

HITACHI

Reliable solutions

Connect with Hitachi



Machine control



Height, slew and RCI



Rental

Tiltrotators



Ultimate safety and efficiency

Hitachi Connected Technology (HCT) offers you a range of market-leading 3D machine control and special attachment solutions to enhance the efficiency and safety of your Hitachi equipment. Based at Hitachi Construction Machinery UK's dedicated HCT production facility in the North East, HCT works closely with your choice of approved supplier to ensure that installations on your new machines are carried out to the highest standard. Fitted by our manufacturer-trained engineers, all additional systems are supported by both HCT and the manufacturer for total peace of mind.

This brochure showcases the wide range of products from our trusted suppliers, which can be fitted to your new and used Hitachi machines, including:

- 3D machine control from Leica Geosystems, Trimble and Topcon;
- tiltrotators from Engcon, Steelwrist and Rototilt;
- height and slew monitoring, and rated capacity indicators from Xwatch Safety Solutions.

HCT also offers you access to the unique CTfleet Link® mixed-fleet telematics solution, designed to help you remotely monitor the performance of all your equipment in one place. When paired with our unique device, you will receive real-time operational data from your equipment to improve efficiency and productivity across your entire fleet.



Improving safety and efficiency on site

Operational and safety data – and maintenance history

API integration

Manage all your equipment in real time

Cut costs and emissions

Monitor your entire mixed fleet

Create and monitor geofences

Increase productivity

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CTFleet Link® devices

A1 – To suit ancillary plant, lighting towers, trailers, tooling

- A small low-cost battery powered magnetic tracking device, simple to fit and use
- Instantly mounted on any magnetic surface, hidden from view with no wires or flashing lights on show
- Ideal as a secondary tracker due to its small size, if thieves disable your main tracker the CTA1 will take over
- Reports location once every day for up to 3 years

B1 – Suitable for any machine

- HCMUK's standard fit telematics device on all Zaxis-6 mini excavators
- Reports location (What3Words) and hours in real-time
- Set a geofence around a machine and receive breaching alerts by text or email 24/7
- Trace machines movements via GPS tracking
- Variety of options for cellular communication technology 2G/3G/4G

D2 – Suitable for medium/large excavators

- The ultimate all-in-one telematics device combining advanced technology
- Dual CANBUS interface
- Highly robust and IP69K water-resistant
- Reports location (What3Words), hours and engine performance data in real-time
- Ability to report additional safety data (such as Xwatch)
- ISO15143-3 (AEMP2.0) compliant

Keypad immobiliser

- HCMUK's standard dual circuit keypad and immobiliser system for theft prevention
- Customisable passive alarming



Stay connected

An industry first, CTFleet Link® is the perfect solution for your fleet management requirements. Designed exclusively by Hitachi Construction Machinery (UK), this mixed-fleet telematics system allows you to monitor the performance and location of your Hitachi equipment in real time, as well as any other machinery in your fleet.

In addition to important operational data such as idling time and fuel usage, access to the CTFleet Link® online portal also gives you live data from any Xwatch Safety Solutions system fitted to the machine, when paired with our CTFleet Link® telematics device.

Utilising both the Hitachi API and a bespoke API developed by HCMUK, CTFleet Link® is compatible with all your Hitachi assets from Zaxis-5 through to the latest Zaxis-7 excavators (eight tonne and above). All Zaxis-6 mini excavators are fitted with CTFleet Link® as standard (three-year subscription included). CTFleet Link® also allows you to connect and monitor all your other OEM equipment, from small tooling and ancillary plant up to the largest equipment in your fleet.

Future developments will incorporate a daily walkaround inspection app, designed for operators to use on their smartphones. This will enable them to check the safety of their machines before they start work and submit an electronic inspection report to the company's office in seconds. In addition, further safety data reporting will be enabled, such as seatbelt alarms, cameras, and eventually remote monitoring of 3D machine control systems.

Benefits of CTFleet Link®

- Real-time reporting of machine location, operating hours and engine performance data.
- Remote real-time monitoring of Xwatch Safety Solutions and other safety-critical devices.
- Easy access to complete service history – all your Hitachi documents from job reports to annual inspection certificates can be uploaded to the CTFleet Link® portal, reducing the need for emails.
- Remote activation of machine geofencing and tracking machine movements – receive breach alerts 24/7 via text or email.
- API integration.



