

GLOBAL RECYCLING SOLUTIONS

Volvo Construction Equipment 11-12/2008



MORE CARE. BUILT IN.



LET'S TALK RUBBISH

In mid-August 2008, Ian Longdon, Area Business Manager at the Warrington branch of Volvo CE Ltd., handed over a second EC210C crawler excavator with a hydraulically elevating cab to James Wheeldon, Managing Director of Wheeldon Brothers Waste Ltd. in Bury, a suburb of Manchester.

Both crawler excavators, weighing around 23 tonnes, are pre-sorting and loading mixed waste into a trommel on two different sites. They are assisted by a Volvo L120E wheel loader, which provides useful services in the transport and compaction of the waste.

Founded in 1965, Wheeldon Brothers Waste Ltd. today employs 55 staff. James Wheeldon, who is managing the company together with his brother Jonathan, can rely on an extensive vehicle fleet (20 skip lorries and trucks – of which four are Volvo FM12s). Wheeldon Brothers can assure the entire process from transport into their depot through picking, sorting and recycling.

The waste, mostly light waste such as rubbish, paper, cardboard, carton and polystyrene but also heavier waste like bricks, wood or tyres is brought in by their own fleet of skip lorries as well as from local authorities. After having being pre-sorted and loaded into the trommel using the new EC210C excavator equipped with a 1.4 tonne Demarec rotating selector grab, the waste then moves by a conveyor until it is manually picked and sorted. From there it is transported to recycling units, with paper waste being compacted, packed on site and shipped to China by container. Hazardous material such as asbestos and oil are treated in a special way.

Both the site owner and 29 year old operator Przemyslaw Rozel are really impressed with the new Volvo's performance: After having worked for several weeks with the new EC210C with its elevated cab, Mr. Rozel is more than satisfied: "Thanks to the cab lift height of two metres from the normal position, I have full visibility for pre-sorting and loading material into the trommel. Compared

with the excavator that I used before, the new Volvo makes my life not only easier but also safer."

"With the hydraulically elevating cab, I don't have to climb up the steps to the cab, which is dangerous especially when working in bad weather conditions. For safety reasons, our new Volvo is equipped with a rear view camera", he adds. "More than this, service can be done easily as I can check everything on the monitor screen in the cabin."

"Despite its elevated cab, I have a very stable excavator that is smooth and powerful at the same time. Noise level inside the Volvo cabin is very low, important as the excavator is working near to the noisy trommel", states the operator.

"When we decided to invest in a new excavator, not only after-market support and the proximity of the Volvo depot



LOCATION:

Bury (Greater Manchester), UK

MACHINES INVOLVED

Two Volvo EC210C crawler excavators with hydraulically elevating cab; L120E wheeled loader, trucks

SITE DESCRIPTION

- 36,500 m² site for transport, sorting and logistics.
- Every week around 1,700 tonnes of mixed waste (90% light, 10% heavy) are delivered in skip lorries.
- After the sorting process, more than 70% of the waste is transported for recycling.
- 15,000 tons of tyres per year are shredded and reused e.g. on horse race tracks.

at Warrington but also the reliability and experience from our existing three year old L120E and a four year old EC140B played an important role," commented James Wheeldon.

According to him, the waste industry has changed significantly during the last 10 years. "As we try to limit as much as possible the amount of waste, recycling is getting more and more important. As a result of our labour intensive picking and sorting process, more than 70% of the waste that is delivered to our depot is going to be recycled."

Mr. Wheeldon is optimistic that his company will continue to develop: "In order to increase the actual capacity of 1,700 tons of waste per week, we are now investing in a new picking and sorting line at our second depot in Oldham".

RECYCLE THIS

Volvo excavators and wheeled loaders are performing well in a demanding waste handling application in New Jersey, USA

