

METALS RECYCLING



A Product of Hard Work



A JCB for Every Task



With the energy required to remelt scrap metal being a fraction of that needed to extract metal from its ore, combined with increasingly stringent legislation, more and more manufacturers are using recycled metals than ever before. This has led to a 40% growth, year on year, in the waste and recycling industry. Quite simply, the business potential for operators dealing in metals recycling has never been greater.

Whatever you specialise in – from cars, batteries and fridges, to recovered steel from demolition and melting down frag into ingots – JCB supplies the right machines to help your business run efficiently and profitable.

Wheeled Loading Shovels to tip into high-sided containers, JCB skid steer loaders to transport scrap iron, telescopic Teletruk forklifts to keep hazardous loads safely away from the operator, compact Loadalls to handle loose ingots, and big wheeled re-handlers to load shredders and balers; these are just a few of our specific solutions designed and built for metals recovery operations.

At JCB we also tailor our machines to suit your specific applications. This includes underbelly protection, heavy-duty filtration, turbo-2 pre-cleaners, extra guard protection for the operator, solid or filled tyres for puncture protection, and much more. Our specialists will advise and help you to achieve the ideal specification for your metals operation.

All of this is, of course, backed up by JCB's legendary support network with its worldwide reputation for being the best. Thanks to our often-same-day parts despatch, JCB-trained service engineers, advanced diagnostics and global communications network, we always have the resources to ensure that if there's an issue, you're back up and earning as quickly as possible.

With JCB speciality machines and tailored support services on your side, you have the perfect recipe for maximum productivity, whatever your area of waste and recycling expertise.





CONTENTS

END-OF-LIFE VEHICLES 4 – 5

AUTOMOTIVE RECYCLING 6 – 7

DEFRAGMENTATION MILLS AND SHREDDERS 8 – 9

FERROUS AND NON-FERROUS METALS RECYCLING 10 – 11

WEEE RECYCLING 12 – 13

BATTERY RECYCLING 14 – 15

CONSTRUCTION METALS RECOVERY 16 – 17

MILLS AND FOUNDRIES 18 – 19

A FEW WORDS ABOUT JCB 20 – 23

End-of-Life Vehicles

Teletruk – 2.5- to 3.5-tonne lift capacity, 5-metre lift height,
2-metre forward reach, 4x4 option

Loadalls – 2- to 4.1-tonne lift capacity, 4- to 17-metre lift height,
compact to full size models

Skid steer – Safe side access, 600kg to 1,100kg
operating capacity, cab or canopy

RTFLs – 2.6- to 4-tonne capacity, 3.6- to 6.5-metre lift heights,
Duplex or Triplex masts



End of Life Vehicle (ELV) legislation has transformed the scrap car business. Now that ELV directives require safe depollution of cars before the bodies can be recycled, a rehandling machine is a key requirement for loading and unloading cars on and off the depollution rigs.

This is where the JCB Teletruk comes into its own. The TLT35D with 3.5-tonne operating capacity is perfect for picking and placing end-of-life vehicles.

The Teletruk has a unique telescopic loader arm rather than a typical forklift mast, resulting in superb visibility for the operator when rehandling cars. It is safer on site too, with clear visibility when loads are down low with no interference from a forklift mast.

An alternative to the Teletruk is a compact Loadall, with nearly 3 tonnes of lift capacity and over 5 metres of lift height. Compact dimensions allow the machines to access closed-top containers and restricted ELV stations. A standard quickhitch lets you easily change from forks and rotator to a barrel clamp for rehandling drums of fluids, oils and lubricants.

Another option for auto rehandling is the highly manoeuvrable JCB skid steer loader. Generally used for lighter duties, it can be fitted with attachments, such as a bucket with top clamp to help load retention. The single-arm design allows the operator to safely access the machine from a side door, rather than having to clamber over dangerous attachments or loads.

For larger sites and heavier loads, the traditional rough terrain forklift or larger Loadall models fit the bill, offering greater lift capacity, reach and rough terrain capability. The RTFL range offers lift capabilities from 2.6 to 4 tonnes and lift heights up to 6.5 metres. The 541-70 Loadall is a 4.1-tonne, 7-metre model ideally suited to the automotive recycling business.





