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ARBORISTS







BARKING UP **ANOTHER TREE?**

Last month's three day forestry and arb show - the APF Exhibition - held at Ragley Estate in Warwickshire, UK, was a good indicator of the access related trends and demands of the professional arborist.

The show itself attracted about 20,000 visitors and 300 exhibitors and featured a good few access equipment manufacturers and distributors aiming to benefit from the growing market. Cranes & Access visited the show 18 years ago when it featured just a few platforms such as a 12.5 metre Land Rover style 4x4 Santana/SkyHigh joint venture built by SkyKing, a Teupen Leo 23GT owned by Trac-access, IJ Access showing Lionlift spiders, a 16 metre **Italmec and Promax Access - still the Platform** Basket distributor in the UK - showing a variety of equipment including a tractor, truck and trailer mounted units. How times and the access industry have changed since then!

Over the subsequent years spider lifts and 4x4 pickup mounted lifts have become the arborist's access equipment of choice, although more recently the market has seen increasing demand for truck mounted lifts with working heights from 20 to 35 metres.

Increasingly strict safety legislation coupled with an aging workforce - unable or unwilling to climb trees - have forced many companies to seriously consider using powered access for tree work. Other factors include the fact that it is safer and can be significantly quicker than climbing.

Tree work is one of the more dangerous market sectors, with frequent injuries and even fatalities. In an effort to reduce incidents, IPAF produced a Technical Guidance document in 2022 entitled 'Safe use of MEWPS to manage trees and vegetation' (TE-1107-0822-1-en) which highlights hazards from planning, workplace inspection and pre-use check through to operation and shut down.

A DIFFERENT VIEW

Because of the nature of the work, arborists look for specific design features in an aerial work platform compared to general rental users and are more likely to buy than rent. An aerial lift is however one of the most significant investments made by an arborist and it is therefore critical that they get the right machine. The person making the buying decision is often the user and they know exactly what they want in terms of specification - a robust machine with good protection for major components, such as hoses and cables, control panel and cylinders etc.. A solid lifting mechanism with a stable platform which contributes to a general feeling of security is also important, particularly when operating chain saws.

Spider lifts are ideal for tree work, being able to manoeuvre in tight spaces and on uneven terrain. Their compact design and manoeuvrability also make them perfect for urban areas or densely wooded locations alike, as well as being narrow enough to fit through a standard doorway and track down the side of a house to reach rear garden jobs. However, the narrow width also means that extra care has to be taken when travelling to avoid overturns, particularly on uneven or sloping ground. Of course, it goes without saying that when in operation, there should be adequate care taken over the ground with suitably sized outrigger mats on board.

In recent years there has also been a demand for larger spider lifts that can be transported on a two axle 3.5 tonne trailer. In the UK Towmate Trailers recently launched a new trailer specifically designed for the 18 metre Hinowa LL18.80 spider







lift which weighs 2,950kg, however some lifts of around 23 metres are coming in at a similar weight allowing them to be towed behind a 4x4. Another increasingly popular accessory is a winch that replaces the basket to create a spider crane.

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INSULATED SPIDERS

One of the main safety issues for arborists is the presence of overhead power lines, particularly in North American where high volage overhead lines are more prevalent. Spider lifts with fully insulated booms offer protection to those working from the platform and below. Only a few of the 20 or so spider lift manufacturers offer insulated machines. Platform Basket was one of the first with its 17 metre PB18.90.46kV in 2012 to meet demand from the USA, its largest market. It added the 22 metre Spider 22.10.46kV in 2018 due to increased demand in the region. Other manufacturers offering 46kV insulated spider lifts include Omme Lift's 26.5 metre model, 22 metre Bluelift and the 23 metre CMC with Chinese manufacturer Goman now offering an 18 metre 10kV version.

TRUCKS NOT SPIDERS

For those arborists not needing a go-anywhere platform, a small truck mount is proving a popular option, being ideal for urban applications such as pruning or clearing overgrown trees from public ways. They are also ideal for travelling rapidly to



site, completing the work and returning to base. A small but growing number of vehicle mounted lifts are now fully electric, although hybrid models featuring a diesel engine powered chassis and a battery operated boom are becoming the norm in some regions due to the low noise levels which also aids good communication between ground and basket.

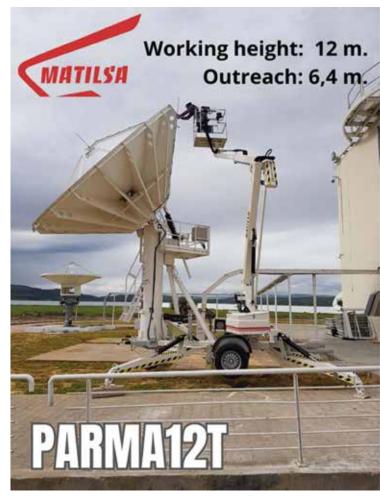
UK manufacturer Aldecote offers the CZ140, CZ150 and CZ160 pickup mounted lifts with working heights of 14.1, 15.2 and 16.2 metres with outreaches of 6.8, 7.6 and 8.1 metres respectively. All have a platform capacity of 250kg and weight just over three tonnes when mounted on a Ford Ranger, Isuzu D-Max or Toyota Hilux chassis. The CZ range features E-Drive - a self-charging hybrid electric system - which is said to



be far more efficient and cleaner than traditional PTO drive systems. The lead acid batteries recharge while travelling eliminating the need for external power sources. It is compatible with both diesel and fully electric chassis.