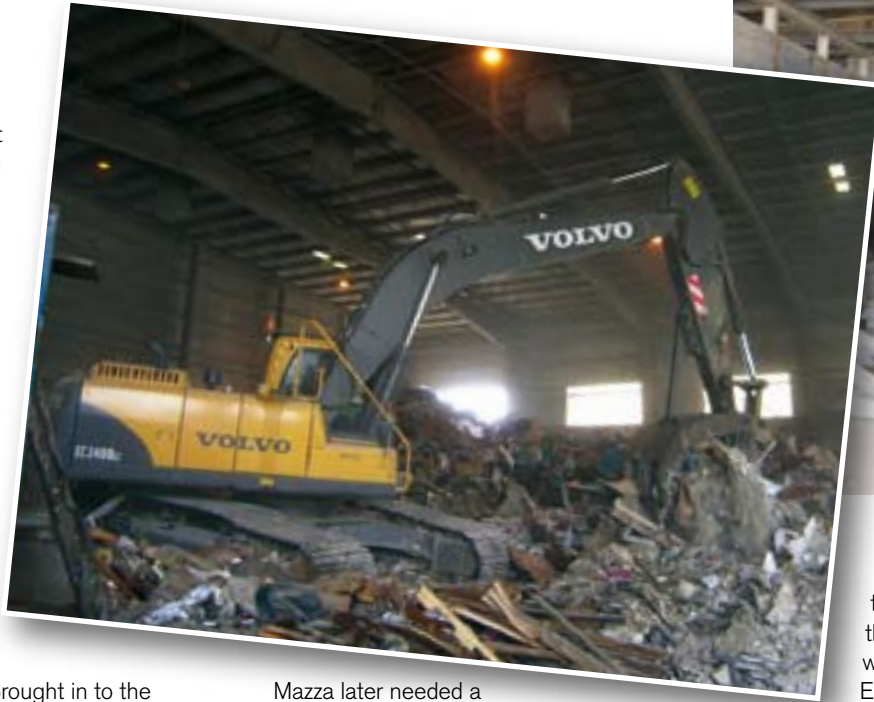
These days, everybody seems to be talking about going green. At Mazza & Sons Demolition and Recycling in Tinton Falls, New Jersey, there is no talk – just action. And it has been that way for a long time. “Mazza is a third generation company,” said Sean Collins, vice president of sales at the nearby Penn Jersey Machinery Volvo dealership that serves Mazza. “They started as a demolition and salvage business and have now diversified into a full service provider – processing everything brought in to the transfer station.”

The company’s transfer station is the hub of its recycling operation. For 10 hours a day, all types of waste arrive for processing. There, a Volvo EC240B excavator fitted with a material handling grapple feeds the waste to a waiting conveyor belt.

“Reversible fans really sold us on Volvo excavators,” said president and owner Dominick Mazza Sr. “We run them all day. There can be a lot of dust in the transfer station. Before we got the Volvo, we’d have to shut down our previous excavators every couple of hours to blow debris out of the radiator grills with a compressor because of overheating problems.”

Volvo delivered

“That’s how Mazza started using Volvo,” added Mr Collins. “I came to see Jim Mazza (Dominick’s brother and co-owner) and told him about Volvo.” He then suggested a few local contractors that had success with Volvo. Jim immediately picked up the phone and called them in front of the salesman and liked what he heard. Mazza was awaiting delivery of a new Komatsu – but they needed a machine immediately. Penn had a machine in stock equipped with a reversible fan and grapple, so Mazza agreed to rent it. The machine never came back.



Mazza later needed a wheel loader and Penn delivered a Volvo L180E immediately for a demonstration. “They were so impressed with its performance and fuel efficiency, this machine also didn’t come back,” continued Sean Collins. “Volvo’s ability to deliver machines, purpose built for their specific application, really impressed the Mazza family.”

Mazza has subsequently purchased another L180E and a second EC240B waste handler fitted with a full, factory-installed transfer station package. This includes a reversing fan, extra guarding on the side panels and swing bearing, extra filtration for the engine and cab, along with extra sealing in the compartment panels to keep debris out of the radiator and coolers. Mazza has also purchased a Volvo EC330B excavator and a Volvo A25D articulated hauler.

“When I buy a machine it needs to do its job well – everyday,” stated Mr Mazza Sr. The three things Mazza looks for in a machine are breakout force, fuel consumption and an efficient cooling system. “Our Volvos deliver breakout force at least 50% better than our previous machines. There’s no comparison on fuel efficiency. Our Volvo excavators burn 35 gallons of fuel a day while our older machines are going through 60-70 gallons a day. That’s over US\$30,000 in yearly fuel savings.”



Sort it out

Back in the transfer station the conveyor belt always keeps things moving. The mixed waste loaded by the Volvo EC240B travels up the belt into a separate sorting room where

a screen sifts out the “fines” smaller than 1.5 inch. The conveyor is elevated above large bays where workers sort out the co-mingled material by hand – designated in New Jersey as Type 13 and 13C solid waste: wood, metal, concrete, plastic, vinyl, gypsum drywall and cardboard. The remaining debris is loaded into trucks headed for landfills.