Automotive Recycling

Teletruk – 2.5- to 3.5-tonne lift capacity, 5-metre lift height,
2-metre forward reach, 4x4 option

Loadalls – 2- to 4.1-tonne lift capacity, 4- to 17-metre lift height,
compact to full size models

Skid steer – Safe side access, 600kg to 1100kg
operating capacity, cab or canopy

RTFLs – 2.6- to 4-tonne capacity, 3.6- to 6.5-metre lift heights,
Duplex or Triplex masts



15 million cars are scrapped in Europe each year (2.3 million in the UK alone). But many of these are relatively new cars, making the recycling of parts a strongly growing business potential.

Automotive recyclers need a machine that can stack safely onto a rack and then lift the car chassis down when needed. Just as in the ELV sector, this is where the JCB Teletruk 35D comes into its own. The telescopic boom offers 2430mm forwards reach and superb visibility, so the operator stays safe while handling awkward loads in busy environments. The 111° carriage rotation allows back-tilt of the load for safe site travel.

It's the confined space in most yards that presents the biggest challenge. That's why automotive recyclers are also turning to JCB compact Loadalls, Robot skid-steer loaders and masted RTFLs.

Compact Loadalls – the JCB 520-40, 524-50 and 527-55 – offer capacities of 2 to 2.7-tonnes and lift heights from 4 to 5.6 metres, all in a package less than 2 metres high and 2 metres wide. The machines feature hydrostatic drive, providing excellent pushing power particularly at low speeds, as well as the ability to operate using only the accelerator. This ensures smooth acceleration and deceleration and precise control in tight spaces.

Meanwhile, both the JCB RTFL fitted with extended forks, and the skid-steer fitted with an industrial grapple are ideal for shifting cars around the roughest terrain. Together with the Teletruk 35D, you won't find a better choice of equipment (with a wide range of attachments) to give the efficient and reliable performance you need and expect.





Defragmentation Mills and Shredders

Scrap handlers – Up to 12-metre reach, four-stabiliser undercarriage, fixed or hydraulically raised cabs, selector grabs, 4- or 5-tine orange peel grabs

Tracked excavators – range from 1- to 46-tonne, zero tailswing and conventional design

Wheeled loading shovels – 1- to 5-cubic-metre capacity, high-lift or super high-lift loader arm options

Teletruk – 2.5- to 3.5-tonne lift capacity, 5-metre lift height, 2-metre forward reach, 4x4 option



About a third of all recycled metals comes from car bodies, and 80% of a new car's body is from recycled metal. These surprising statistics show how important the industry has become. And with new legislation continually setting ever-more challenging targets, serious players in the industry simply can't afford to get left behind.

Defragmentation mills and shredder operations are all about bulk throughput; getting the maximum amount of recyclables away to the customer each day. So the quicker you can get raw product in and frag out, the better.

JCB can offer tracked or wheeled materials handlers purpose built for the job with proven reliability, specialist features and additional protection. A choice of fixed raised cab or hydraulically raised cab ensures an unimpaired view into containers and hoppers. There's a wide range of boom and dipper options, including mono, tab or materials handling rig, and for scrap metals a 5-tine cactus grab and magnet installation. Add all this to a state-of-the-art cab with filtered heating and ventilation, and you've found the perfect partner for shredder or baler operations.

For loading frag onto trucks or freight trains, you can't get better or quicker than the robust and reliable JCB wheeled loading shovel. Featuring extra protection guarding, the JCB 456 has optional best-in-class super-high-lift arms for plenty of clearance when loading. The arms also have 4-ram geometry for excellent visibility. Superb traction and power, along with heavy-duty, puncture-resistant tyres, keep this machine performing on challenging terrain, while features like servo controls, low noise levels and the sophisticated Electronic Monitoring System make for easy operation throughout every shift.





Ferrous and Non-Ferrous Metals Recycling

Scrap handlers – Up to 12-metre reach, four-stabiliser undercarriage, fixed or hydraulically raised cabs, selector grabs, 4- or 5-tine orange peel grabs

Tracked excavators – range from 1- to 46-tonne, zero tailswing and conventional design

Wheeled loading shovels – 1- to 5-cubic-metre capacity, high-lift or super high-lift loader arm options

Loadalls – 2- to 4.1-tonne lift capacity, 4- to 17-metre lift height, compact to full size models



With the manufacturing sector using more recycled metals than ever before and scrap prices on the increase, the business potential in metals recycling has never been greater. Whatever metal you specialise in, we have a machine to rehandle it.

With its purpose-designed scrap boom and dipper, the JS200W scrap handler offers 12 metres of reach for excellent lift and loading performance. The four-stabiliser undercarriage reassures with its all-round stability, making this the ideal rehandler for small to medium-sized scrap metal merchants.