As one of our trusted machine control suppliers, Leica Geosystems has an emphasis on prioritising customers' needs and their design vision. Together we share a desire to deliver the best installation and support, and to help you to become more efficient, sustainable, and profitable.

Leica MC1

Leica MC1 is a one-for-all software solution platform for all machine control solutions, helping owners and operators to guide and automate heavy construction machines for increased uptime, operator satisfaction, safety and productivity.

Comparing the design model to the actual position of the machine's cutting edge, MC1 machine control software assists operators in positioning the machine and automatically controls the orientation of the machine's cutting edge to achieve the planned design.

The Leica MCP80 rugged panel and MDS Series docking station ensure that operators can access Leica MC1 using the same panel between different machines.

Leica ConX – cloud solution and web interface to share and visualise data

Leica ConX is the cloud-enabled solution that construction companies need to manage, monitor and share

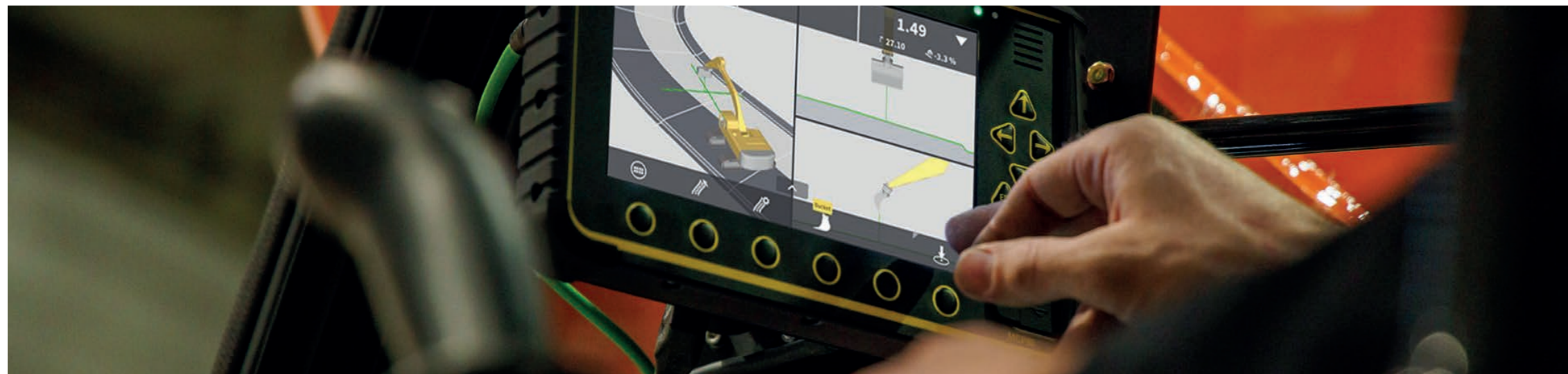
construction and survey data in real time everywhere. This cloud-based collaboration tool allows you to efficiently manage all your connected construction projects, including third-party platforms, and share job-related data with all stakeholders. With Leica ConX, non-experienced users will be able to visualise and validate localised reference models, survey data and constructed data.

iCON iXE3 advanced 3D excavator machine control solution

The iXE3 machine control solution guides the operator using reference models and GNSS in 3D. Operators can rapidly excavate to the reference design with real-time cut/fill indications and design information displayed on the cab's control panel.

The operator can also use the Create Model function to make even complex models directly on the panel without leaving the cab and without the assistance of a surveying engineer. The iXE3 machine control solution works with a wide range of popular data formats including LandXML, DXF, GEO, KOF, L3D, LMD, LIN, MBS and TRM formats.

For more information about Leica Geosystems, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachicm.co.uk



Leica components

- Boom sensor MSS401
- Docking station MDS series
- Control panel MCP80
- GNSS antennas CGA60
- Pitch & roll sensor MSS400
- Dual GNSS receiver iCon GPS 82
- Bucket sensor MSS405
- Stick sensor with laser receiver MSS404 SL



HCMUK has developed a powerful partnership with Trimble's UK dealer, SITECH. Offering a complete connected solution in one place, Trimble's rugged systems are easy-to-use, fully upgradeable, and flexible enough to meet a wide range of job site requirements.

Trimble Earthworks for Excavators Grade Control Platform

This innovative platform has been designed to help operators do more in less time. It features intuitive, easy-to-learn software that runs on an Android operating system.

