

Welcome

Firstly we would like to welcome everybody to our new 6 monthly news letter and thank you all for taking the time to have a look.

2010 has been a difficult year for everybody with the economy in poor condition and tight margins meaning everyone has been trying to save costs.

Pressure for cost savings has led some clients to look elsewhere at alternative suppliers offering alternative deals which on the face of it have been impossible to turn down. Unfortunately, some of the companies offering these "too good to be true deals" have not been able to perform, resulting in huge problems for some sites.

Over the last 12 months WTS has been asked to help out several sites having experienced poor performance from alternative suppliers problems such as:

- Lack of genuine or recognised Qualifications for Technicians carrying out inspections
- Inability to comply with Health and Safety regulations
- Inspection techniques not suitable for the task in hand
- Unable to meet agreed deadlines.
- Unable to contact suppliers when required.

However, considering the above, WTS has managed to continue to grow at a rate of 8% which is fantastic considering the current economy. We have also invested heavily in new equipment and infrastructure to allow us to continue our growth and excellent customer service.

We would like to send a big thank you to all our customers who have supported us over the last 12 months and look forward to being of service to you all in 2011 and beyond.

Spray Dryer Inspection

WTS has developed a new state of the art inspection platform for use in Spray Dryers. It has many advantages over traditional scaffolding methods, such as:



- No risk of damage to the Spray Dryer from Scaffolding poles
- No risk of splinters or debris from wooden planks
- No blind spots below scaffold pole supports which have not been tested
- Less downtime
- Cost savings.

Meeting British and European Standards

Our new access platform, as far as we are aware, is the only mobile access platform for spray dryer inspection currently in use to meet the British and European Standards for Suspended Access Equipment in accordance with BS-EN 1808.

We have a wealth of experience in spray dryer inspection of over 15 years, and currently test approximately 30 spray dryers per year throughout Europe.

All inspections are carried out by highly trained and qualified personnel. All technicians are certified to PCN level 2 or 3

or SNT-TC-1A level 2 or 3. Both of these internationally recognised certification schemes comply with EN 473 – the European Standard for the Qualification and Certification of NDT personnel.

Continued overleaf...

Welding repair on Spray Dryer



WTS Trial

WTS recently conducted a trial to evaluate both processes. This was carried out on a 10 metre diameter Spray Dryer. The Liquid Penetrant inspection was carried out using WTS's own bio-degradable Fluorescent Penetrant and conducted by Quality Director, Richard Rossiter. The Eddy Current examination was carried out by Quality Manager Aaron Wicks utilising the Array Probe Technique, for the examination of the circumference and vertical weld seams where the surface was flat, and the Bridge Probe Technique, for the top and bottom weld connections where the surface was not flat. The recommended scanning speeds, when carried out by suitably certified personnel, is array 20 mm per second which only needs to be carried out in one direction. For the Bridge Probe, 150 mm per second but in four different directions to cover all defect orientations.

Note: It is not possible to use the Array Probe Technique unless the surface is completely flat to enable contact of all the probes.

Timescales: Liquid Penetrant inspection was carried out on 100% of the internal surface including explosion doors and attachments in 4 hours. Eddy current was carried out on the circular and vertical seams in 7 hours.

Defects located: Liquid Penetrant inspection – 12 off crack like indications between 3 - 40 mm in length. 10 off gas pores.

Eddy Current examination – 8 off crack like indications between 8 - 40 mm in length. No gas pores located.

Mr Wicks explained the reasons for the differing results were that his only option was to use a Bridge Probe on the top and bottom shell to end plate welds. It is not possible to locate defects less than 5 mm when using this probe. This is because the probe contains two coils which are 5 mm apart, both of which need to be in contact



What's best for you

There are two NDT processes that can be used for the internal inspection of spray dryers, vats and tanks –

- Liquid Penetrant inspection
- Eddy Current examination and derivatives.

There are of course advantages and disadvantages of both processes.

with a defect to confirm its existence. Therefore it is not feasible to locate defects of less than 5 mm.

Final Conclusion: The Liquid Penetrant process was far superior. It located more defects, in a far shorter time, and the whole internal surface of the dryer was examined. Clearly the Eddy Current process, when utilising the Bridge Probe Technique, is not reliable for locating smaller defects, which in the liquid food industry, could be critical. As the Bridge Probe Technique is the only option for shell to end plate welds and outlets, which is where the majority of cracks appear, we as a quality orientated company recommend Liquid Penetrant Inspection for the inspection of spray dryers, vats and tanks.

For more information on our Spray Dryer testing, please visit our website; www.wts-int.com

New Service Manager

As of the 1st of October James Kurpyta has been appointed as service manager for PHE Servicing and Spares.

Jim has been with WTS since 2005 in the roll of Technician heavily involved in Heat Exchanger testing and has a great deal of experience in the food and drink industry.

We would all like to wish Jim success in his new role. Jim can be contacted on the following.

Office: 0844 875 1245

Mobile: 07734 174227

Email: jjm@wts-int.com



Plate Heat Exchanger Servicing & Spares

After many years of developing our knowledge of plate heat exchangers WTS is now able to offer a complete Service Package as well as Spare Parts for all makes and models of heat exchangers.

We have invested heavily in our service facilities installing the latest technology in both chemical cleaning and dye penetrant application and inspection techniques. This gives us the most up to date facility in the UK at this time.



WTS in-house service centre

Contact: Western Technical Services, Unit 29 Blake Mill Business Park, Brue Avenue, Bridgwater, Somerset TA6 5LT United Kingdom

Tel: 0844 875 1245 **Fax:** 0844 875 1250 **Email:** info@wts-int.com **Web:** www.wts-int.com