A hydraulically raised cab gives clear visibility into trucks or containers for greater safety and more efficient working. Solid tyres protect against punctures and central spacer rings keep out any metal from between the twin tyres. There is a choice of attachments available, from 4- and 5-tine orange peel grabs to cutters, plate magnets and selector grabs.

JCB tracked excavators are also hugely popular in metals and demolition. A tracked excavator equipped with a hydraulic cutter makes light work of the often awkwardly sized incoming material, efficiently preparing it for loading into the shear. Tracked models can also be fitted with hydraulically raised cabs and scrap rigs.

It is not unusual to see JCB wheeled loading shovels working in the scrap metals industry. With correctly specified tyres they are more than capable of loading and rehandling frag, while high-lift loader arms increase loadover height where required and can easily accommodate high-sided bulkers.

Finally, JCB Loadall Wastemasters offer additional solutions for scrap metal rehandling. Variable loadover height of up to 7 metres for the 541-70 is more than ample for any vehicle. The extendable reach of a Loadall also comes in handy if you are loading or unloading a closed container.





WEEE Recycling

Teletruk – 2.5- to 3.5-tonne lift capacity, 5-metre lift height,
2-metre forward reach, 4x4 option

Loadalls – 2- to 4.1-tonne lift capacity, 4- to 17-metre lift height,
compact to full size models

Wheeled loading shovels – 1- to 5-cubic-metre capacity,
high-lift or super high-lift loader arm options

Skid steer – Safe side access, 600kg to 1100kg
operating capacity, cab or canopy



The Waste Electrical and Electronic Equipment (WEEE) directive demands the recycling of electrical goods. Fortunately, JCB Loadalls, skid steers and the unique Teletruk are all ideally suited to this growing rehandling industry.

The most popular JCB machines for rehandling WEEE are the Teletruk and Loadall. Excellent manoeuvrability and low height, combined with infinitely variable telescopic reach, make either ideal for handling this type of waste stream.

Loading or unloading a truck can be achieved from one side using traditional forks or a bale clamp attachment. Larger Loadall models can even unload a closed container from one end, while smaller models are low enough to access inside the container. Plus, specialist attachments, such as the magnetic frame, eliminate risk of damage to the pipework on fridge and freezer units, protecting against refrigerant leakage.

For TVs, CRTs, computers and all other WEEE material, Loadalls or Teletruks can be used as conventional forklifts, easily handling palletised or caged loads. Rotators can also be fitted enabling 360° rotation of the stillages for easy unloading and discharging.

Puncture risk is of little concern as the machines can be fitted with a host of tyre options for complete protection and maximum machine uptime. Operators are kept in complete comfort too, with all controls falling readily to hand and full heating and air conditioning to keep the temperature just right.

Attachment changing couldn't be simpler thanks to a JCB quickhitch which lets you quickly change from forks to bucket to sweeper and back again, as many times as you wish during a typical working day. This makes for a very versatile and highly utilised piece of equipment.





Battery Recycling

Wheeled loading shovels – 1- to 5-cubic-metre capacity,
high-lift or super high-lift loader arm options

Telemaster – combination of WLS and Loadall, articulated steering,
telescopic boom, 3-tonne lift capacity, 5-metre reach

Teletruk – 2.5- to 3.5-tonne lift capacity, 5-metre lift height,
2-metre forward reach, 4x4 option

Loadalls – 2- to 4.1-tonne lift capacity, 4- to 17-metre lift height,
compact to full size models



Battery recycling and lead cell recovery is now a well-established industry in its own right. Whichever type of battery your business handles, you need reliable, versatile machines to keep your operation running.

JCB 436 and 456 wheeled loading shovels are robust performers perfectly suited to rehandling used batteries. Cab, lighting and underbelly protection is fitted as standard to Wastemaster models as is additional air filtration and a pre-cleaner for the engine. Additional cab filtration, standard air conditioning and ergonomically positioned servo controls help to keep the operator as comfortable and productive as possible.

Based on a wheeled loader design, the JCB TM310 Telemaster is a combination of wheeled loader and telescopic handler. The machine offers over 3 tonnes of lift capacity to a full height of over 5 metres with a load capacity of up to 2 cubic metres. A new large cab complete with standard air conditioning gives superb visibility and comfort for the operator.

The mobile and versatile Teletruk 35D offers up to 2.4 metres of forward reach and up to 3.5 tonnes of lift capacity, allowing quick loading of stillages full of battery casings into trailers or containers.