With Trimble Earthworks, you can take advantage of the first integrated 3D aftermarket grade control automatics for excavators. Trimble Earthworks allows your excavators to work semi-automatically, helping to create smooth, flat or sloped surfaces more easily. The software and hardware give operators of all skill levels the ability to work faster and more productively than ever before.

Dual GNSS System

The Trimble Earthworks grade control app runs on the new 10-inch (25.7cm) Trimble TD520 touch-screen Android display. The software was created in collaboration with construction equipment operators around the world, so the interface is optimised for ease-of-use and productivity. Trimble Earthworks allows data files to be transferred to or from the office wirelessly and automatically, so you've always got the latest design.

For more information about Trimble, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachicm.co.uk

Trimble components

- GS520 Sensor
- MS995 or MS975 Smart receivers
- SNRX30 On-machine radio
- TD520 Display





Working together with HCMUK, Topcon aims to provide the best possible equipment – with leading-edge hardware, software and mobile solutions – to significantly increase efficiency on job sites across the UK.

Topcon X-53x

Whether you are digging a utility trench, cutting building pads, or repairing a landslide, the X-53x system keeps your bucket on grade anywhere on the job site. The elevation and location of the cutting edge is constantly tracked using a combination of GNSS receivers, antennas, precise tilt sensors, and graphical 3D-MC software. Collectively, these components form a rock-solid system that increases the operator's productivity and optimises material management.

The current configuration of the X-53x system, with the MC-X1 controller and TS-i3 (500) slope sensors, is cutting-edge and future-proof – ready for enhancements and upgrades.

SiteLink3D Site Management System

The SiteLink3D Site Management System allows owners and operators to send files directly to your machinery electronically and troubleshoot issues remotely. Users can easily view machine progress and production rates from anywhere in the world and customise reports to match your management style.

As well as remote access and support from Topcon's experienced support team, SiteLink3D allows you to view and manage job site machinery in action, get tabular views of your project crews including their exact position, activities, and files in use, and send files via text message or file transfer for ultimate flexibility.

For more information about Topcon, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachimc.co.uk

Topcon components

X-53x

- MC-X1 controller
- GR-i3 GNSS receiver
- TS-i3 (500) single/dual slope sensors





HCT: in a different league

Hitachi ZX225USLC-7

Leica Geosystems 3D machine control system

Engcon tiltrotator

Xwatch height and slew restrictors, and rated capacity indicator system

“We were working with another Hitachi owner and watching him operate with a machine control system. You could tell it was an ideal solution for the ‘cut-and-fill’ job that he was doing, and so we decided to hire a similar system to try it out. Then when it came to replacing our ZX225USLC-6 with the new Zaxis-7 model, we decided to add 3D machine control so that we could undertake all work to fine tolerances and with safety in mind.

“In addition, the tiltrotator allows the operator to follow the contours of a site, and Engcon was recommended by HCMUK for reliability and support. And while we’ve always had a RCI on our 20-tonne machines, we’ve now added height and slew restrictors to increase the machine’s versatility for many different on-site scenarios. Hitachi Connect Technology (HCT) is brilliant, because it enables us to operate a larger machine than we would otherwise be able to do for deep drainage and heavy lifting work, even in confined spaces.

“It has been 100% to our advantage that we opted for HCT’s one-stop shop approach rather than using a third party. The Hitachi team have been so impressive, and the whole process – from specification to installation and training – has been outstanding.

“Everyone has dedicated their time and effort to answer our questions, and ensure we are happy and understood all aspects of the operation. We’ve really appreciated this excellent service, which is a different league to anything we’ve experienced before! We are so pleased that we have had the same HCT systems retrofitted on to one of our older excavators.”



“ It has been 100% to our advantage that we opted for HCT’s one-stop shop approach ”

Gary Caddick
Operations Director
BCL Groundworks, Bridgwater



Engcon is one of HCMUK's trusted tiltrotator suppliers, working with us to provide versatile and robust enhancements for your Hitachi machine. With profitability, efficiency, flexibility and safety at the core of all Engcon's products, our collaboration brings operators simpler handling, greater control and increased safety. It provides owners with increased uptime and profitability, and peace of mind with expert support.

Engcon tiltrotators come with the following as standard:

- standardised locking system
- joystick control system.