Engines typically provide far more power than is needed even when idling meaning 90 to 98











percent of fuel is wasted with diesel engines when running a platform with most of the excess dissipated as heat.

Aldercote says it started with a blank sheet of paper when designing the hydraulic system for its CZ models in order to make them as efficient as possible when driven by the electric motor. The average over the cycle is only 800W. If the time spent at full reach is three minutes, the average requirement falls to 250W. The solution therefore only requires two conventional lead acid batteries. They can power around 20 lift cycles on one charge before the engine needs to be switched on to recharge which can happen when travelling. Aldercote is also trialling lithium-ion batteries which are 10kg lighter and can offer up to 50 cycles per charge.

Another new 4x4 pickup mounted lift is the 13.4 metre working height Socage Forste 14A, the demonstration unit was unveiled at Vertikal Days. With a platform capacity of 230kg it has an unrestricted outreach of 7.1 metres and features straight leg jacking and is only available on an Isuzu chassis. Socage also says it is aiming to produce models the UK in the near future.

ALTERNATIVE EQUIPMENT

The best way of avoiding working at height is to remain on the ground. One of the more unusual pieces of equipment for an arborist for tree felling or trimming is a 360 degree telehandler fitted with a grapple saw attachment. Larger 360 degree telehandlers - with say six tonnes capacity and 30 metre lift height - can be equipped with an attachment such as the Westtech

Woodcracker CS750 or CS580 which allows the machine to grab and hold a trunk or branch of up to 750mm in diameter then cut it using the integral saw. The severed limb is then lowered to the ground. With most 360 degree telehandlers this can also be done with the remote controller allowing the operator to leave the cab for a better view and improved safety. The machine's dedicated load chart for the attachment allows the operator to see the weight of the load and







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APF 2024 - A NEW HIGH!

The 24th bi-annual three day APF Exhibition - which this year took place at the Ragley Estate in Warwickshire at the end of last month - welcomed 20,000 visitors and 300 exhibitors. The verdict of many was that it was the 'the best show to date'.

Over the years the show has seen a growing arborist presence and in particular, an increasing number of aerial work platform exhibitors showing spider lifts, 4x4 pickup lifts and truck mounted platforms. As well as the extensive range of forestry and arb equipment there were plenty of events including the **Husqvarna World 25 metre Pole Climbing** Championships, the new APF Tree Climbing Challenge, axe throwing, chainsaw carving and the UK Lumberjack Championships. A woodland craft area displayed traditional crafts and skills from clogs to coracles, oak swill baskets to dug out canoes. The show returns to Ragley Estate on the 24/25/26th September 2026. Here a few of the exhibitors at this year's show.



























THE NATURAL CHOICE FOR WORKING AT HEIGHT



How JLG is meeting the needs of arborists and tree surgeons with its expanding range of compact crawler booms ideal for garden maintenance

JLG is continuously seeking opportunities to expand its compact crawler boom lift portfolio with capabilities to help customers unlock their potential. Its acquisition of Hinowa in 2023 is a prime example of how, once a market need was identified, JLG responded with a solution that not only met that need but also strengthened its offering.

Italy-based Hinowa is the leading manufacturer of compact crawler boom lifts and an access industry pioneer in lithium-ion battery technology. It employs around 200 across two facilities, a 23,000 square metre manufacturing plant and a 5,000 square metre parts facility. The company has produced JLG-branded compact crawler boom lifts for almost 15 years.

The JLG compact crawler boom lift product line offers a large range of sizes, including articulated and straight boom models, and a variety of power options including engine, electric and bi-energy. Notable recent introductions include the X26AJ and X33AJ models and a new straight-jib model, the X22SJP/X22SJL.

For garden maintenance operations, and tasks such as tree inspections and surveys, tree pruning and reduction, and tree felling, the X2OJ Plus and X22SJP are ideal. They strike the perfect balance of compact size (stowed width 0.8m), working height (20.05 - 22m) and horizontal working outreach (9.70 - 12.55m), which is extremely important for arborist work. Minimal emissions and noise pollution are highly advantageous as it means less disturbance for customers in residential areas.

Highly versatile

Thanks to the slim design, they can fit through narrow gates and on paths to easily access rear gardens. The low weight makes them easy to transport from one site to another and suitable for operation in weight-restricted areas.

Easy to manoeuvre, users can position the basket precisely to ensure trees are cut from the right position, without compromising safety, and the tree is reduced in the optimum way, ensuring its long-term health.

JLG compact crawler booms are a safer and more productive alternative to traditional methods – it can take half a day to complete a job with the

X20J Plus compared to two days when climbing with ropes. This enables arborists to respond quickly to their customers' requests, take on more challenging projects that other companies cannot, and maintain competitive prices by reducing their time spent on site. The auto-levelling outriggers can reduce set-up time significantly, for example.

"At JLG, we frequently receive feedback from the field about the operating experiences users have with this type of equipment," says Nicola Sacchet, JLG EMEA Product Manager. "We listen and continue to carefully consider design cues that not only meet the needs of our customers but also address their wants.

"When it comes to future introductions to our compact crawler boom lift product portfolio, we will continue to evaluate our product offering with the market need, and we remain committed to considering options that meet those needs, including introductions that fill gaps in the line or extend the range."

For more information, please scan the QR code:



