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GROUND CONTROL

Issue 25 Spring 2018 www.hitachicm.eu

HITACHI

Reliable solutions



Perfect partnership

- Compact equipment in Germany
- Introducing Hitachi Premium Used
- Waste recycling with ZW-6 wheel loaders

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GROUND CONTROL

Issue 25 Spring 2018 www.hitachicm.eu

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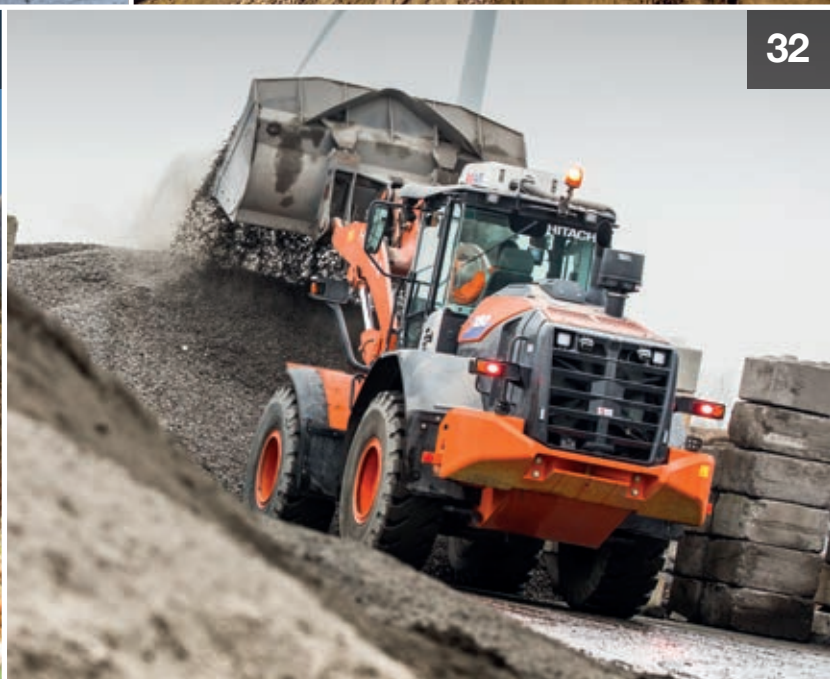
A ZW310-6 wheel loader is the driving force at a new Swiss recycling centre.



Hitachi Construction Machinery (Europe) NV, Siciliëweg 5, 1045 AT Amsterdam, The Netherlands
Telephone: +31 (0)20 44 76 700
E-mail/website: info@hitachicm.eu/www.hitachicm.eu
Editor: Hitachi Construction Machinery (Europe) NV: Ghislaine Jonker
Editorial and design: Red International Communication, www.redmarketingagency.com
Photography: Glenn Blackburn, www.glennblackburn.co.uk
Translation: UvA Talen, www.uvatalen.nl
Coordination, printing and circulation: Holzer Druck und Medien Druckerei und Zeitungsverlag GmbH + Co.KG, www.druckerei-holzer.de
Please note that images may include modifications/attachments, which were provided by the local dealer.

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NEWS



Factory restructure to meet **growing** demand

Hitachi Construction Machinery (Europe) NV (HCME) is expecting to increase production capacity at its factory in Oosterhout following a restructure. Due for completion by April 2018, this will support growing demand so that customers benefit from shortened lead times through improved operational efficiency.

Hitachi's goal for the Oosterhout factory is to supply competitive products under more flexible conditions. As such, it will become a hub for the delivery of mini and compact excavators, ranging from one- to eight-tonne capacity.

Demand in this category is set to continue. Hitachi's investment in the Oosterhout factory over the past year means that consolidating production will benefit customers through enhanced productivity and quality.

The implementation of production methods based on Kanban – a lean manufacturing system aimed at improving overall efficiency – is set to reduce lead times through more streamlined workflows. This will also be supported by the addition of a new distribution centre.

To facilitate the consolidation of mini and compact excavator production at Oosterhout, assembly of Hitachi's special application machines (including demolition, super long front and telescopic arm excavators) will transfer to the Amsterdam factory.

"The main objective of the factory restructure is to increase production efficiency and performance in response to growing demand," says HCME's Director Production and Procurement, Kazutoshi Yoshioka.

"This is one of the many steps we are taking to meet our customers' needs. I am confident that our competitive position in the market will be enhanced as a result, so that we can continue to be relied upon as a trusted business partner."

Hitachi **donates** machinery to local school

A practical training provider in Oosterhout, The Netherlands, has welcomed the donation of production machinery from Hitachi Construction Machinery (Europe) NV (HCME). The equipment arrived at the Praktijkschool de Zwaikom (the Zwaikom) on 1 November and will contribute to the hands-on education of its pupils, aged from 13 to 18.

The Zwaikom provides specialist practical learning opportunities for students who are unable to pursue a conventional route of education. The school equips them with the relevant skills to help them thrive in regional businesses following the completion of their studies.

On behalf of HCME, Tonny Engels (Production and Procurement), Toon van Dongen (Supervisor welding) and Erik Broeders (employee and former student) visited the school for the official handover of the construction machinery. This included a professional column drill and a metal cutting saw, as well as steel and tube profiles.

Director of the Zwaikom, Salo Timmerman, and teachers Mr Embregts and Mr de Wit, were there to welcome the arrival of the equipment and were extremely grateful for the generous donation from HCME. Free transportation of the machinery was kindly provided by Martens Transport Oosterhout.

"The students are very excited to start working with the new materials in order to learn some fundamental production processes using this professional machinery," says Salo. "The practical training we provide is an essential part of our curriculum and vital in preparing our students for the future."



From left: Tonny Engels, HCME Production and Procurement Division and Maurits van der Vlist, Praktijkschool De Zwaikom



New ZW150-6 is fine-tuned to **perfection**

Using its extensive knowledge and research of the European market, Hitachi has perfected the ZW150-6 to better satisfy the needs of operators. The mid-size wheel loader is designed to deliver the highest levels of safety and comfort, and meet their demand for greater versatility without compromising on performance.

Powered by a new Stage IV-compliant engine, the ZW150-6 provides the same levels of productivity as the ZW150-5, but with the added benefit of reduced fuel consumption*, emissions and running costs. It offers the best all-round visibility and is one of the quietest machines in its class.

Multipurpose and adaptable

With a wide range of options and extras, the ZW150-6 is perfect for a diverse range of applications, from general and road construction, to industrial use. Three types of lift arm – standard, high lift and parallel lift – provide a further degree of flexibility.

The improved traction control system of the ZW-6 wheel loader minimises tyre slippage when operating in snow and muddy conditions. This diminishes wear and fuel wastage, leading to reduced running costs. Several tyre types are also available, according to the needs of the operator.

Optional extras for the ZW150-6 include a radiator dust protection screen, anti-clogging radiators, front windscreen guard and pressurised filtration system. These provide added protection in dusty environments, making the wheel loader suitable in the waste management, demolition and agricultural sectors.

Technologically advanced

Increased productivity and efficiency are delivered through advanced technology. The hydrostatic transmission facilitates precise movements

at low speeds. In addition, the ZW150-6 engine's after-treatment device is designed to significantly reduce emissions. The wheel loader also features first speed dial and creep mode switches. In combination, these allow for the maximum travelling speed in first gear (1-7km/h) to be fully adjusted. As a result, the operator can apply higher rpm at low speeds, optimising performance with various hydraulic attachments across different job sites.

Comfortable and safe

The cab of the ZW150-6 offers enhanced comfort and safety. The optional lift arm auto leveller is controlled via two switches on the side console and the ride control feature ensures a smooth drive on all kinds of terrain by minimising machine pitching.

Improved all-round visibility is provided by the rear-view camera, wide-view mirrors, curved engine hood and repositioned exhaust pipe and air intake. Visibility on dusty sites is further increased by the addition of LED rear road lights. The ZW150-6 has wide-opening side engine covers to facilitate easier maintenance. The air filter and urea tank can also be easily accessed from ground level.

"Maintenance, operator comfort and versatility are extremely important to our customers," says Hitachi Construction Machinery (Europe) NV Wheel Loader Product Manager Vasilis Drougkas. "The ZW150-6 has evolved to exceed their increasing expectations. In addition, it can also be fitted with a range of specifically designed Hitachi Genuine attachments and quick couplers to optimise its performance."

*Fuel consumption reduced by 19% in travelling operations and by 6% in V-shaped loading.

NEWS

Minis **outperform** in Australia

An Australian customer has confirmed his loyalty to Hitachi construction machinery, following the initial purchase of a 3.5-tonne used model. Owner Matt Christian invested in the mini excavator in 2004 during the start-up phase of his business, Diggin It Earthworx. It specialises in residential and commercial construction projects across the Eyre Peninsula in the south of the country.

“When we purchased the machine, we found that it outperformed any other machine I’d operated previously,” says Matt. “This has continued to be our experience and now I wouldn’t even consider another brand.”