EC-Oil
 EC-Oil is standard for simultaneous purchases of Engcon's machine hitch, tiltrotator and control system. It lets you change hydraulic tools in just 10 seconds without leaving the cab, as well as connecting hydraulic tools automatically. It can be retrofitted to all types of hydraulic tools, regardless of manufacturer* and its extremely durable connectors allow tool connection at full system pressure.

*Subject to specifications and flow requirements

For more information about Engcon's range of equipment, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachim.co.uk



Engcon range for Hitachi excavators

Hitachi model	Machine weight	Tiltrotator	Quick hitch
ZX85US/USB-6	7-12 tonnes	EC209	QS45
ZX130LCN-7 / ZX135US-7	12-18 tonnes	EC214	QS60
ZX160LC-7 / ZX180LCN-7	16-20 tonnes	EC219	QS60
ZX210LC-7 / ZX225US-7 / ZX250LC/LCN-7	18-26 tonnes	EC236	QS70
ZX300LC/LCN-7 / ZX350LC/LCN-7	25-33 tonnes	EC233	QS80

engcon



GRD40 – GRD70

For excavators weighing 6-26 tonnes



SWD40 – SWD60

For excavators weighing 4-19 tonnes



GH1000 – GH1200

For excavators weighing 6-19 tonnes



PP3200

For excavators weighing 6-12 tonnes



SG03 – SG33

For excavators weighing 1.5-33 tonnes



TG25HD – TG55HD

For excavators weighing 4-26 tonnes



R06 – R33

For excavators weighing 1.5-33 tonnes



TC03 – TC33

For excavators weighing 1.5-33 tonnes



CB01 – CB29

For excavators weighing 1.5-33 tonnes



DB01 – DB32

For excavators weighing 1.5-33 tonnes



SR800 – SR2000

For excavators weighing 6-30 tonnes



GRB1250 – GRB3000

For excavators weighing 2-33 tonnes



SB02 – SB29

For excavators weighing 1.5-33 tonnes



GB01 – GB29

For excavators weighing 1.5-33 tonnes

HCT: highly flexible and user-friendly

Hitachi ZX130LCN-7

Leica Geosystems 3D machine control system

Engcon tiltrotator

“At first, we had Leica systems installed on two of our machines that were working on a large housebuilding site. The benefits of 3D machine control became clear while working on the roads and sewers, as well as the foundations and external drains for the housing plots. We have now decided to fit these systems to every machine in our fleet, from Hitachi ZX130LCN-7 up.

“We opted for Leica because of the simplicity of the programme and how user-friendly it is for our operators. The flexibility is the biggest benefit as we can change our plans on a daily basis with less downtime.

“Initially, we had Engcon tiltrotators fitted to see how they would work on three of our Hitachi models across the whole site. We immediately saw how beneficial these were around the plots and on piling jobs, as well as for the ponds and roads.

“The tiltrotators are highly flexible, as our activities can be undertaken without the need for tracking or moving around. In addition, there is a cost benefit as they reduce the need for people to be working near the machine – safety is a big factor and therefore well worth the investment.

“Hitachi Connected Technology is a one-stop shop for all our needs, and we benefit from the in-house knowledge and expertise. When a new machine arrives on site, it is fully kitted out and ready to go. And we also benefit from Hitachi’s great service – we just pick up the phone and they can resolve any issues.”



“ HCT is a one-stop shop for all our needs, and we benefit from the in-house knowledge and expertise ”

Colm Kilroy
Director
Carmac Building and Civil Engineering Ltd
Finedon, Northamptonshire





Headquartered in Sweden, Steelwrist is a global manufacturer of tiltrotators, quick couplers and work tools for excavators with a commitment to efficiency. As one of HCMUK's trusted tiltrotator suppliers, Steelwrist has a determined focus on robust and modern products, and fast customer service to keep your operations running as smoothly as possible.

Steelwrist tiltrotators

Steelwrist's tiltrotators enable operators to work with complete accuracy and with a productivity improvement of between 20 and 35%. They can tilt 45 degrees left and right, rotate 360 degrees continuously, and enable attachments to move with complete flexibility. Connection to the excavator's machine control system and real-time signals ensure exceptional accuracy.

These benefits increase efficiency and productivity for owners, and enhance safety and provide a simpler working environment for operators, with minimal movement of the machine required.

Steelwrist SQ Auto Connection System

With Steelwrist SQ technology you can change between hydraulic-powered work tools as well as mechanical work tools in seconds, all without leaving the cab.

