

Recycling conversations

Ross Matthews visited the RWM Show in September and talked with solution suppliers about new technology and trends

People seem to want to recycle despite the recession according to the views of many of the 500 exhibitors at the Recycling & Waste Management exhibition (RWM 09) held during September.

The initial attendance figures appear to back this up with an 8% increase on last year's record figure. A total of 9,781 people (subject to audit) visited RWM 09 at the Birmingham NEC from 15 to 17 September.

"RWM has grown consistently over the last five years and against the background of a general economic downturn we still saw substantially more visitors and exhibitors than ever this year," said event director Gerry Sherwood. "There was a real buzz about this year's show, which with the new Korean pavilion had a growing international flavour among exhibitors and visitors alike. Up and down the show floor record numbers had clearly come to RWM to do business."

Inside the exhibition halls were three free seminar theatres. Among the most popular presentations were from Miller Homes and Wates in the construction sector, and those covering the subjects of anaerobic digestion, energy from waste and carbon reduction.

Among the business being done, JCB announced the sale of two new high specification machines on show in the outdoor area to Newcastle-based Graphite Resources Limited, which will use them for handling waste at its £50 million Derwenthaugh EcoParc facility on the banks of the River Tyne. The vehicles were 456ZX wheeled loading shovel and JCB JS220LC tracked excavator complete with new JCB SG Selector Grab attachment.

Corin Wright, sales and marketing manager at JMC Recycling was happy with the success of their stand: "We took orders for 24 of our metal recycling machines including all of our display models. That's more than last year and much more than we were expecting in the current climate. We are also getting more orders from our sales follow up."

"We've been absolutely inundated," said Fraser Macintyre, national sales manager at Recresco. Hub-4 had its own stand at the show and between talking to visitors it toured the exhibition to talk to a number of other exhibitors to hear about the latest technologies and trends. In this special review, five exhibitors tell Hub readers the news from their stand at RWM 09.

Jonathan Fallon, Sales Director at Kaizen Recycling

Kaizen Recycling specialises in all types of waste markets and in the UK represents three partners: Bulk Handling Systems, Eggersmann Anlagenbau and Haasa Environmental Consulting. BHS focuses on dry recyclables or MRFs. Eggersmann is a plant building company and provides biological treatment plants for MBT. The company has a large share of the European and global market for preprocessing and post processing bio-drying systems and Anaerobic Digestion (AD) plants. Haasa supplies Wet Anaerobic Digestion Systems.

Eggersmann and Haasa are supplying three of the five MBT systems for the Greater Manchester PFI contract as part of the Viridor Laing consortium. These 100,000 tpa mechanical systems are for pre-treating domestic waste for the Haasa wet Anaerobic Digestion System.

Kaizen, however, is also focusing on commercial and industrial and Construction and Demolition MRFs, which we've had a lot of experience in the last 4 years. Recently we secured a contract with Viridor Waste Management have awarded Eggersmann Anlagenbau to build a new Commercial & Industrial Materials Recycling Facility (MRF) at their existing Salmon Pastures site in Sheffield. The system is capable of processing over 150,000 tpa of

commercial and industrial waste, recovering ferrous, non-ferrous, inert fines, stone, wood, dense plastics and RDF from the mixed waste input. Using a combination of shredders, magnets, screens, air separation, eddy current separators and optical sorting equipment the system is highly automated to ensure maximum separation efficiency and purity levels.

The system, which will be fully operational by January 2010, will maximise the recycling from this kind of waste stream that hasn't been handled so well in the past. So this is a key role for Eggersmann on the C&I type of materials. BHS is very strong in the commingled market in the US where disc screen technology is used predominantly over trommel type systems. The main advantage of the BHS screen is the inline design: it produces high tonnages with minimal pickers and you get minimal downtime for maintenance.

Kaizen's biggest recent news is that it has completed the SCA Recycling 120,000 tpa MRF, which is now fully operational. It is working fantastically, living up to all expectations. The SCA plant is the first major opportunity to demonstrate what we can do as a company from a very varied commingled stream.

Also of interest are some new technologies being introduced at RWM, including a new hybrid system that Eggersmann is developing alongside Haasa where they are combining the bio-drying

tunnels with a wet AD process and targeting specific fractions of material to go to specific routes that are more beneficial to the recovery and generation of energy.

On the key trends, the BHS side of the business is seeing a big emphasis on quality going through the MRFs. A lot of the MRFs that have been designed over the last 5-10 years haven't been designed for the collection methods that have been adopted in the UK, especially with the inclusion of glass on many contracts and a lot of the existing systems out there are being flooded because the collections have increased dramatically. They have to deal with anything that's thrown at them but we know that we can provide high capacities from the systems we produce to a reasonable budget.

Quality is another strong trend. You need a shelf life of 15 years from the system so long as it is maintained and serviced at regular intervals. We work with a specialised service company in the UK that services all our systems and stocks spares, which is very important stage in our development.

The main focus at RWM 09 from Kaizen is to bring a combination of solutions from various industries. We have a lot of expertise in these industries and work with companies that have 30-40 years experience in providing proven MRFs in the UK and Europe and globally.