When batteries are delivered in a closed container, the Teletruk easily accesses the restricted space as there is no interference from a conventional forklift mast. Unloading or loading of trucks can be achieved from one side, saving time and money, and especially important if the site is restricted.

The Loadall range is also ideally suited to battery rehandling. With lift capacities from 2 tonnes to over 4.1 tonnes and lift heights from 4 metres up to 17 metres you will always find a model to suit your particular application.





Construction Metals Recovery

Range of XD excavators from 26- to 46-tonnes

Materials handling and scrap rig options for JS220

21m, 26m and 28m high-reach demolition rig options
for JS330, JS360 and JS460 models

XD (Xtra Duty) additional machine protection

Range of JCB attachments from hydraulic breakers
to cutter crushers



Steel used in construction is usually of a very high grade so during demolition work it makes good business sense to recover it from the concrete frame, particularly when you consider that a typical 4-storey office development can contain as much as 166 tonnes of steel.

Few work environments are as demanding as demolition, but there's a range of JCB machines designed to more than stand the pace ... the JCB XD tracked excavator range.

The dipper on the XD excavator is specially reinforced so it can handle the most arduous of loads and the rear plate is also strengthened, protecting it when material is gripped between a grab attachment and the underside of the dipper. A 10mm plate protects the whole underside of the upperstructure of the machine to prevent reinforced steel bars penetrating and damaging engine or hydraulic components.

Protective measures continue with flush fitted covers that safeguard the track from re-bar and all other debris, an engine air pre-cleaner that removes the heavier dust particles before they get to the air filter, and a fine mesh grille to keep the radiator clear. All hoses and pipe work are run inside the undercarriage framework to avoid damage.

When it comes to maximum performance on site, you'll find this machine range gives optimum productivity from whatever attachment you choose to fit. An optional merged pump facility in the hydraulic system allows high flows to be delivered to the dipper-end via the optional combined pipe work for fast operation of larger hydraulic attachments. Plus, the combined pipe work provides two-way flow for JCB attachments such as cutters and crushers.

High-reach rigs are available for the larger machines in the range for more specialist demolition and metal reprocessing projects.





Mills and Foundries

Teletruk 35D can load and unload from one side

Teletruk 111° carriage tilt keeps loads stable during travel

Telescopic boom keeps hazardous materials
away from the operator

JCB Robot features maximum safety, side-entry design

Special kits enhance Robot safety even further



Health and Safety; it's got to be the top priority issue for a mill or a foundry where you're dealing with hazardous and unstable molten metal. But the first job in the process is to get raw product delivered through the door. And for that you must consider the very compact JCB Teletruk 35D.

Unlike any other counterbalanced forklift, the TLT35D offers a tremendous benefit; forwards reach to load and unload lorries all from one side. It's perfect alongside freight containers, trucks or hoppers as loading space can be reduced by up to 50%.

Another major difference between Teletruks and conventional masted forklifts is the degree to which the forks can be rotated forwards-back. Masted industrial forklifts only offer 6-8° of forwards-tilt for work with pallets in storage racking. But the Teletruk 35D carriage rotates 111° allowing excellent back-tilt so there can be no danger of difficult loads becoming dislodged from the forks during yard travel.

The most important benefits come from the Teletruk's telescopic boom. With excellent visibility and a reach of 2430mm, this ensures that hazardous loads are kept well away from the operator. Plus, full cab air-conditioning is an option no operator should be without if by-product fumes are present.

Another very versatile machine for mills and foundries is the JCB Robot skid steer loader. This unique machine is the only skid steer to offer a maximum-safety, cab door side-entry design. With a single loader tower for optimum visibility, the Robot is a compact and highly manoeuvrable machine which allows direction changes to be made within the machine length. There is also a choice of extra-safety kits; heavy-duty bars, front-screen guards, level II FOPS guards and shatter-proof screens. It's a versatile, productive and safe partner machine for the Teletruk 35D.





A few words about JCB

A groundbreaking, class-leading family business with a commitment to supporting our customers and protecting the environment



A family company on a global scale. JCB is no ordinary company. From the dreams of one man, Joseph Cyril Bamford, we have grown into the world's biggest privately owned construction company by volume. Since 1945, the same attention to detail, passion for progress and family spirit has taken us from strength to strength.

Nowadays JCB operates across all five continents, manufacturing at 17 factories in the UK, Brazil, Germany, China, North America and India. With 1,500 dealerships and depots selling and supporting our products in over 150 countries, we are one of the top three manufacturers of construction equipment with some of the finest engineering facilities in the world.