The SQ system has been designed to be able to connect other brands using the same type of oil connection system, allowing for the most efficient and versatile tool changeover possible.

For more information about Steelwrist's range of equipment, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachicm.co.uk



Steelwrist range for Hitachi excavators

Hitachi model	Machine weight	Tiltrotator	Weight (from)	Quick coupler
ZX85US/USB-6	7-12 tonnes	X12	285kg	S45
ZX130LCN-7 / ZX135US-7	12-18 tonnes	X18	400kg	S60
ZX160LC-7 / ZX180LCN-7	16-20 tonnes	X20	445kg	S60
ZX210LC-7 / ZX225US-7 / ZX250LC/LCN-7	18-26 tonnes	X26	570kg	S70
ZX300LC/LCN-7 / ZX350LC/LCN-7	25-33 tonnes	X32	840kg	S80





Finger FG20 – FG40
For excavators weighing 6-26 tonnes



Multi MG20 – MG40
For excavators weighing 3-18 tonnes



Sorting Bucket SOB6 – SOB20
For excavators weighing 2-32 tonnes



Utility Bucket UB15 – UB30
For excavators weighing 13-33 tonnes



Stone and Sorting SG20 – SG40
For excavators weighing 3-26 tonnes



Ripper RP40 – RP70
For excavators weighing 2-33 tonnes



V-ditch Bucket VB2 – VB20
For excavators weighing 0-32 tonnes



Cable Bucket CB1 – CB30
For excavators weighing 0-40 tonnes



Grading Beam GR1250 – GR3000
For excavators weighing 2-33 tonnes



Asphalt Cutter AC5 – AC20
For excavators weighing 2-33 tonnes



Digging Bucket DB08 – DB17
For excavators weighing 0-18 tonnes



Teeth Digging Bucket DB1T – DB30T
For excavators weighing 0-33 tonnes



Grading Bucket GB08 – GB40
For excavators weighing 0-40 tonnes



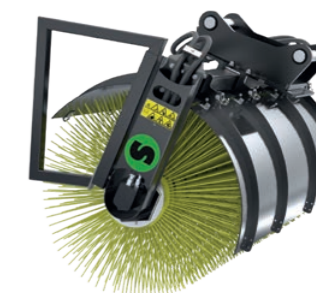
Skeleton Bucket SKB8 – SKB14
For excavators weighing 5-20 tonnes



Compactor HC20 – HC90
For excavators weighing 2-30 tonnes



Sweeper FB1800 – FB2500
For excavators weighing 2-20 tonnes



Sweeper SW1000 – SW2000
For excavators weighing 5-33 tonnes



ROTOTILT®

Rototilt® works closely with HCMUK to transform your excavator and your business, through a growing range of machine couplers, tiltrotators, control systems, tools and smart solutions. With hand-in-hand after-sales support, a focus on usability and efficient design, and a commitment to improving efficiency, agility and precision, our collaboration with Rototilt brings a wide range of benefits to owners and operators alike.

Rototilt QuickChange

QuickChange™ enables you to change hydraulic tools automatically without leaving the cab. When it is used in both the attachment frame at the top and the quick coupler at the bottom, you can disconnect and connect the tiltrotator or switch between different hydraulic tools quickly, easily and safely.

You can also attach your tiltrotator directly to the machine and get QuickChange™ functionality for the quick coupler to change hydraulic tools quickly. In addition to saving time, this results in a safer working environment for you as an operator. The SecureLock™ safety solution is also always included as a standard function.

For more information about Rototilt's range of equipment, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachicm.co.uk



Rototilt range for Hitachi excavators

Hitachi model	Machine weight	Tiltrotator	Quick coupler
ZX85US/USB-6	7-12 tonnes	R3	S45
ZX130LCN-7 / ZX135US-7	12-18 tonnes	R4	S60
ZX160LC-7 / ZX180LCN-7	16-20 tonnes	R5	S60
ZX210LC-7 / ZX225US-7 / ZX250LC/LCN-7	18-26 tonnes	R6	S70
ZX300LC/LCN-7 / ZX350LC/LCN-7	25-32 tonnes	R8	S80



Asphalt Cutters

For excavators weighing 2-32 tonnes



Trenching Bucket

For excavators weighing 1.5-40 tonnes



Compactors

For excavators weighing 3-32 tonnes



Sorting Bucket

For excavators weighing 4-25 tonnes



Digging Bucket

For excavators weighing 1.5-40 tonnes



Grapples

For excavators weighing 1.5-32 tonnes



Grapple Modules

For excavators weighing 1.5-32 tonnes



Universal Bucket

For excavators weighing 1.5-40 tonnes



Grading Beam

For excavators weighing 0-40 tonnes



Railroad Grapples

For excavators weighing 10-19 tonnes



Rippers

For excavators weighing 2-32 tonnes

HITACHI

Connected Technology Rental



HCT Rental offers you the opportunity to hire some products on a short- or long-term basis to suit your project needs. This gives you additional flexibility to meet the varying demands of your business.