Matt has since purchased another four Hitachi excavators, starting with a ZX50U-2 in 2007, and followed by a ZX38U-5 and ZX55U-5, and a ZX85USB-3 medium excavator. The durability and reliability of the Hitachi machines have been particularly impressive: “We clocked over 7,000 hours with the ZX50U-2 without a single issue,” he explains. “We use the machinery on all our rock-breaking tasks, and find the Hitachi equipment to be both robust and able to withstand the harshest of conditions.”

In addition, Matt has complete confidence in his authorised dealer, Hitachi Construction Machinery (Australia) Pty Ltd. to ensure that downtime is kept to a minimum. “The Hitachi after-sales is another positive factor. There is always a quick turnaround with parts and they are readily available. That’s essential in my line of work.”



Matt Christian, owner of Diggin it Earthworx



EX1200-6 proves **valuable** for gold mine

Maintech Machinery, the official dealer of Hitachi construction machinery in Russia, has commissioned an EX1200-6 for Mining Service LLC. The large excavator with front shovel configuration and a 5.9m³ rock bucket was purchased by the contractor for Vasilievsky Rudnik JSC, a gold mine in the Krasnoyarsk Territory.

The mine currently produces 1.3 tonnes of gold per year. The new Hitachi excavator will help to increase production to 1.8 tonnes per year. It has already been used to remove overburden, excavating between 200,000 and 250,000m³ of rock per month.

Mining Service LLC provides a full range of services for open-pit mining of mineral deposits. Its employees are highly experienced in using equipment in harsh working conditions on sites throughout Russia and the CIS.

Oleg A Zhukov, General Director of Mining Service LLC, says: “Our team had already had a positive experience with Hitachi excavators. Based on their feedback, we decided to invest in Japanese equipment to meet the needs of our customer.

“The personnel from Maintech Machinery were extremely professional. Despite the remote location of our customer’s mine, which made it difficult to access, the excavator was delivered on time. A team of three people assembled and commissioned it in just five days.”

High performance in Hawaii

Hawaii's largest locally-owned construction company has strengthened its fleet of machinery through the addition of a new Hitachi ZX470LC-6 large excavator*. Nan Inc. (Nan) specialises in a wide range of services, including construction management and general contracting.

Since arriving on the island, the machine has been used by Nan for the construction of a new baggage handling facility. The project at Ellison Onizuka Kona International Airport at Keahole, forms phase one of the airport terminal's modernisation programme.

Due for completion in 2019, the project requires an 18-foot deep tunnel to be excavated for the baggage handling equipment. Additionally, the scheme will link the north and south terminals. This requires Nan to dig drainage wells and install all utilities.

"The Hitachi ZX470LC-6 is our largest piece of equipment on the project," says Nan's Project Manager Glenn Kobayashi. "It's our workhorse for digging the tunnel and the utility packages."

Working at an active airport can be a challenging environment. However, Nan has been able to overcome any issues by having the ZX470LC-6 on site. These have also been further minimised thanks to the support Nan receives from its regional Hitachi dealer, American Machinery.

"Access is difficult when working in the air operations area," explains Glenn. "We definitely want to minimise downtime, as well as bringing in mechanics and service people. Having a brand new Hitachi ZX470LC-6 on the job site really makes my life easier."

*The ZX470LC-6 is similar to the ZX490LCH-6, which is available for the European market.



From left: Mr. Pritpal Roopra, Managing Director of Hitachi dealer Rock Plant; Mr. BT Shah, MCL Director; Piet van Bakergem, General Manager of Hitachi Construction Machinery Middle East Corporation FZE

MCL cements relationship with Hitachi

Having initially invested in two Hitachi excavators, East Africa's leading cement producer has subsequently replaced its fleet with a further 27 machines. Mombasa Cement Limited (MCL) is the most technologically advanced producer in the region. It yields up to 1.8 million tonnes of cement and one million tonnes of clinker per year.

"In 2014, we decided to buy two Hitachi ZX400LCH large excavators," says Director of MCL, BT Shah. "The performance of the machines delivered to us was exceptional." Having added another two ZX400LCHs to its fleet, MCL further substituted older machines with two ZX350H-5Gs and five ZX470LC-5Gs, and three ZW180 and 12 ZW310 wheel loaders.

MCL also decided to invest in three ZX870LCH-5G large excavators for its limestone mining activities. "We have found the excavators to be highly productive and efficient," confirms Shah. "They offer better fuel consumption and deliver an overall lower cost per tonne."

MCL's decision to continue using Hitachi can also be attributed to the excellent support it receives from authorised Hitachi dealer, Rock Plant. "The ConSite technology incorporated in the new Hitachi machines has led to a considerable drop in maintenance costs," adds Shah.

"However, when there is an issue, Rock Plant's ground support team provides us with a 24/7 call-out service, keeping downtime to a minimum. The product and after-sales support has been far superior compared with any dealer we have used in the past. We would recommend them to any construction firm."

NEWS



Urban space saver

French earthmoving and machinery rental company Solotramo has invested in a new Hitachi ZX145W-6 wheeled excavator. The family-owned firm took delivery of the short-tail swing model in May from its local authorised Hitachi dealer, TECHNI-MAT SAS.

The ZX145W-6 has been working on a project outside St Stephen's Cathedral in Metz, which is in France's Grand Est region. The presence of this historical landmark and the fragility of the local Pierre de Jaumont limestone used to build the cathedral posed a logistical challenge to Solotramo.

However, the precision and space efficiency offered by the ZX145W-6 meant it was able to cope with these demands. The compact size of the wheeled excavator makes it an ideal choice for urban areas, where space is often limited. The addition of a tilt rotator further enhances its versatility.

Prior to its purchase of the ZX145W-6, TECHNI-MAT demonstrated a similar machine to Solotramo. The high level of customer care it received during this process was instrumental to its decision-making. Solotramo has also been impressed by the after-sales care it has received from the dealer.

"We are delighted with the Hitachi ZX145W-6," says Solotramo Manager Mr Molioli. "It is extremely compact and stable, which is essential for the urban environments in which we operate. It's fast too, which, coupled with its low fuel consumption, makes it a highly economical addition to our fleet."

First for durability

Swiss construction company Brigger Bau AG has added two new Hitachi medium excavators to its fleet. Based in the village of Grächen, the company is known throughout the Valais region for a diverse range of services, from civil engineering, renovations and general contracting, to specialist mountain work.

The conditions under which Brigger Bau AG operates can be extremely harsh and complex. It recently undertook work on the new Plattja chairlift, which provided a vital modernisation of the tourist infrastructure in the region.

The new Hitachi ZX135US-6 and ZX240N-6 medium excavators are particularly suited to Brigger Bau AG's needs. The short-tail ZX135US-6 is ideal for tight and steep locations that may be difficult to access. The ZX240N-6 is specially designed for mountainous regions and has a 2.5-metre wide undercarriage, which makes it easy to transport on narrow roads.

The €2.2-million Plattja project required the company to work in demanding rocky conditions at altitudes of up to 3,000 metres. Having invested in Hitachi excavators since 1997, Brigger Bau AG knows that the brand's durability under such conditions is second to none.

"We have had great experiences with Hitachi machines," says owner Dominic Brigger. "They are highly robust, and have a fast and precise hydraulic system. That's why they are a popular choice for our operators."

The company has also established a close collaborative relationship with authorised Hitachi dealer, Probst Maveg, over the years. "In particular, I appreciate how quickly they respond to our queries and how accommodating they are to our needs, as well as the speedy delivery of spare parts."



From left: Sven Ruff (Bergbahnen Grächen), Jürg Hofer (Probst Maveg) and Dominic Brigger (Brigger Bau)



France welcomes first ZW370-6

The first Hitachi ZW370-6 wheel loader in France has been delivered by local dealer Teramat to a quarry near Hauteville-Lompnes in the department of Ain. The machine is now in operation at the site in the plateau de l'Ain, which has been operated since the beginning of 2017 by Carrières du Salève under a licence extended for 20 years in 2015.

Covering more than seven hectares, Hauteville Quarry produces in excess of 125,000 tonnes of rock a year and employs three people full-time. Three products are extracted: blocks of Hauteville Stone marble for both the French market and export, primarily to Italy and the USA; rock armour stone for use in local and regional public works, including construction sites in the Port of Geneva; and processed aggregates.

“We chose the ZW370-6 mainly for its stability when loading and moving blocks of marble,” says Michel Protot, Managing Director of Carrières du Salève. “Its power was also important. We have to work fast, so this machine responds perfectly to our needs. We went to see one at a demonstration to confirm our choice and there was no doubt – this was exactly what we wanted!”

A regular customer of Teramat for several years, Carrières du Salève also opted to renew its excavator fleet with two Hitachi products last year: the ZX470LCH-5 and ZX490-6.

“We know the Teramat after-sales service team well,” says Protot. “They’re professionals and they never leave us without a solution. We’ve forged a strong relationship, so we were right to have confidence in them when selecting the ZW370-6.”

Best on the market

The leading provider of demolition services in Poland has strengthened its fleet of 60 machines with the addition of five new Hitachi excavators. Headquartered in Warsaw, JMR Polska was established in 2006 and now employs 68 people.

In addition to demolition works, JMR Polska will use the Hitachi ZX470LCH-5, ZX350LC-6, two ZX225USLC-6s and a ZX135US-5 for a range of operations, including land preparation, earthworks and road construction.

JMR Polska’s owner, Robert Pietrzak, is proud of his growing fleet and the new machines. “Since adding the Hitachi excavators to our portfolio, we have found them to be the best on the market.”

With the Polish economy having seen strong growth over the last 25 years, its construction industry has matured. With this in mind, the demand for more sophisticated machinery, such as the excavators offered by Hitachi, is rising.

By providing high-quality machines and excellent after-sales care to leading companies such as JMR Polska, authorised Hitachi dealer Kiesel Poland is well placed to meet this growing demand.

“We have formed a very positive relationship with Kiesel Poland,” says Robert. “We are highly optimistic about the future growth of the markets we serve. As such, we’re looking forward to working together with them again in the future.”



NEWS

Hitachi in the spotlight

More than 500 guests from over 200 companies attended an open day hosted by Moviter, the authorised Hitachi dealer in Portugal. The event took place at its headquarters in Leiria in October. It showcased the new Hitachi Zaxis-6 and ZW-6 machines through a programme of workshops, presentations and interactive challenges.

Renowned for its expertly organised customer events, Moviter's open day was the perfect platform for machine owners, operators, site managers, technicians and other construction professionals to come together in an informal but professional environment.

Attendees enjoyed a presentation of the Hitachi ZW310-6 wheel loader, followed by a demonstration of the new machine. Several mini and medium excavators, and other ZW-6 wheel loaders were also on display.

Operators were also given the opportunity to pit their skills against one another – 25 took part in a competition, manoeuvring four different machines across a range of specific challenges.

"The open day exceeded all our expectations in terms of turnout, engagement and the feedback we received," says Moviter Managing Director Arnaldo Sapinho. "We had so many new topics we wanted to talk about, but we also intended to create an inviting and casual atmosphere, in which customers could get user-friendly information and advice.

"These events are important because they not only show our organisational qualities and capabilities, but also demonstrate Moviter's determination to take the lead on innovation. They allow us to get to know our customers' businesses better, so we can see where synergies exist and develop solutions that answer their specific needs."



Hitachi customers in Portugal enjoying the open day at Moviter



Large-scale project requires powerful ZX490LCH-6

Danish construction company Holbøll A/S has invested in its largest Hitachi excavator to date. The ZX490LCH-6 joins its fleet of over 30 Hitachi machines and was purchased after Nordic Sugar commissioned Holbøll to complete a large-scale project.

Nordic Sugar required a pool, measuring 300m long, 65m wide and 12m deep, at its sugar factory in Nakskov. The facility will separate soil and sludge from water used to clean sugar beets. To help achieve this, the ZX490LCH-6 will handle a demanding 240,000m³ of soil over the course of the development.

"The power of the machine and its swift hydraulics will be central to this project," says Company Director Carl-Ole Holbøll. "In addition, the capacity of the ZX490LCH-6 is highly significant, with its ability to load between 3,800 and 4,200m³ of soil in only 12 hours."

Based in the town of Næstved, Holbøll employs over 100 people and operates its own workshop to service the company's growing Hitachi fleet. This area of the business is reinforced by the partnership Holbøll has established with authorised Hitachi dealer, HP Entreprenørmaskiner (HPE).

"For many years, we have enjoyed an excellent working relationship with HPE, and everything between our workshop and their team runs smoothly," explains Carl-Ole. "They have a great understanding of what is important to us and our business, and are always willing to share their technical knowledge. This gives us the freedom to work in our own way."

New dealer in Slovakia

A new dealer has been appointed in Slovakia to provide customers with a wide range of Hitachi construction machinery, including mini, medium and large Zaxis excavators, and ZW wheel loaders.

MANNET spol. s r.o. is a sub-dealer of NET spol. s r.o., the authorised dealer for the neighbouring Czech Republic. It is co-owned by CEO Pavol Domorak and Kvetoslav Tretina, owner and CEO of NET.

Founded in 1991, NET became the Hitachi dealer for the Czech Republic in 2015. With headquarters in Hustenovice in the eastern part of the country, it has two offices and seven workshop branches serving customers in the general construction, waste and mining industries.

“NET’s head office is approximately 50km from the border with Slovakia, which makes it an ideal location to handle business in both territories,” says Kvetoslav Tretina. “We are looking forward to working with the team at MANNET and helping them to offer a high level of support to their local market.”

MANNET already has an established sales and service network in Slovakia, which will be beneficial to Hitachi customers. Employees from both companies will attend technical and product training sessions for Hitachi to ensure a high level of quality and consistency across both territories.

For more information, please visit: www.netcz.cz



From left: Bronislav Indra, Hitachi Product Manager (NET); MANNET co-owners Kvetoslav Tretina and Pavol Domorak; Peter Poliak, Product Manager (MANNET); Marek Kubovič, responsible for technical support (MANNET) and Milan Hablak, responsible for spare parts (MANNET)



Complete package

A fleet of more than 20 Hitachi machines is essential to the work undertaken by Belgian company Hector van Moer & Zonen. Based in Melsele in East Flanders, the family-run firm specialises in demolition and recycling, and civil engineering projects.

Hector van Moer established the company in 1980 initially as an agricultural contractor. Over three and a half decades, it expanded into landscape maintenance, civil engineering and demolition.

Since 2008, it has offered a total service to customers, acting as a one-stop shop for their projects. Among its largest customers in Belgium are companies such as Ghelamco, Cordeel and Vandebussche NV. It is now run by Hector’s grandson, Stijn van Moer.

The company bought its first Hitachi machine in 1996 and currently has a fleet of 21 models. These include five Hitachi wheel loaders (from the ZW75 to ZW310-6) and 16 Hitachi medium excavators (from the ZX85-3 to ZX350-6), including a ZX250 material handling machine. The average number of hours for the fleet is 4,500 per machine and each is replaced at 13,000 hours.

“We continue to invest in Hitachi equipment because of the support we receive from our dealer, Luyckx, and the favourable price/quality ratio,” says Stijn. “We use Global e-Service on a daily basis for maintenance and planning, and appreciate the technical assistance provided by Luyckx’s engineers when we carry out service in our workshop.

“Our operators enjoy working with Hitachi machines, particularly because of their stability, comfort and controllability. We believe that they are the best in the global market – the complete package.”

The machine shown above has been modified by the local dealer and is only available for the Belgian market.

NEWS

Quality and performance from Premium Used equipment

Hitachi Premium Used is an initiative created by Hitachi Construction Machinery (Europe) NV (HCME) to provide peace of mind for contractors when they purchase second-hand Hitachi equipment. The Premium Used label guarantees a reliable performance from a high-quality machine that's covered by an approved Hitachi warranty and costs significantly less than a new model.

A wide variety of Hitachi machines is available as part of the Premium Used programme. It includes any ZX excavator (mini, medium, large or wheeled) and ZW wheel loaders (above 125hp). They are less than five years old, with up to 7,500 working hours (or 3,500 hours for mini excavators less than seven tonnes).

The undercarriage or tyres have at least 50% life remaining, and components, such as the cylinders, hoses, pumps, motor and valves, are all in good working order. All recent maintenance and scheduled oil sampling have been completed by an authorised Hitachi dealer. The warranty is for 12 months or 1,500 hours, and covers the powertrain and hydraulics.

Inspection process

Before a machine can be granted Premium Used status by HCME, it undergoes a rigorous inspection and refurbishment process. This is carried out by authorised dealers using only Hitachi Genuine parts and lubricants, according to Hitachi specifications.

These inspections ensure the high quality of Hitachi used equipment is maintained throughout Europe, according to Martijn Kruihof, Remarketing Manager at HCME: "It means that customers travelling across or working in different countries can benefit from the same Premium Used conditions and will be supported by the local authorised dealer, irrespective of where they are on the continent."

At the Hitachi dealer in The Netherlands, After-Sales Manager Henk Diderik oversees the process with a team of seven technicians, who are responsible for carrying out service, maintenance and repairs.

"First, we carry out a visual inspection of the machine and complete a short report," he explains. "We check for any damage and leakages, look at the cab, engine, hydraulic hoses, cylinders and the blade. The condition of the undercarriage, tracks and rollers is examined. For wheel loaders and wheeled excavators, we also check the condition of the tyres."

For medium and large excavators (from ZX130 upwards), Henk and his colleagues can download operational data from the machine using Maintenance Pro software. This provides the total working hours, including operating and travel hours, hours in power and eco modes, and temperatures of the hydraulic system and engine. "It gives you a good overall impression of the machine's condition," adds Henk.



Refurbished to high standards

A maintenance technician can then produce a detailed inspection report, which is checked by Henk: "We assess the report and decide whether to accept the machine for Premium Used or not, which depends on what work needs to be done and the costs involved."