A history of world-class innovation. Our business has always been driven by innovation, using only the most advanced technology, components and processes, meticulous design and rigorous testing. In heavy products this has meant one of our largest investments to date, £40 million, into a new factory dedicated to producing large excavators. Here, with a team of industry experts and machine specialists, we're designing and developing the heavy machinery of the future.



Sustainability in all we do. As a manufacturer of working machinery, operating in both established and emerging markets, we accept the challenge of helping to deliver economic and environmental sustainability.

Product innovations that provide the right solutions to our customers have been a vital part of our history and will be key to our sustainable future. But in addition to developing cleaner and more efficient machines, we have a commitment to ensuring our manufacturing facilities meet the highest environmental standards.

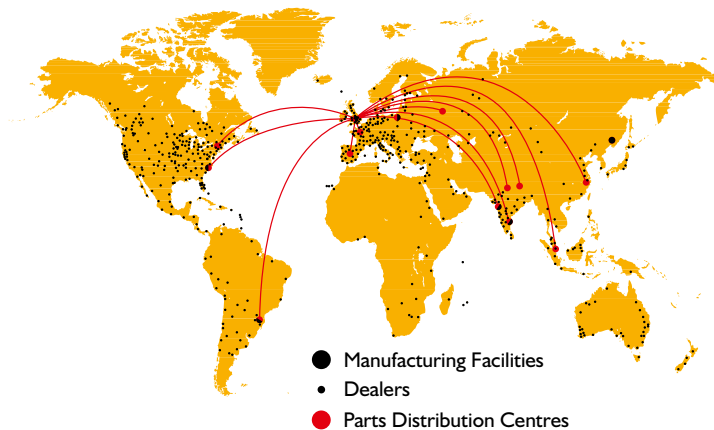
A commitment to our customers that goes on and on. That's a fact we remind ourselves of constantly, and it's the reason our customers are at the heart of everything we do. Whatever a customer needs, we make it our mission to provide world-class support and 100% satisfaction.

At the heart of this is a dedication to minimising machine downtime. So our state-of-the-art World Parts Centre dispatches more than a million genuine parts and attachments every week, with an 'Anywhere in 24 hours' strategy. Our JCB-trained technicians provide excellent, expert customer care, whether it's routine servicing or something more urgent. And we are constantly looking at new, innovative ways to help you get the most out of your machine.



The best back-up in the business

Whether we're providing you with support, parts or finance, we aim for 100% satisfaction. It's all part of our promise to put you, the customer, first



Wherever you are, we are. Our mission to provide world-class support and deliver 100% satisfaction reaches into more than 1,500 dealer depots, spanning 150 countries across five continents. The aim? To bring you global expertise at a local level. We truly believe no other manufacturer does more to understand the subtle differences between one region of the world and another. It's a degree of attention that we maintain at every level of the company and an assurance to our customers that wherever they are in the world, JCB will fulfil their needs.

Trust the genuine article. At the heart of the support network is our impressive World Parts Centre, a state-of-the-art facility operating 24/7 to dispatch more than a million genuine parts and attachments every week to our dealers and international distribution centres. Because we understand the need to minimise downtime, we utilise the latest logistics and warehouse management systems and have committed to an 'Anywhere in 24 hours' strategy.

Keeping you up and running. Just as important as genuine JCB parts are the people who fit and maintain them. Our JCB-trained technicians in all of those 1,500-plus dealer depots provide excellent, expert customer care, whether it's routine servicing or something more urgent. If there is an emergency breakdown situation, we need to act fast. This is why all our dealers operate their own fleets of support vehicles, enabling parts to be delivered quickly and fitted expertly, and fulfilling our promise to keep our customers working.

Advanced technology. At JCB, we are constantly looking at new, innovative ways to help you get the most out of your machine. Our latest development is JCB LiveLink, an advanced telematics system using satellite and cellular technology that enables you to better protect your machine and accurately monitor and improve its performance. Using JCB LiveLink

can benefit your business in many ways, from increasing the security of your machines to improving fleet utilisation. It can also enable your JCB dealer to view your machine and guarantee timely servicing of your fleet, improving uptime.

