

Buyer's guide: Small-scale machinery

For many years the structure of the UK forest industry has favoured big machinery. However, with so many smaller woodlands across the country coming into management, a much larger range of small-scale equipment is now available. In many cases this represents a much lower capital investment and fewer overheads, as well as giving more flexibility to deal with different woody materials and difficult-to-access sites – ultimately helping owners and managers to get the most out of their woodlands.

When it comes to woodland and forest management, small-scale equipment plays a huge role in getting the job done. Whether you're working in a small space, tackling tricky terrain or on a sensitive site, this month's buyer's guide brings you the latest in small-scale machinery, from skidding grapples to forwarders.

AVESTA-VAGNEN TIMBER TRAILERS FUELWOOD

IN the life of a small woodland/estate manager, a timber trailer is an essential piece of kit. The range of mini forwarding trailers from Avesta-Vagnen are built with Swedish forestry in mind; the unforgiving Swedish terrain makes them suitable for all conditions. Pulled by any compact tractor, quad bike, or 4-wheeler, the range starts from £1,750 + VAT with the TB1300. This is a simple mechanical trailer with articulating axles and flotation tyres to tackle the toughest terrain without surface damage. Fitted with the optional electric, radio-controlled WARN winch, the TB1300 can extract timber from a 25-metre radius.

The range is comprehensive, through to the MS48 with driven axles, steering drawbar, hydraulic crane, Honda power pack and radio-controlled winch. All the trailers in the range can also be fitted with conventional trailer bodies and the cranes with clamshell buckets, meaning that when not required for timber extraction the trailer does not sit idly in the shed but becomes a useful tool to assist with other jobs. **01926 484673**
www.fuelwood.co.uk



KINETIC FORWARDER RIKO UK

THE latest in small-scale kit for timber extraction from Riko, the Kinetic 8x8 forwarder was designed as a serious, high-output professional machine for low-impact work by forestry owners and contractors. The standard build includes crane, grab and rotator and the hydraulic extending chassis to reduce the length for transport to 5.1 m from the working length of 5.7 m.

There are a number of advantages to choosing the Kinetic over a small tractor and forwarding trailer/crane combination, such as easy transport on a single trailer – the Kinetic will easily fit on a 14 ft flatbed trailer. It provides better ground clearance, climbing and manoeuvrability, and far better traction due to eight-wheel drive through four oscillating axles, plus is much lower impact due to its articulated steering and band-track option.

The Yanmar 26 hp diesel engine is quiet and smooth, providing longevity as well as low fuel costs, and there is a mechanical gearbox with three forward and one reverse, driving a Vario transmission for clutchless drive from stationary to full speed in each gear.

01420 487300
www.riko-uk.com



MALWA TREELINE WOODLANDS LTD

WITH their new third-generation harvester, forwarder and combi machines, Malwa have a wide range of small-scale equipment ideal for forestry management.

Their bestselling 560.3F forwarder and their harvester are aimed at forestry contractors who require highly reliable, productive and comfortable machines. All machines in the range weigh around five tonnes and share the same engine – a Cat 3.4b, a hydraulic system from Bosch Rexroth and control system from Parker IQAN. These components make the heart of the machines very reliable with easily available spare parts and technical backup if required.

The chassis and drivetrain are rugged and well designed to provide a machine which can easily cope with the rigours of forestry contracting use. The forwarder uses a crane and grapple from Cranab, which provides speed and power and has smooth and adjustable operation through the mini-lever controls. The harvester uses a parallel reach crane from FTG Mowi with a Logmax harvesting head capable of cutting up to 42 cm stems. A strong articulation brake, direct drive, hydrostatic transmission, diff locks front and rear and the ability to run a variety of band tracks or chains make the machines extremely capable even in demanding terrain. Malwa offer the forwarder with a larger headboard for the UK, increasing the load space by 25%, to optimise for working with short roundwood such as our 3 m chip-wood.

01968 660698
email nick@treelinescotland.com

SMALL-SCALE RANGE MARSHALL LOGGING

WINCHING is a simple, low-cost method of extracting timber, particularly on wet or difficult sites. Marshall's supply the Vitli Krpan range of winches with pulling power from 3.5 to 10.5 tonnes. Options include radio remote control, hydraulic butt plates and snatch blocks. They also manufacture the Savall hydraulic winch intended for cableways, which is suitable for rugged and inaccessible terrain. This has a mechanical lever for continuous brake disengagement. They also have a range of three-point linkage grapple skidders.