The inspection and refurbishment process takes approximately one week. It takes one day to complete the report and decide what action should be taken. Then the Hitachi Genuine Parts are ordered and fitted. Following that, the machine is ready to be painted, tested and checked before delivery to the customer.

To ensure an immaculate appearance, Premium Used machines are repainted (if necessary) with the same colours used on new Hitachi models in the factory. "Normally, they are painted in the standard Hitachi orange," says Henk, "but last autumn, we worked on a ZX38U-5 mini excavator that was intended for a unique project. As it was a special case, it was painted in beige and brown safari colours, to match the other equipment on site." (See pages 16-19).

This particular model was among the first Premium Used



A perfect fit for your Hitachi wheel loader



Ask your dealer for more information

machines to be produced by the Dutch dealer. As more companies are becoming aware of the benefits of investing in Hitachi-approved second-hand equipment, Henk has high hopes for the success of Premium Used machines in the Dutch market.

“Being able to offer Premium Used machines will help us to offer a new service,” he explains, “particularly for those operating in the rental market. Initially, we are expecting to produce around 50 Premium Used machines per year.”

HCME is also optimistic about the potential for Premium Used machines across Europe. “We created the Hitachi Premium Used programme to increase confidence in the quality and performance of this equipment,” says Martijn. “It also enhances Hitachi’s long-established reputation for providing reliable solutions to the construction industry.”

To view Hitachi Premium Used equipment, and compare the hours, specs and pricing of similar models, please visit: www.used.hitachicm.eu

- General purpose buckets
- Rock buckets
- High dump buckets
- Coupling

Reliability is the key

A Swiss contractor with a large and expanding fleet of Hitachi construction machinery has won an important earthmoving contract in the affluent district of Lugano. *Ground Control* visits the prestigious site to see Contrabi SA's new ZX300LCN-6 and partnership with local Hitachi dealer Probst Maveg at work.



A new development is emerging across an exclusive area of 12,500m² in the municipality of Massagno in the canton of Ticino. Contrabi SA is paving the way for the construction of three apartment blocks covering 7,000m², with one third of the area being reserved for landscaping.

Contrabi has exhibited its knowledge, experience and passion over the past four decades since its inception in 1977. Based in Biasca with a team of 28 employees, the contractor now specialises in earthmoving, water works (river beds), demolition, recycling, aggregates and transportation.

The groundworks for the project commenced in August 2017. Contrabi is excavating 45,000m³ of material, and then separating and selecting the appropriate components to be recycled. With the necessary mechanical processing, screening and crushing, they are transformed into different sizes of aggregates.

Some of the materials obtained are reused on the construction site for drainage. Materials that cannot be reused on site are transported to Contrabi's recycling facilities or reused in redevelopment projects promoted and implemented by Contrabi.

The project is scheduled for completion in March 2018. Thanks to the organisation and capabilities of Contrabi, together with the customer's requirements, the excavation is completed in stages

before the construction work begins.

"This is a superb location in Massagno," says Gianfranco Croce, Contrabi's President, "and a valuable piece of commercial land. The project we've been awarded is of vital importance to our company. We are using a wide range of machinery for the demolition of the old buildings, earthmoving and recycling, as well as the transportation of the materials.

"We are working in a relatively small region, so there are limited opportunities and it's very competitive. This in turn means that our suppliers play a vital supporting role. Like Contrabi, they must also be reliable, precise and respect the environment."

One of its key suppliers is Probst Maveg, the Swiss Hitachi dealer since 1999. With a current range of construction equipment that includes 16 Zaxis excavators and two ZW wheel loaders, Contrabi has purchased more than 60 Hitachi machines since its first acquisition in 1986.

The Hitachi fleet is covered by a full service agreement with Probst Maveg and the more recent purchases also benefit from extended warranties. The dealer's Osogna branch and workshop are nearby, and in combination with five mobile service vans, Contrabi knows that there's always some assistance available for its Hitachi machines across Ticino. With more than a dozen projects live at any



given time, Probst Maveg is also able to rent additional 15-20 tonne machines to the contractor at peak periods.

Exceptional support

“The most important aspect of our long-standing relationship with our Hitachi dealer is service,” explains Gianfranco. “If there is a problem with a machine, then the whole operation would close down, but thankfully they always come to help and do everything to support us.

“Our main point of contact is David Frapolli and we have known each other for 28 years. He is an excellent salesman and we have a very good relationship. I have also always found the top management at Probst Maveg to be very open and honest.”

Contrabi is utilising up to ten trucks and four Hitachi machines on this project: a ZW250 wheel loader; and a ZX250LCN-3, ZX350LCN-5 and new ZX300LCN-6 medium excavators.

“This is a great machine,” says operator Frederico Motta of the ZX300LCN-6, “because it’s precise, responsive and strong. This combination, in addition to the power of the engine, means that the whole package is excellent. In my opinion, there is a big difference compared to the previous model.

“The cab is so spacious and comfortable, it’s like sitting on my

sofa at home! The best feature of this beautiful machine is that it responds perfectly to the controls and does exactly what I want it to do with all movements.”

The final decision on the purchase of new construction equipment rests with Gianfranco and he has signed off three other new excavators in 2017: a ZX135US-6, ZX225USRLC-6 and ZX350LCN-6. “Hitachi is a reliable, precise and durable brand, and we’re very happy with the latest Zaxis-6 range at our disposal,” he adds.

“They are excellent machines and we’ve never had any issues with them. The -6 machines are very fast and precise, and the fuel consumption is favourable. However, this isn’t the most important purchase criteria – reliability is the key!”



To see a movie of the ZX300LCN-6, please visit www.youtube.com/user/HitachiConstruction. To receive a digital version of *Ground Control* with new movies, please register online at www.hitachicm.eu/subscribe



New lease of life

A ZX38U-5 mini excavator has been donated to an inspirational project in rural France, which gives elephants from zoos and circuses a place to retire. It will also give the second-hand Hitachi model a new lease of life, as it becomes an invaluable tool on this unique endeavour.

Surrounded by unspoilt countryside, rolling hills and woodlands, streams and rivers, the picturesque hamlet of Rétabout in Haute-Vienne, in France's Nouvelle-Aquitaine region, may not be best known for its elephant population. However, that is all set to change when the relocated first residents of Elephant Haven arrive in 2018.

Founded in 2012 by former Belgian zookeepers Tony Verhulst and Sofie Goetghebeur, the idea for the sanctuary was conceived in response to the fact that an increasing number of European countries are banning animals in circuses. In addition, during his 20-year career, Tony had witnessed the problems that can occur

when older elephants move from one zoo to another.

"They would fight with each other," he says. "So I thought it would be nice for them to have a place where they could live and spend the rest of their days in comfort."

First in Europe

Although there are already elephant sanctuaries in Africa, Asia and the USA, this will be the first facility of its kind in Europe. Demand for places at Elephant Haven already exists and will increase over the coming years. "There are more than 100 elephants in circuses across Europe," explains Tony, "and sending them back to their



HCME Product Specialist Joep van den Maagdenberg shares maintenance tips with Elephant Haven founders Tony Verhulst and Sofie Goetghebeur

country of origin isn't always possible."

The location in Rétabout, approximately 35km from Limoges, was carefully selected by Tony and Sofie because it had a good balance of everything the elephants would need: space, tranquillity, hay, water (elephants drink 100 litres a day) and trees.

"Most of the trees – willow, birch, chestnut – are edible," says Sofie, "and there are many farmers in the area producing hay. We also have a large vegetable garden as 10% of the elephants' daily diet is fruit and vegetables."

Last autumn, the couple received permission for phase one of the development of the 29-hectare site. This entails converting a 760m²

open barn (previously used for horse-riding lessons) to a closed shelter for a maximum of three elephants.

It will be fitted with windows and doors, insulated, and equipped with ventilation and heating. It also includes building a four-hectare outdoor enclosure, which will be fenced off to keep the elephants secure and people out.

Versatile addition

This is one of the first jobs for the Hitachi ZX38U-5 mini excavator, which has been donated by Hitachi Construction Machinery (Europe) NV (HCME) to the project. Delivered in September, and supplied with



“We chose Hitachi because it’s a strong brand, renowned for manufacturing high-quality, powerful and reliable equipment”

Tony Verhulst,
Founder, Elephant Haven

several different sized buckets, it began work on the foundations of the barn a month later.

Renowned for its versatility, the ZX38U-5 will be used to carry out a variety of tasks at Elephant Haven. It will be required to build fences, dig trenches and create mud pools. Once the elephants arrive, the short-tail swing model will help to maintain the sand boxes in the barn and make sand piles on which the elephants will sleep. It will be used to move tree trunks and logs, and maintain the streams and mud pools.

“As a non-profit organisation, we depend on donations and sponsorship, and we are so grateful for the generosity of organisations such as HCME,” says Sofie. “The excavator will be used for several purposes, both in the short and long term. It will help the project so much and stay here until the end of its days, just like the elephants!”