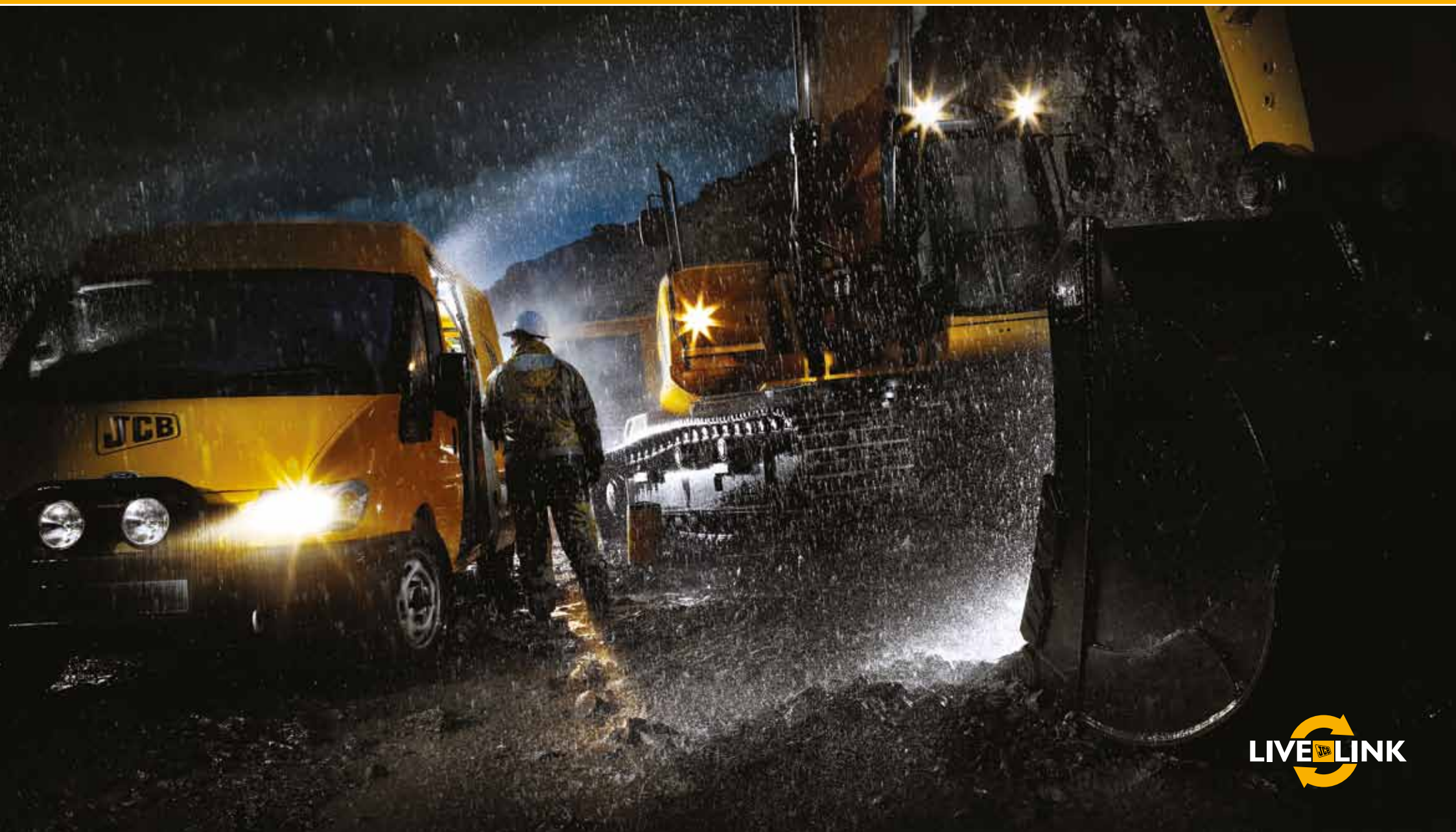


Maximising earning potential. We grow as our customers grow. That's why, at JCB, we are committed to offering expert financial advice and support to help customers maximise their earning potential.

Finance options* are available for new and used machinery, all part of our dedication to helping customers preserve their working capital while spreading costs in the most effective and tax-efficient way.

And as well as financial help, we are also happy to offer JCB Insurance.* We specialise in construction and industrial insurance and in offering Insurance Premium Finance facilities.

** Please check individual countries for available services.*





JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP. Tel: +44 (0)1889 590312 Email: salesinfo@jcb.com

Download the very latest information on this product range at: www.jcb.com

©2009 JCB Sales. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB Sales. JCB reserves the right to change specifications without notice. Illustrations and specifications shown may include optional equipment and accessories. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.