Paul Fears, Managing Director of Eriez

We are trying to take recycling to the next stage. Everybody can separate metals of a larger size of, say, +25 mm but we are looking to take that down to 3, 4 or 5 mm and also we're also looking at difficult materials such as stainless steels. So we have brand new pieces of kit on the stand.

The INOX SREX separator is basically a magnetic drum but we've changed the magnetic configuration in such a way that the permanent magnetic field generated is higher than anything we supply - and I do believe it's the highest in the World. Originally developed in Japan it's going to offer the end customer something that's unique in terms of separation performance.

The eddy current separator has been around since the mid-1980s and you will see several around the RWM show. What we have here though is a separator that separates at 3-5 mm. We can do it effectively and very cleanly. There are a lot of stockpiles around that have maybe 5-10% aluminium/copper in them - we can actually recover this now. Ironically, although this year has been a tough one for everybody, it has been one of our best years for recycling in the UK ever. What we've seen is with the launch of the RevX Eddy Current Separator at RWM last year, we are offering a cost effective machine that is suiting not only the economics of the market but also its separation demands.



People have to make money out of their waste and what we are looking at is giving them a solution that can actually generate cash. It's a tough market and metals are not at the highest prices they have ever been so therefore you have to be more effective, more efficient. And that's what we are trying to give them, technology that will give them a solution?

We invited nearly every recycling company in the UK to come to the RWM show with a sample and carry out a test; people have been amazed at what they can see our machine doing for their materials.

Simon Ingleby Managing Partner of Alfatek UK

We are telling people about our Windshifter, which is the core machine in the plants that we build. AlfaTek is the supplier of Redox recycling equipment such as the Windshifter, which separates and cleans incinerator and metal slags. We can see fewer big turnkey plants being built this year because of the finance situation but we can retrofit this technology in existing plants to enhance the sorting lines that they might have already.

Everybody needs to look at improving their waste streams and getting cleaner recycling to refine their products.

I've been visiting sites in the UK to see a lot of new technologies, looking at possible partnering operations with the different technologies that are out there such as waste to energy and autoclaving. People are finding it difficult to borrow money to go ahead with big projects even though they are keen to go ahead with those projects so they are having to really do a phased development spending as little as they can but to maintain a good quality because in the market sectors taking the recycled materials, they are expecting better quality all the time irrespective of the current financial trends so people are having to improve the quality of recycled materials coming off the plants.

Pat McGeary, Managing Director of Blue

This year in particular at RWM we are focusing on the biomass sector. At the moment the big drive is to build these small megawatt power stations around the country and the big driver here is the wood. Because the amount of waste wood that's going to be available will be limited there's a big drive from Blue looking at MSW and converting it for biomass. This involves a lot from Blue in terms of becoming solution providers - offering turnkey systems right down to drying MSW to put it into RWF, which will eventually lead to 100% no landfill. It's a slow burn sector but we have allocated quite a lot of resources to it internally. Having identified a demand for this so we have allocated some new engineers and investment towards it,

it will be a 2-3 year project for some of these plans but we are very excited about it.

C&I, C&D, mobile shredders and trommels remain our core business but the big drive has to be towards biomass, AD, MSW, MBT, handling food waste and developing other sectors that are becoming very much 'live' now.

We were known primarily as a crushing and screening company five years ago. That all changed and we are now offering full turnkey systems right from the primary shredder at the front end to the baling system at the back end and optical sorting through the non-ferrous and ferrous sorting systems.

There has been a recession throughout the economy this year but we have actually held up quite well and that has come from our move into different sectors.

The number one driver for us is legislation: People will have to recycle as landfill will be history going forward and we feel we are well placed to offer the customer a solution.

Sascha Kloft, Sales Manager of Haas Recycling Systems

We are focusing on the recycling companies that are looking at mobile shredders and carrying out material and waste handling as well as turnkey wood recycling installations. Installations involve pre-shredding, to the screening and hammer milling - quite a small sector but one that we are very strong in - and small installations for pelleting, which is on the increase, as well as the mobile equipment we are showing on our stand.

We have quite a number of installations in the UK, involving 10-15 mobile units. We have turnkey installations such as the biggest wood recycling installation in Europe that is working in Manchester, turning out about 60-80 tph.

On our mobile shredder we are trying to cut down noise levels to a minimum with some special systems, as well as achieving fuel savings from the machine without loss of production. This is a big thing, especially for the mobile machines, because everybody is looking at costs at the moment and you need more arguments to replace machines so they are looking at options that they can get better with.

The other big focus is on pellets, more particularly the wood handling part of the pelleting installations - the whole front end. Due to the fact that we offer turnkey solutions in this specialist field, we do not have a lot of competition in turnkey solutions. We have a large order in Belgium for a big wood recycling installation and a big pelleting installation in Russia that we are going to build early next year and a further plant in Belgium that will be running at the end of October.

The pelleting sector is growing - everybody is talking about it. There are not many people facilitating this in a proper way because there are a lot of factors involved to put up a complete pelleting system. This makes business good for us even during hard times.

A podcast with interviews from the people featured in this review and others at RWM 09 can be found at www.hub-4.com RWM 10 takes place from 14 to 16 September 2010 at the Birmingham NEC.