“We chose Hitachi because it’s a strong brand, renowned for manufacturing high-quality, powerful and reliable equipment,” adds Tony. Both he and Sofie received some operator training and tips on daily maintenance from HCME when the excavator was delivered.

HCME Product Specialist Joep van den Maagdenberg says: “Hitachi mini excavators are extremely user-friendly and easy to maintain, which makes the ZX38U-5 ideal for Elephant Haven. It is quick and easy to clean and inspect: the wide engine covers for example are easy to open, and the radiator and oil cooler are positioned conveniently next to each other.”

Premium Used

Maintenance and service had already been completed on the ZX38U-5 when it first arrived on site, however. This was carried out by the Dutch Hitachi dealer in Oosterhout, as part of the Premium Used programme (see pages 12-13).

The three-year-old machine had approximately 2,000 working hours when it was selected for the programme. Generally in good condition, it required little refurbishment by the technicians at HCM Nederland.



The ZX38U-5 was repainted as part of the Premium Used process



Technician Roel Gommers was responsible for the maintenance of the ZX38U-5



HCME Marketing Manager Ghislaine Jonker with Tony and Sofie at the machine's delivery

After-Sales Manager Henk Diderik explains: "After a general inspection, we carried out some maintenance jobs, such as replacing the hydraulic and cab filters, and the air filter for the engine. We replaced the broken lower front window, the V belt, and a mirror or light may also have been replaced. We also cleaned the chair in the cab."

The ZX38U-5 was sent to be painted in safari colours, to match the other equipment at Elephant Haven. Then, it returned to the workshop for a final check before delivery.

Maintenance Technician Roel Gommers was responsible for completing most of the work on the ZX38U-5 and enjoyed working on this particular Premium Used model: "Every repair is different and there is so much variety in my work here. I enjoy transforming a used machine into something that can be utilised again, it's like giving it a second chance."

Future plans

The Hitachi mini excavator will undoubtedly be kept busy in its new life at Elephant Haven. Once phase one of the development has been completed, Sofie and Tony will move on to the next phase, which will prepare Elephant Haven for visitors.

"It will include building a walkway and lookout to observe the elephants from a distance," says Sofie. "The elephants are always our priority," she adds. "We will do guided visits with little groups, and work together with local schools and hospitals. It's about taking people back to basics, protecting nature, and learning more about elephants and how they live."

Looking further into the future, phase three of the development will be the construction of a larger second shelter for the arrival of more elephants. The couple hope to purchase the land of a neighbouring farmer, who is due to retire in 2022. This will enable them to expand Elephant Haven by a further 25 hectares. "Then we will have elephant valley here in Limousin," says Sofie.

People power

It's an incredibly ambitious and meticulously organised plan, by two inspirational and determined individuals. The arrival of the Hitachi mini excavator has brought them another step closer to realising their dream and is symbolic of the support they've received from volunteers, followers on social media, as well as companies and organisations around the world.

"We're a small organisation, but we have so much support," says Sofie. "Along the way, we have met so many kind people who believe in us. And because of these people, we will reach our goal."

Participating in the project has also given the staff at HCME something in return. Marketing Manager Ghislaine Jonker says: "Hitachi decided to get involved with Elephant Haven because it is in line with our corporate responsibility to contribute to society. Everyone who has participated in the project, from sales to after-sales, and also our domestic dealer, has felt extremely proud to be part of something so unique."

Additional photography by Peer de Wit (www.aksento.nl)



To see a movie about Elephant Haven and the ZX38U-5, please visit www.youtube.com/user/HitachiConstruction. To receive a digital version of *Ground Control* with new movies, please register online at www.hitachicm.eu/subscribe



Trolley line powers productivity

Hitachi group technology has always been exhibited through the continuous development of the EH rigid dump truck range. The latest model – the EH3500AC-3 – has taken on the mantle of its predecessor under the electric trolley lines at the challenging Kansanshi copper mine in Zambia, southern Africa.



The importance of the copper mining industry in Zambia has been underlined by the International Council on Mining and Metals. It has released verified data, which shows that the large majority of foreign direct investment in the country and its export earnings are due to mining.

In addition, the mining sector has paid more than a quarter of all revenue collected by the Zambian government, contributed more than one tenth to the nation's GDP and become established as a significant employer. These parameters show Zambia's dependence on the copper mining industry.

Total copper production was just over 300,000 tonnes towards the end of the Nineties. However, under a newly privatised industry, that figure more than doubled within ten years on the back of sustained investment and a rising copper price. Production reached 711,000 tonnes in 2015 and is expected to continue increasing.

Four mines account for around 80% of Zambia's copper production: Lumwana, Kansanshi, Mopani and Konkola. Lumwana

is wholly owned by the world's largest gold-mining company (Canadian company Barrick). The other three each have a majority foreign shareholding as well as a minority shareholding by ZCCM (owned by the Zambian government), the biggest overall shareholder in the country's mining industry.

Zambia's copper mines are concentrated in the Copperbelt, the most urbanised and developed of the country's provinces. However, in the course of the last decade, a "new Copperbelt" has sprouted in the rural and relatively underdeveloped North-Western province. This is thanks to the First Quantum Minerals (FQM) and Barrick's mining operations at Kansanshi and Lumwana, which already account for about half of the country's annual production.

Expanding copper production

Kansanshi mine is the largest copper mine in Africa – and one of the eighth largest in the world – located ten kilometres north of the town of Solwezi, the capital of the North-Western province.

It has 1,700 employees (plus contractors and suppliers) and is owned and operated by Kansanshi Mining PLC (KMP). The majority shareholding is held by FQM, a Canadian mining and exploration company, with ZCCM's stake set at 20%.

The mine has undergone several expansions since it began operating in 2005. From an initial production capacity of 110,000 tonnes of copper, it is now capable of producing 240,000 tonnes of copper and more than 120,000 ounces of gold per year.

Mining is carried out in two open pits, Main and Northwest, using conventional methods. FQM employs hydraulic excavators and a fleet of dump trucks, including 38 Hitachi EH3500ACIIs and two new EH3500AC-3s that were commissioned in December 2016. Since the first Hitachi truck arrived in 2010, the 40 machines have collectively amassed more than 1.1 million working hours.

The Hitachi trucks are maintained and serviced by Hitachi Construction Machinery Zambia Co., Ltd. (HCMZ). The company was inaugurated in 2010 and now employs 166 staff across four branches: on site at Kansanshi (with 38 personnel) and Lumwana (30); and two service and sales centres at the capital city of Lusaka (89) and Kitwe (nine) in the Copperbelt.

Lusaka is also home to the Hitachi Remanufacturing Centre (see box below) with the total 20,000m² site situated on the outskirts of the city, close to the international airport. The Kansanshi (70% service, 30% parts) and Lumwana (70% parts, 30% service) mines account for 80% of HCMZ's turnover, with the other 20% represented by remanufacturing for the local market, as well as South Africa, the Democratic Republic of the Congo (DRC) and Mozambique.

A new approach to hauling

The EH3500AC-3 takes the diesel-electric drive truck to a new level with exceptional hauling capabilities and a build quality to match for operating in the toughest of environments. This latest model has

been fitted with a larger body – and a strengthened wear package – that delivers an increased payload of 20 tonnes (up to 175 tonnes) compared with the EH3500ACII.

The EH3500AC-3's advanced Hitachi AC Drive system ensures a smooth and quick operation, whether the truck is starting from a standstill, travelling uphill or performing steering manoeuvres.

The pitch-control system reduces bouncing and rebounding when the truck travels over uneven ground and comes to a stop. The side-skid control system reduces the chance of slipping when the truck is turning in slippery conditions by utilising changes in the wheel motor torque during cornering.

“The EH3500AC-3 offers a whole new approach to hauling and is of huge significance to Kansanshi in particular,” says HCMZ's General Manager – Operations, Scott Johnston.

“It not only meets FQM's expectations, but has also delivered what the mine needs in terms of payload and speed on the trolley line. There is even more confidence in the product with its unique slip-side control system, which adjusts the torque of the wheel motors and improves stability while travelling in slippery or frozen conditions.”

More productivity and less costs

Another feature of the EH3500AC-3 enables a secondary means of powering the wheel motors. When this is activated, diesel-generated power is cancelled, and overhead catenary power is connected and diverted to the wheel motors through the inverters.

All of the trolley-related parts on the EH3500AC-3 are produced by Hitachi, including the pantograph assembly, trolley switch box, wheel motors and in-cab pantograph activation switch. These are highly efficient, fully supported by Hitachi and have a long life expectancy.

It is easy for the operators to change from trolley to diesel, or vice versa, with a flick of the switch. Automatic switching is also

Reman **reduces** life-cycle costs





HCMZ's remanufacturing (reman) activities commenced in June 2012 to support the mining operations at Lumwana and Kansanshi, among others. After a successful introduction, the Remanufacturing Centre was designed, built and open for business within two years.