For transporting timber, estates, farms and contractors generally use trailers with timber cranes for loading and unloading. On small or sensitive sites the Vahva Jussi trailer is the perfect solution and can be towed by ATVs, compact tractors or the Lennartsfors IronHorse. Jussi have three trailer crane models – the 1500, 2000 and 3000 – and the Vahva Jussi crane models 320, 400, 420 and 500 are available. A demounting tipping trailer body, hook-lift body, energy head, and post hole borer attachments are also available. Wider tyres can be fitted to give greater flotation.

The new model from Lennartsfors, the IronHorse Flex, is ideal in wet and difficult terrain, with low ground pressure making it gentle on soil and plants. We have machines working successfully in very wet and marshy terrain throughout the UK and Ireland. The Flex HI is fitted as standard with a winch, heavy-duty tracks and hydraulics. They can also be fitted with a hydraulic grapple skidder, tipping body or skidding arch, to name but a few. This machine is also ideal for hunting, fencing and all types of land maintenance in extreme conditions. As the name suggests, this is a very versatile machine – you can drive it, lead it and it is capable of turning on the spot.

For rapid harvesting of small-diameter biomass, Marshall's offer the range of Westtech tree shears for excavator mounting. Westtech have recently brought out a range of smaller tree shears to mount onto mini diggers.

Gierkink manufacture two models of grapple saws for tractor, truck, mini digger or forwarder crane mounting. These come with a continuous rotator and a patented valve block, so there is no need for extra hydraulic lines or electric cables.

01892 770788
www.marshalllogging.co.uk



SKIDDING GRAPPLES FUELWOOD

SKIDDING grapples are gentle on woodlands yet robust enough for extracting, transporting and stacking substantial quantities of timber. In small woodlands, these cost-effective bits of kit can save an immense amount of manual labour and make the whole operation considerably safer. Fuelwood offers a variety of skidding grapples depending on the environment, the timber and the machine it is to be mounted to.

The Japa skidding grapple is an extremely effective machine for skidding timber behind a tractor. With a 2-metre jaw opening and strong cylinder, it can grab as much timber as even some larger tractors can counterbalance against and ensures good penetration of the claws into the woodpile. The optional 45-degree slewing capability assists with positioning whilst collecting and dropping timber, making it easier to pick up bunches from a drive track, as well as helping steer around obstacles during extraction.

The Forest Master skidding grapple can



attach behind a tractor via the three-point linkage, onto a mini digger, or be mounted onto a front loader or telehandler via an adaptor plate. It also has the option of coming supplied with or without a rotator. These options increase the versatility of handling timber in a yard environment.

01926 484673

www.fuelwood.co.uk



PFANZELLT MASCHINENBAU – D A HUGHES

ONE of the newer innovations from Pfanzenbau is the Moritz Fr50, packed into a neat little package. Essentially a tracked mini tractor designed for felling and forwarding, it is an especially useful felling aid for undertaking winch work on the most inaccessible sites (those demanding a high level of safety), as well as having low ground impact.

The Moritz is powered by a 4-cylinder 35 hp Kubota engine with a proportional hydrostatic drive. Travelling at a top speed of 6.5 km/h, it is fully controlled by a radio remote. The Fr50 can be fitted with a 4- or 5-tonne geared cable winch, hydraulically or mechanically driven. The winch comes with 70 m of 10.5 mm rope as standard, with a drum capacity to fit up to 110 m of 11 mm rope. Optionally, the winch can be fitted with a rope infeed brake, guaranteeing optimum cable spooling by giving more precise control and ensuring the cable is always kept taut on the drum. The cable speed is variable to suit the work demanded and the infeed height adjustable via the logging plate.

The Moritz can also be equipped with a three-point linkage and PTO transmission, for which an easily interchangeable 1.2 m mulching head is available. This also offers the operator the option to run any compatible three-point attachment as

required.

