have been working on five new catalogues to meet the market requirements:

- Blast Equipment
- Refinishing & Bodyshop Spray Equipment
- Protective Coatings Inspection Equipment
- Industrial Finishing & PTE Inspection Equipment
- Ultrasonic NDT Equipment

With over 1,000 pages to be translated and checked in eight different languages, product catalogues are only part of the story. At the same time it is essential that we modernise and split out our website to support the new business divisions.

Our website, elcometer.com creates awareness and generates enquiries for our offices and distributors around the world. Making a 26% increase on June 2020, last month, in June 2021, elcometer.com had the highest number of unique visitors – ever.

This is why we are in the process of redeveloping our website, covering over 3,800 product codes, in eight different languages, promoting all the business divisions and, for the first time ever, offering an e-commerce platform for bodyshop spray equipment in the UK.

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5,000 LINKEDIN FOLLOWERS
1 MILLION YOUTUBE VIEWS
1 VERY BUSY MARKETING TEAM

Keeping it social!

by Catherine Lund-Barker, Marketing Manager

It's not just our website that has seen substantial growth over lockdown, our main YouTube channel broke the 1 million public views mark in June, growing to over 7,200 subscribers - almost seven times more than our nearest coatings inspection competitor.

In April our main LinkedIn channel reached 5,000 followers and in June our Facebook hit 1,000 followers.

In January we started testing Instagram and Twitter social media platforms.

To support the different business divisions we have split out both Blast and NDT equipment to have their own dedicated YouTube and LinkedIn channels which are showing consistent growth.

We have also created the bodyshop spray equipment channels - Sagola by Elcometer - to actively promote our bodyshop spray equipment site which was launched in May.

In between all this, with the help of our Commercial and Technical colleagues, we have introduced a series of monthly webinars, reaching over 2,300 customers with dedicated product/industry training.

We are working hard to support the business but we could do with your help:

Please follow our social media channels and share our posts - the more we share, the more people will see us.

PERFORMANCE REVIEW

COUNTING THE COST OF POOR OUALITY

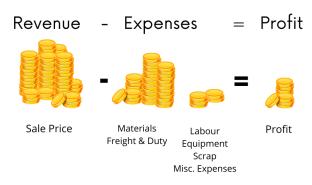
Cost of Poor Quality (COPQ). What is this?

COPQ is defined as the costs associated with providing poor quality products or services. There are three categories:

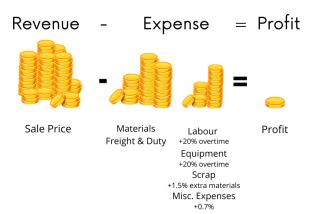
- 1. Appraisal costs are costs incurred to determine the degree of conformance to quality requirements.
- 2. Internal failure costs are costs associated with defects found before the customer receives the product or service.
- 3. External failure costs are costs associated with defects found after the customer receives the product or service.

This includes elements we can measure: scrap, rework, warranty, inspections, complaints and repairs.

Profit: if we do well



If things don't go according to plan



Elcometer is always looking to improve - if you have any improvement suggestions please direct them to quality@elcometer.com

We can all influence how successful or not Elcometer is and can be.





elcometes