The impressive facility was then expanded in July 2016 to meet the demand for the volume of component repairs from Kansanshi. The warehouse and workshop both doubled in size to 1,552m² and 3,923 m² respectively to provide an increased level of production capacity.

HCMZ holds a stock of reman parts on site – with almost 100% availability – and then recovers the core from the machine when it is being replaced. This is shipped from the mine direct to the Remanufacturing Centre, where it is documented by the creation of a specific serial number for each item.

After it has been washed, the component is disassembled and a decision is taken on its suitability for future use. The customer is refunded after a successful inspection has been carried out, while unusable parts are scrapped. The reman products include: cylinders, hydraulic pumps and motors, travel and swing devices, centre joints, transmissions, final drives, AC motors, alternators and pantographs.

If the component passes the test, HCMZ has a team of 49 personnel on the shop floor with an extensive range of equipment at their disposal to complete the reman process. These are divided

into hydraulic, electrical and mechanical sections, and include: the welding and machining centre; the electric component test room; the digital test bench (with separate rigs for pumps and motors); cylinder assembly and disassembly area; painting and shot blast rooms; and a despatch area for final checks.

HCMZ supplies the reman components to its mining customer base in southern Africa, with a total population of over 40 EX excavators and 170 EH dump trucks across the region. The number of parts supplied to the market by the Remanufacturing Centre has already increased from 115 in 2014 to 355 in 2016 – and it had a projected target of 420 in 2017.

“The key point of having the Reman Centre is to increase the usability of the components, which enables us to help reduce the life-cycle costs for Hitachi mining equipment,” says Toshiyuki Asaga, HCMZ's Manager Remanufacturing Centre. “Rather than acquiring new parts, our customers can save 60% by opting for reman components.

“This facility has given Hitachi a point of difference in the mining sector, not only in Zambia – where customers are very happy to buy locally sourced products – but across southern Africa. In addition, this is the only centre for repairing the pantographs for the EH dump trucks. The mines have even asked us to reman other manufacturers' components!”



carried out by the detection of incoming electric power. This smooth process puts less stress on the mainframe and wheels, which in turn helps to limit load spillage.

Trolley mode is used on uphill sections – there are four 700-800m trolley lines at Kansanshi – whereas diesel power is used on flat and downhill haul roads. This is because the speed of trolley mode is higher on loaded hill climbs than diesel mode, delivering shorter cycle times and more productivity. In addition, the fuel consumption is 90% lower than diesel mode with low-cost electric power for better economy and reduced running costs.

“I believe that this has been a good test site for Hitachi trucks and I’m pleased that the EH3500AC-3 has been developed in response to our experiences at Kansanshi,” says Clayton Reeves, FQM’s Mining Manager. “It’s not just a bit of an upgrade from the previous truck, but a big jump forward in design and technology, as well as the bigger payload and reliable performance.

“It’s all about productivity and saving costs. These new Hitachi trucks are one of the cheapest machines to run from the moment that they go under the trolley line. Trolley mode also approximately doubles the speed, which is of course much better from a productivity point of view. So, the EH3500AC-3 offers big savings in time and money.”

With the lower duty cycle, the life of the EH3500AC-3’s engine will

be longer and there will be less downtime and running costs due to the infrequency of engine rebuilding. It is also more environmentally friendly with lower exhaust emissions and engine noise.

“The new truck is definitely an improvement from an environmental point of view and we would definitely like to add more of these trolley machines to our site,” adds Clayton. “We are already working on the next trolley line, because the more distance you’re travelling under the trolley, the less diesel we’re burning and the more environmentally friendly we become. This is something that we take very seriously and is definitely a positive factor.

“We will always have two fleets on this mine: trolley and diesel. The EH3500AC-3 is certainly the future. Some of our older Hitachi trucks are getting near the end of their lifespan and in the next few years we will be looking at replacement models. With this in mind, it’s good to know that we have an improved model in the current Hitachi fleet.”



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Wenco's System 6 KPI dashboard that allows the driver to see metrics set by the mine manager on screen in the cab

Hitachi group delivers more **technology**

HCMZ is not the only Hitachi Construction Machinery group company with an on-site team at Kansanshi mine. Wenco's comprehensive fleet management system has been in use on all mining equipment since January 2018, with the aim of being fully operational within four months.

FQM has acquired Wenco's applications installation for its 13 large and five other excavators, as well as 73 rigid and 11 articulated dump trucks. This value-added package incorporates: BenchManager (machine guidance system); Dynamic Dispatching (mine dispatching service); Fleet Awareness (real-time location and movement); Fuel Dispatching (automated dispatching for fuelling); Pit Nav Mobile 51+ (turn-by-turn GPS navigation); and Readyline Mobile 51+ and Readyline Office (asset health management system).

"High-precision digging was one of our main requirements, and Wenco stood out from the crowd when we assessed the various options," says Sanjay Prabhakaran, FQM Head of Section – Dispatch. "This system is mining's best kept secret and the optimum solution on

the market. In addition, Wenco was also very flexible to FQM's needs."

Another selling point for Wenco is that all third-party systems can be integrated within one screen. At Kansanshi, these include fatigue and fleet management systems, tyre pressure monitoring, a communication device, SkyAngle (on the EH3500AC-3s) and other 360-degree systems (on the older models).

The implementation of these new technologies means that an operator training programme is a top priority. With over 400 personnel to train between October 2017 and March 2018, the first step was to implement a course for FQM's trainers and then put a schedule in place for the dump truck operators. Wenco trained the large excavator operators directly as high-precision digging was new to the mine.

"It's an added advantage that Wenco is a Hitachi-owned company," explains Sanjay. "This is the first Wenco system fitted to Hitachi machines in Africa, so it must be physically located in a place where it will not be tampered with or damaged."



The complete flexible package

A Swiss construction company is continuing the family tradition of building profitable relationships with its suppliers, as well as its customers. Director Fabio Savioni explains how Savioni Attilio SA's new Hitachi wheeled excavator is a typical example of how the firm is adapting to meet the needs of the local market.



From left: Attilio Savioni, David Frapolli and Fabio Savioni

Savioni Attilio SA (Savioni) takes its name from Fabio's father, who founded the company in 1973. The company's headquarters have always been in Castaneda, a small town in the canton of Grisons in the Calanca Valley. Since 2009, the main office has been located in San Vittore in Grisons, nestling in the valley of Mesolcina near the border with the canton of Ticino.

Fabio started his career as a civil engineer, but in 1996 began working for his father's construction and earthmoving company. The family-owned firm now employs 70 people with an equal split between civil engineering projects and construction work.

The strength of Fabio's relationship with Switzerland's authorised Hitachi dealer, Probst Maveg – and main point of contact David Frapolli in particular – comes from the friendship they have shared for over 20 years. "We are just simple people, who speak the same language and understand each other perfectly," explains Fabio.

They started doing business together in 2006, when Savioni purchased its first Hitachi machine. "We have a very strong



relationship with Probst Maveg, especially with the Osogna branch, who are easy to reach, even if it's 7am or a Saturday," Fabio confirms. "Probst Maveg should be very proud of this team and there's never been any discussion about where we should buy our next piece of construction machinery!"

Savioni's current fleet of 14 Hitachi Zaxis machines comprises: two ZX17U-2, a ZX19U-5, ZX22U-2, ZX35U-2, ZX50U-2, ZX52U-3 and ZX85US-5 mini and compact excavators; a ZX240N-3 and ZX250LCN-3 medium crawler excavators; and a ZX140W-3, ZX145W-3, ZX145W-6 and ZX160W wheeled excavators.

The latest acquisition, the ZX145W-6, was delivered by Probst Maveg in September 2017 with a full service agreement and extended warranty programme covering three years/4,000 hours. "We opted for this after-sales package as our own mechanics do not have sufficient time available," says Fabio. "We also assessed the total cost savings that we would make before we took our final decision."



Savioni's service requirements for the whole fleet are managed by Patrick Rianda, its dedicated service technician provided by Probst Maveg. "The whole package – the product and the service – is the most important aspect of our ownership of Hitachi construction machinery," highlights Fabio.

"For example, we monitor the level of warranty, response times and so on. In fact, our Hitachi machines are so reliable that we have very few issues with them. We also benefit from the low maintenance and running costs of the Zaxis excavators.

Precision and comfort

"In addition, our operators really like these machines, due to the precision of the hydraulic system and the comfort of the cab. These features are particularly beneficial when handling large rocks, as the ZX145W-6 has already been employed to do.

"We work with other companies who own and utilise Hitachi machines on various contracts, so the operators are able to swap these compatible machines with ease. In this respect, they are all working on a similar technical level."

Savioni's latest investment was to meet a requirement for a short-tail swing machine, similar to its versatile ZX145W-3. "We are very happy with its predecessor and trust David implicitly of course, so the deal to buy this new machine was completed in about ten minutes," says Fabio.

The flexibility shown by this machine is supportive of the challenges facing Savioni in today's marketplace. "We have to react quickly to our customers' demands and often have to be ready to work within 24 hours," he adds. "The ZX145W-6 is fast, smooth and precise, with excellent visibility and space for our operators.