Fitted on rubber tracks, with a ground clearance of 300 mm and designed with a 45-degree angle at both ends, it is an all-terrain vehicle capable of travel on steep slopes and rough ground. The machine's chassis is built of special torsion-resistant steel, at 1.1 m wide it can be hydraulically widened up to 1.5 m to give increased stability during operation. For the most demanding pulls, four fixing points at each corner of the chassis can help anchor down the machine.

At only 1.4 tonnes and 2.2 m long it is quick and easy to transport, being small enough to fit in the back of a van, pickup or small trailer. Its compact dimensions also access narrow and difficult site access. And with a low ground pressure less than that of the human foot, it is also perfect for fragile soils, SSSI sites and is an ideal solution for work on wet ground. With all functions wirelessly controlled it is especially useful for felling on steep and dangerous ground, allowing the operator to keep well clear of the risk zone.

A storage box is also fitted to the chassis with enough space for a chainsaw and fuel canister. It even comes with a horn!

01691 882138

www.dahughesforestry.co.uk



JAK TREE SHEARS JAS P WILSON

TREE shears are a low-cost, simple and effective tool for the management of small-scale woodlands, parks and local amenity land. They are designed to quickly attach to a standard excavator, allowing it to grab round the base of a tree, shear through the timber in one clean cut and remain in possession of the cut tree to allow the operator to either fell it where it stood or track it off site towards a woodchipper or trailer.

Jas P Wilson are the sole UK and Ireland suppliers of JAK tree shears, designed and manufactured in Finland. The JAK shear features a reliable Hardox strengthened steel blade, sliding through standing timber with ease. It can easily be unbolted from the main body of the shear to be sharpened or replaced – something which is rarely of any concern.

The shears are available in a number of sizes and cover a variety of base machines such as excavators, cranes and telehandlers. The range includes models from an 8" cut machine typically fitted to a 2–4.5 tonne excavator, up to a 16" cut machine, the JAK400, recommended where the base unit is a 20+ tonne excavator. 01556 612233 simon.clingan@jaspwilson.co.uk



VIMEK HARVESTER & FORWARDERS OAKLEAF FORESTRY

VIMEK'S new 404 SE harvester moves carefully between the stems. This machine is just 1.8 m wide and has a unique double steering function that gives it a turning angle of up to 80 degrees. This allows it to proceed without wide strip roads, which increase the risk of wind-blow and snow damage, for example. This flexible, lightweight machine gives the operator the best chance of selecting the right trees and minimising damage along the strip road.

The harvested timber can be loaded onto the Vimek 610 SE forwarder, which efficiently transports the timber to the collection point. Although the forwarder can carry a load of 5,000 kg, which is more than the weight of the machine itself, like the harvester, it has extremely low ground pressure. It reduces the risk of damage to the vital root system of remaining stems.

The fact that these machines have also been developed to be fuel-efficient is gentle on both the environment and the finances. The latest generation of Vimek machines have been equipped with Electronic Travel Drive, which ensures that the diesel engine runs at the lowest rev range possible, to ensure minimal fuel consumption.

www.oakleafforestry.com/

CS100 GREENMECH

THOUGH chippers may not be the first things that come to mind when considering small-scale equipment for woodland management, there's still something to be said for small, versatile machines like the CS100. At just 760 mm wide it is ideal for chipping in confined spaces. Available in a 16 hp recoil-start or 18 hp electric start petrol-engine spec, it is ideal for landscapers and for use on large estates/parkland.

Arthur Owen, who manages Rhos Holiday Park, claims that the CS100 has made maintaining the site's hedges and brash a breeze. "Squeezing the CS100 between caravans is not a problem, meaning I can chip large amounts of brash into next to nothing, straight into a pile or bin. I've also had it working on the farm and it has taken everything we've put into it easily in its stride."

The CS100 can be carried on the back of a trailer or truck, or it can be specified with its own chassis or tractor-mount. A heavy-duty flywheel with twin blades makes light work of typical material and a wide-throat infeed chute ensure easy flow of branches without 'sneeding' or catching. Blades are simple to replace or sharpen and maintenance time is very minimal, making this a highly productive and flexible unit.

www.greenmech.co.uk



RIKO Kinetic 8x8:

Diesel 26Hp. 8x8. Weighs 2.2 ton, 3 ton load.

BOOK YOUR DEMONSTRATION NOW!