The options available are installed by our trained engineers on site for your convenience and peace of mind. You can choose from the following:

- Leica Geosystems cab kit
- Optional extras including SmartNet
- ConX for remote support and data transfer.

In addition, Leica Geosystems base kits are available through HCT on your new and used machinery, making your equipment 3D machine control ready.

To find out more about HCT Rental, please get in touch via: hct@hitachicm.co.uk





Hitachi Connected Technology products are now equipped with CESAR Datatag, the official construction equipment security and registration system, as standard.

The CESAR Scheme is the only official Police CPI and HO approved plant and equipment registration scheme. It has been tested and approved by the British Insurance test house, Thatcham. Substantial premium discounts and reductions in mandatory excesses can be obtained once CESAR is fitted to your equipment.

HCT products will be registered and protected by the CESAR Scheme and will be permanently fitted with two unique and highly visible triangular identification plates, which are tamper evident and contain a unique Datatag® transponder.

Each CESAR system includes a number of unique Datatag® transponders, or 'tags' permanently hidden within the machine that can be located and read with Datatag's unique infrastructure of special readers.

The system also includes hundreds of miniature Datadots® embedded with another unique number concealed throughout the machine, making them virtually impossible to find and remove.



With many years of machine control and safety systems experience, Xwatch provides forward-thinking integration and simple-to-use, operator-focused hardware to meet the demands of today's job site.

Xwatch systems contribute to a safe and comfortable working environment for the operator and reduce the demands placed on the machine. As a result, they combine safety, value and flexibility for peace of mind. The following Xwatch systems are available through HCT and are suitable for all Hitachi excavators.

XW4 Height and slew limitation

The XW4 monitors the height and slew movement of your excavator. It accurately restricts and controls the height and left/right slew parameters using proportional soft-stop hydraulic valves. It enhances operator safety and comfort, and ensures a safe environment around the machine.

XW5 Rated capacity indicator with height and slew limitation

The XW5 offers a total safe working envelope around your excavator, enabling control of height and slew, and providing rated capacity indication. This comprehensive system covers every eventuality when considering both operator and machine safety, offering complete peace of mind.

For more information about Xwatch, or if you have specific requirements not outlined above, then please get in touch via: hct@hitachicm.co.uk



HITACHI | **Connected
Technology**



“ HCT is a huge advantage, as we can just go to Hitachi for a new machine with the whole package ”

John Moriarty
Production Director
McDermotts, Birmingham



HITACHI | **Connected Technology**

HCT: a massive benefit

Hitachi ZX225USLC-7

Topcon 3D machine control system

Steelwrist tiltrotator

“We’ve used Topcon machine control systems on our medium excavators for at least seven years. In the past, we’ve had these retrofitted directly from the supplier, but now we’ve opted to utilise the service provided by Hitachi Connected Technology (HCT) for our new Hitachi machines.

“That means when the new machines arrive on site, they come straight off the low loader and are ready to go. The bottom line is that we don’t have any downtime, whereas before we’d probably have lost two or three days to get them retrofitted and set up. We’re really pleased with the two new ZX225USLC-7s, due to their versatility, reliability, high residual value and the power is second to none.

“The convenience of the HCT service has encouraged us to have tiltrotators fitted to our new Zaxis excavators for the first time.

“HCT is a huge advantage, as we can just go to Hitachi for a new machine with the whole package. This also includes any on-site training, service and warranty requirements. All we do is make one call to Hitachi and someone will come and help us. That’s a massive benefit, as downtime is our biggest cost. And having one finance agreement in place for the machine and HCT is also much easier from an administrative point of view.”



For more information on HCT, and to find out how it can make your operations more efficient, cost-effective, and safer than ever before, please contact us to discuss your needs.

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