"So, we have to expect the same level of support from Hitachi and Probst Maveg. Flexibility is important in dealing with them too, as they must also be able to respond in good time to satisfy our expectations."



Perfect compact partners

Individually, the Hitachi ZW75-6 compact wheel loader and ZX55U-5 mini excavator can make a positive impact on any job site. There are extra benefits to be gained, however, from combining the two on a joint operation. *Ground Control* visits Germany to see how a landscape gardening company is receiving added value by utilising both machines.

“The partnership between the two Hitachi machines is fantastic, and I always aim to have them working together on the same project”

Sven Susewind,
Owner, Susewind



The residents of Freiburg in the state of Baden-Württemberg have plenty to be happy about. Not only does it receive an abundance of sunshine (it regularly features in polls of Germany’s sunniest cities), but it also lies on the edge of the picturesque Black Forest. The area has long been a magnet for tourists and locals looking to ski and hike, or visit one of the many spa towns.

To the north of the city, the suburb of Bötzingen is home to one of the area’s most notable landscape gardening companies – Susewind. Founded in 1996 by owner Sven Susewind, the company specialises in the design, construction and maintenance of private gardens, as well as being engaged in forestry and tree surgery.

An important decision

At the time of *Ground Control’s* visit, Susewind was overseeing a number of projects in and around Bötzingen. One assignment, adjacent to a 4,000-hectare vineyard, involved building and maintaining a three-tiered, terraced garden at the rear of two newly built houses. Work began in October 2017 and was expected to be completed two months later.

To support its operations on site, Susewind invested in a Hitachi ZX55U-5 mini excavator and a ZW75-6 compact wheel loader. The former was delivered in the summer of 2015, while the latter was handed over in March 2017. Both machines were supplied by Hitachi’s authorised local dealer – Kiesel – with whom Sven shares a long and productive relationship.

“The service from Hitachi is outstanding, and I have known the Kiesel salesman personally for around 40 years,” says Sven. “My two most important considerations when buying new equipment are the overall service I receive and the quality of the machine. I can completely trust Kiesel to offer me a superior excavator or wheel loader that is appropriate for the projects I’m working on.”

Confined space

Several processes take place simultaneously at the Bötzingen site. At the beginning of the day, trucks deliver and deposit gravel at the foot of the slope leading to the main garden area. The ZX55U-5 integrates this material into the road surface, while executing the grading at the same time. In addition, the mini excavator is being used for a wider variety of tasks, such as general site preparation, and removing debris and weeds.

Owing to its short-tail swing radius, the ZX55U-5 is ideal for the confined job site. Not only is space limited within the garden itself, but it leads directly on to a residential street. For these reasons, manoeuvrability and versatility are important advantages of the mini excavator. The enlarged front window and door also enhance visibility, which contributes to improved safety.



“I particularly like the Hitachi ZW75-6, because of its manoeuvrability – especially on this job site”

Rainer Kühnle,
Operator, Susewind



Responsive and versatile

Elsewhere, the ZW75-6 is being used to transport materials around the busy site. The compact wheel loader also clears away any undesirable vegetation and loads trucks. When necessary, it is used for road sweeping in the surrounding area, an activity which displays Susewind’s respect for the local community, as well as the versatility of the machine.

Thanks to its compact design, Susewind is able to drive the ZW75-6 between its headquarters and the job site – both in Bötzingen – over public roads. This helps to significantly reduce transport costs and is also supported by the design of the cab, which offers a 360° panoramic view. The ergonomic and user-friendly controls also contribute to a superior operating experience.

For its operator, Rainer Kühnle, there are a number of important factors behind the success of the compact wheel loader: “We’re mainly using the ZW75-6 to unload trucks and to move materials around the site, so its size is optimal for our purposes. For me, the narrow shape and overall design of the wheel loader are ideal.

“I particularly like the Hitachi ZW75-6, because of its manoeuvrability – especially on this job site. It offers excellent visibility and I can see every corner of the machine. It’s also highly responsive and the ride control is one of my favourite features. Compared to other models, it is much smoother over rough ground, while the cabin is both spacious and comfortable.”

The ZX55U-5’s operator Erwin Ufheil is clear on the additional benefits of the Hitachi mini excavator. Having been involved in the construction industry for over 30 years, Erwin is a reliable judge of a high-quality machine: “When we were testing the ZX55U-5 initially, I was highly impressed by what it could do. Owing to its shape, the mini excavator is simply ideal for the type of work we’re doing.

“Having a short-tail machine is very convenient, and it’s helpful as an operator to be able to switch between the two modes – power and eco – so quickly. Personally, the number one feature of the Hitachi ZX55U-5 has to be the hydraulics, which are extremely smooth. In terms of looking after the machine, it’s also helpful that the maintenance points are so easy to access.”



“Owing to its shape, the mini excavator is simply ideal for the type of work we’re doing”

Erwin Ufheil,
Operator, Susewind

The ideal combination

The combination of the ZW75-6 and ZX55U-5 has been an exciting revelation for Sven: “The partnership between the two Hitachi machines is fantastic, and I always aim to have them working together on the same project. The advantage of having both machines on site is that you can pick up any material and move it with the excavator, then transfer it to a central point before using the wheel loader to remove the rubble and vegetation. This makes for a seamless and more effective operation.”

The ZW75-6 and ZX55U-5 also complement Susewind’s two existing Hitachi mini excavators – a ZX10U-2 and ZX33U-3. The ZX33U-3 was the company’s first Hitachi purchase in 2009 and continues to perform effectively. The durability of all machines is set to help Susewind complete even its most demanding forestry projects during winter.

“The biggest challenge we will face over winter is the bad weather,” adds Sven. “Thankfully, this is no problem for the Hitachi machines, and the reliability of its wheel loaders and excavators is exceptional. Even in the worst conditions, we have peace of mind that we can continue to use the ZW75-6 and ZX55U-5 without any downtime.

“I have owned Hitachi machines for eight years and never encountered any issues beyond routine maintenance. As a business owner, it’s satisfying to see that our operators have been so happy



with the ZW75-6 and ZX55U-5. Having all the equipment from one brand not only makes servicing easier, but it also looks impressive on site. The look and design of the Hitachi machines are wonderful and owning them creates an excellent image for my company.”



To see a movie of the Hitachi ZW75-6 and ZX55U-5 in Germany, please visit www.youtube.com/user/HitachiConstruction. To receive a digital version of *Ground Control* with new movies, please register online at www.hitachicm.eu/subscribe



Ideal for urban **mining**

The fleet of Hitachi wheel loaders and excavators is vital to the urban mining process at Heros Sluiskil BV – handling and transporting waste materials that are transformed into valuable sustainable resources for the construction industry.



‘One man’s trash is another man’s treasure,’ as the saying goes. That’s certainly the case at Heros Sluiskil BV, a facility in The Netherlands that extracts valuable raw materials from incinerated domestic and industrial waste for reuse. The so-called ‘urban mining’ process is increasingly important in light of the global increase in demand for raw materials, rising costs and the need to find sustainable alternatives.

Owned by German company Remex Mineralstoff GmbH, Heros is one of its 60 locations in Europe and Asia. During processing, it extracts ferrous materials such as iron, and non-ferrous metals such as aluminium and copper, from incinerated bottom ash. The remaining material forms the basis for the

production of high-quality secondary aggregates, used for example in road construction, earthworks or concrete products.

Heros is one of the largest facilities of its kind in The Netherlands and has an annual capacity of 650,000 tonnes. Located on the 45-hectare Heros Ecopark Terneuzen, on the canal from Gent to Terneuzen in the North Sea Port, it is conveniently situated between the cities and harbours of Rotterdam and Antwerp. Its central location, deep waterway and 500m dock ensure excellent links to Belgium and Germany, as well as the north of France and the UK.

Most of the incinerated waste is delivered by ship and comes from various plants in The Netherlands and Belgium, which each have their own processes. The materials are treated in batches, so waste from different factories remains separate. “Each ship carries 3,000 tonnes and we unload 400 tonnes per hour, two ships per day,” says Peter David, Head of Machines and Planning. “The processed material also goes out by ship.”

Challenging environment

Such demanding working conditions require a fleet of reliable and durable equipment. “It’s a very corrosive environment,” confirms Peter. “The bottom ash can stick to machines like concrete or cement, so parts can get corroded. Sometimes a machine that has been here for four years can look like it’s been here twice as long!”

Heros has been a Hitachi customer for seven years since the delivery of its first wheel loader, a ZW310 in 2011, supplied by local dealer, Pladdet. It now has a fleet of ten Hitachi machines including a ZX350LC-6 excavator and nine wheel loaders (see page 34).

The machines are provided with full maintenance and service contracts, and extended warranty from Pladdet, which is conveniently located 20km away. “Reliability and service nearby are the most important things for us. Maintenance costs money and we can’t work with the machine if it needs to be repaired,” says Peter. “The reliability of the machines in combination with the maintenance programme ensures we don’t incur any unexpected costs.”