**Small Scale,
Low Impact,
Forwarding &
Extraction.**



**5WD Pedestrian
Operated Forwarder.
1500Kg capacity 3.3M crane**



Skidding Grabs



Winches 3 ton to 12 ton



26-99Hp Alpine Tractors



1.5 – 5 Ton Forwarding trailers

Riko UK Ltd enquiries@riko-uk.com Tel: 01420 487300

BUYER'S GUIDE

NOVOTNY CALEDONIAN FORESTRY SERVICES LTD

NOVOTNY forwarders are robust machines which, as well as being easy to service, are light and convenient for forest use. CFS Ltd market two of their most popular models, the 511 and the 520, and will soon have available the largest and newest in the range, the 720.

The LVS 511 low impact forwarder is the smallest machine in the range, with a five-tonne loading capacity which has been designed mainly for thinning. Its compact size means there is minimum impact on forest ground, yet despite its small size, the cab is surprisingly spacious. Powered by a fuel-economic Cummins engine, together with Bosch Rexroth hydraulic components, this small forwarder is effective in all forest conditions. The 8-wheeled, narrow chassis provides stability, and the quick and precise Kesla 204T crane means high productivity while minimising damage to standing trees.



Slightly larger than the 511, the LVS 520 is also designed mainly for thinning. Like the 511, it features the sturdy 8-wheeled chassis, which, together with 500 mm tyres, provide good traction even in the most difficult forest terrains. The Cummins engine has a 60-kW output, with Sauer Danfoss hydraulic components, a SCAD control system from Adcis, and a Kesla

303 or 304 crane, all of which make the LVS 520 a powerful low impact machine.

New to the Novotny family, the 720 is designed for thinning and clearfell, and has been received well in its two years of intense performance and safety testing. Watch this space for more information on this new model coming soon.

www.caledonianforestryservices.co.uk

HYPRO TRACTOR PROCESSORS OAKLEAF FORESTRY

OAKLEAF Forestry have been suppliers of Hypro tractor processors since 2014, providing reliable, high capacity machines that are powerful and cost-effective. A popular model is the Hypro 755, a processor capable of cutting and delimiting trees from 45 cm in diameter right down to 3 cm. The machine has its own load sensing hydraulic system and is operated with ECH mini joysticks from the comfort of the tractor cab. This powerful machine comes with its own 7.5 m, double extension crane and a 50 m radio controlled winch to recover trees into range for the crane to then load on to the machine bed. It can also be fitted with the optional Hypro FG45 felling grapple to make it an all-round harvesting solution.



Smaller models in the range include the Hypro 300, with 35 m radio control winch and which can delimit trees up to 12"/30 cm. This machine has been in production since 1987 and they just keep going... there are 30-year-old examples still working hard all over England.

The 450XL model can handle trees up to 18"/30cm and comes with its own 6 m crane and 50 m radio controlled winch. This machine has a dual speed setting for increased speed or more power, so it can adapt to the most demanding conditions.

028 3833 0011

www.oakleafforestry.com

MINI SKID STEER VERMEER UK

THE Vermeer S925TX mini skid steer is the latest unit to be released in their implement tool carrier range. Whether you are hauling heavy material, digging, grabbing, post boring, sweeping or trenching the S925TX will help tackle the tough jobs.



Equipped with heavy duty loader arms, it can efficiently lift 420 kg to 2.2 m and transport materials around the jobsite. The hydraulic system provides both high and low flow as standard, and is capable of powering attachments that need either precision or high hp – thus it can be used with a multitude of different attachments and implements. This unit is designed to get through narrow gates and into tight access areas with the 7" (180 mm) track option, giving it a width of 36" (91.4 cm). When 9" (230 mm) tracks are selected, the S925TX is 40.5" (102.1 cm) wide, offering maximum traction and lower ground pressure (psi).

The platform keeps users out of mud and debris and includes operator presence; if the operator steps off the platform, ground drive and boom/bucket motion are stopped until the operator steps back on the platform. Ground transport is controlled by a single joystick making movement easy and controlled. The Kubota 1505V engine, with a choice of 25 or 35 hp options, gives the operator the choice of what makes the most sense for their fleet.

The universal mounting plate allows the operator to easily hook up to numerous attachments and implements.

01933 274400

www.vermeer-uk.co.uk