The transfer station processes between 600-1,100 tons of construction and demolition waste per day – over 200,000 tons of Type 13/13C waste per year. Of that volume Mazza recycles 25% – about 50,000 tons a year.

LOCATION

Tinton Falls, New Jersey, USA

MACHINES INVOLVED

Two Volvo EC240B, one EC330B crawler excavators, two Volvo L180E wheel loaders, one A25D ADT

DESCRIPTION OF WORK

- Mazza & Sons’ waste transfer station handles between 600-1,100 tons of construction and demolition waste per day.
- The excavators are used to feed waste conveyors prior to sorting, with 25% of the material being recycled.



NEXT GENERATION EQUIPMENT

At the beginning of September 2008, Piet W. Braam, sales manager at the Numansdorp branch of Kuiken NL, handed over a EW160C wheeled excavator with a hydraulically elevating cab to Jasper Wielemaker, managing director of Wielemaker, based in Middelburg, the capital city of the Zeeland province in the Netherlands.

This 18 tonne wheeled excavator is sorting and loading mixed waste in containers, as well as loading waste from smaller containers into bigger ones.

Since Wielemaker has a five-year contract with the local authority service ZDR (Central Cleaning Service), the new Volvo excavator is alternating between 20 different collection sites. As a consequence, it only spends on average 1½ days at each site per month. When it works at Wielemaker's main site in Middelburg, the EW160C is assisted by a Volvo L70F wheeled loader and a Volvo L50D wheeled loader.



Wielemaker bv employs 70 staff and celebrated its 90th year in business in 2006. Jasper Wielemaker - one of five managing directors besides brother Ronald, father Arno, uncle Krijn and John den Hollander (the only non-family member of the board) - is managing the company in what is now its 4th generation. He can rely on an extensive vehicle fleet of 60 trucks and well over 2,500 containers. Wielemaker handles the entire process, from transport into its depot

through picking, sorting and further transport to recycling or incineration sites.

With more than 11 years of work experience in waste projects, operator Jos de Bree is a true professional. After having now worked

with the EW160C, equipped with a 1.2 tonne Demarec grab, he is really impressed with the machine's performance.

"Thanks to the proportional control system, I can control everything with the joysticks without using the pedals. The smooth hydraulic control and the low noise level both inside and outside of the cab make the operator's life easy. Despite its elevated cab, I have a very stable and well balanced excavator. More than this, I have full visibility when loading and compacting material into the containers, thanks to the cab lift height of 2 metres from the normal position", stated

LOCATION

Middelburg (Zeeland Province), Netherlands

TASK

Waste handling

MACHINES INVOLVED

EW160C with hydraulically elevating cab; L70F, L50D

SITE DESCRIPTION

- 16,000m² site (Middelburg site) for transport, sorting and logistics.
- Twenty smaller sites for collecting and loading the waste from open bunkers into 35m³ containers.
- The new Volvo excavator handles 700 m³/200 tonnes of waste per day during an eight hour shift.

the 36 year old operator.

"When we decided to replace our previous 17 tonne Volvo EW160B after 5 years and 10,000 machine hours, not only its resale value and reliability but also serviceability played an important role," commented manager Jasper Wielemaker. "By focusing only on Volvo construction machinery, we can achieve a high level of expertise and also benefit from parts commonality. This makes servicing both easier and cheaper."

To work in this dusty, dirty environment, the new EW160C is equipped with Volvo's special waste package. This comprises a micro mesh top screen and micro mesh screens over the side opening panels to prevent ingress of dust and debris; sealing around the inside of the panel doors as a further prevention against dust entering; an engine pre-cleaner and a reversible fan. Selectable from the in-cab monitor, the fan can blow away any fine particles that enter the cooling compartment and also blow away dust and debris collected on the screens. This prevents any clogging or overheating and the need for frequent radiator changes, thus guaranteeing more machine uptime.

The waste industry has changed significantly during the last 10 years. "Waste projects have become more price sensitive. In addition, our customers are expecting fast completion while care for the environment is becoming more and more important. That's why our new Volvo EW160C with hydraulically elevated cab is also equipped with a diesel particulate filter to reduce emissions still further", commented Mr Wielemaker.

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