Heros obtains most of its machines on an operational lease. At the end of the term, it purchases the machines to resell them. “We like to run our Hitachi machines for four years/10,000 hours. However, every machine runs more than that, up to 3,000 hours a year. We had a ZX350-5 that reached 12,000 hours in four years, for example.”

Powerful and efficient

That model was replaced by a new ZX350LC-6. Fitted with a 2m³ bucket, the medium excavator is used to open up the stockpiles of incinerated bottom ash, which can be stored on site for three to six weeks. “The temperature rises inside the heap as the material heats up and transforms, and it becomes like a soft-quality concrete,” says Peter. “We need a solid machine with strong force and bucket teeth to break it open.

“According to our operator, the ZX350LC-6 is smooth and powerful, with more efficient hydraulics than the previous model. When working in eco mode, it has the same power as the -5 machine in power mode.”

One of the company’s ZW310 wheel loaders takes material from the pile and transports it to the feeder of the separation and processing equipment. The smaller ZW250-6 works on another part of the site, where scrap metal is separated. It is fitted with solid tyres and larger mud guards for this purpose.



Hitachi machines at Heros Sluiskil

- ZW180-6 – delivered April 2017
- ZW250-6 – delivered May 2017
- ZW310 – delivered November 2012
- 3 x ZW310-5 – delivered between April 2015 and July 2016
- 2 x ZW310-6 – delivered between November 2016 and November 2017
- ZX350LC-6 – delivered November 2017
- ZW370-6 – delivered December 2017



The company's largest wheel loader on site is used to unload the material from ships. "This is the largest capacity machine for this site," confirms Peter. "Anything heavier would ruin the asphalt – the ground would not be firm enough to support any additional weight."

Perfect fit

The smallest Hitachi wheel loader on site, the ZW180-6, was also chosen for its size. It works in the 2,700m² non-ferrous upgrading facility, which opened in June 2017. It sorts aluminium and small non-ferrous metals from the incinerated ash, and purifies and cleans them after treatment.

This is an example of how Heros is increasingly refining its 'urban mining' process, resulting in materials of a higher quality. These can be used more widely and also sell for a higher price.

The ZW180-6 works for 16 hours a day in the plant, loading the material into the machine for cleaning at the start of the process. It then loads trucks with the purified material at the end. Any residual product is returned to the incinerated ash on site.

"We chose the ZW180-6 to work inside the plant, as it's easy to manoeuvre and able to reach the height of the feeder," adds Peter. "It's also versatile for tidying the stockpiles, loading the machine and cleaning the floor."

The ZW180-6 is fitted with a 2.5m³ bucket, which is slightly smaller than usual because of the weight of the material. It has a pressurised cab, a parking system and additional lights to help operators work safely and more comfortably.

"The blue back lights help to increase its visibility," says Peter van Liere, Sales Manager from Pladdet. "The operators have to wear ear protection in the plant, so it makes it easier to spot when the wheel loader is reversing."

For operator Marco Dierkx, low noise levels in the cab, smooth operation and easy manoeuvrability in small spaces are among the main advantages of the ZW180-6. The air conditioning is also important, as he explains: "It can get very hot indoors as the materials generate so much heat. The temperature, certainly in summer, can rise significantly, so the air-conditioned cab is vital."

Sustainable future

Marco is part of the growing workforce at Heros – the number of employees has doubled in the past couple of years to approximately 80, in addition to temporary workers. This, in combination with the opening of its new facilities, shows the growing demand for its recycling activities.

As regulations on environmental pollution are becoming more comprehensive, and future legislation is likely to require that even more materials be extracted from waste, this looks set to continue. By recovering raw materials, professionally treating them using verified and continually improving processes, Heros ensures that the waste of today is an important resource for tomorrow.



To see a movie of the ZW180-6, please visit www.youtube.com/user/HitachiConstruction. To receive a digital version of *Ground Control* with new movies, please register online at www.hitachicm.eu/subscribe



Number **one** for total cost of ownership

TIB is helping Switzerland to eliminate waste and protect the environment by recycling. The company's new recycling centre is being driven forward by the Hitachi ZW310-6 wheel loader and the support of local dealer Probst Maveg.



TIB Recycla SA (TIB) was established in 2014 as a partnership between three companies: Toggenburger, Implenla and Bizzozero. Toggenburger AG specialises in cranes and transport, building materials, environmental engineering, demolition and earthmoving. Implenla AG is the leading construction and related services company in Switzerland, with a strong position in the European market. And Fratelli Bizzozero SA is active in the fields of transport, construction, earthmoving, demolition, disposal and recycling.

“The three companies had previously worked together as a consortium on other construction projects,” says Martin Feldmann, Toggenburger’s Head of Environmental Technology. “We then decided to extend our cooperation with the provision of a recycling centre in the south of the country.

“Toggenburger already cleans and recycles contaminated soil in the north of the Alps. However, there is a requirement for this type of facility in the canton of Ticino, due to the difficulty in disposing of these types of waste in landfill sites in this region.”

Having been established in the district of Lugano, TIB has opened its new recycling centre within the municipality of Mezzovico-Vira. The purpose of this modern facility is to provide the construction industry with the opportunity to dispose of excavated and demolished materials, and acquire the recycled aggregates for reuse in building and other projects across Switzerland. TIB can also dispose of, wash and treat polluted materials within the plant.

Perfect opportunity

“Bizzozero already had a facility that carried out some basic recycling activities on this site – such as crushing and washing,” explains Martin. “So, TIB had the perfect opportunity to build a wash plant here, which became a reality when the government approved our plans in 2015.”

The plant was completed in August 2017 and by November TIB was engaged in testing, checking and making final adjustments to the recycling machinery. In addition, the company was training its on-site team of five employees, who were already accepting incoming deliveries of materials for processing.

These are brought from construction, demolition, industrial and landfill sites by contractors who are grateful of having a convenient means of disposal. “Our main business is washing materials and the target is to supply an average of 700 tonnes of recycled products



From left: Martin Feldmann, Roberto Bizzozero and David Frapolli



per day,” continues Martin, who is working in an advisory role at TIB on behalf of Toggenburger.

“The biggest challenge is to introduce TIB and the new facility to the market, so that all prospects will consider using TIB’s recycling centre as a first port of call. We must educate them on how we can recycle everything for reuse in construction projects and how they can get the best value from the plant.

“TIB has a unique facility in the region and there is not enough high-quality gravel in the area, so we are confident of achieving our goal of working with one main contractor. This would reduce the number of tests and simplify the whole process considerably.”

A new Hitachi ZW310-6 has been selected as the main workhorse on the site. The medium wheel loader is being utilised to drive up the steep ramp and feed the machine with freshly delivered materials – the first step of the process. Its other main task is to load delivery trucks with finished aggregates for onward transportation by road or rail.

Exemplary service

The ZW310-6 was supplied to TIB with a five-year/6,000-hour extended warranty and service contract. It was one of four machines ordered in the third quarter of 2017 from the Swiss Hitachi dealer, Probst Maveg, by Roberto Bizzozero, the director of TIB. The other three were medium excavators – a ZX240N-5, ZX135US-6 and ZX300-6 – on behalf of his own company, Fratelli Bizzozero.

“We tested Probst Maveg’s Hitachi ZW310-5 and ZW250-5 during product demonstrations before committing to the new ZW-6 loader,” says Roberto. “Hitachi is strong in this region and the most important element for us is exemplary service – Probst Maveg’s depot is ideally located only 20 minutes’ drive from here.

“We benefit directly from our dealer’s top quality approach, and enjoy a friendly business relationship and high level of

professionalism with our main point of contact, David Frapolli. The ZW310-6 is working for around 15 hours per day so it has to be reliable. Apart from preferring the orange Hitachi colour, we also appreciate the quality associated with the brand and the high resale value.”

Despite working with another manufacturer over the past 30 years, Roberto has enjoyed 15 years of Hitachi ownership even more! “Over the long-term, Hitachi is the number one choice and Zaxis hydraulic excavators are the best in the market,” he enthuses. “We opted for the ZW wheel loader due to the total cost of ownership, driven by its low fuel consumption, as well as the high price/quality ratio.”

Operator Damiano Alberton has also been impressed with TIB’s new acquisition: “The seat and ergonomic design of the control panel make life comfortable for the operator of this machine. The driving position is perfect – the best one I have experienced – and the noise levels in the cab are low.

“The visibility is ideal for both feeding the recycling installation and loading trucks with the finished materials. The power and torque of the engine are also excellent for travelling up the steep ramp, and the fuel consumption is equally impressive. The precision of this machine is also evident from how easy it is to clean the floor of the plant with the shovel.”



To see a movie of the Hitachi ZW310-6 in Switzerland, please visit www.youtube.com/user/HitachiConstruction. To receive a digital version of *Ground Control* with new movies, please register online at www.hitachicm.eu/subscribe



The ZW310-6 owned by TIB is equipped with a Hitachi Genuine bucket and quick coupler

Hitachi merchandise



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