



## THE SMART ALTERNATIVE TO LADDERS, PODIUMS AND SCAFFOLDING !

### **LOW-LEVEL ACCESS FROM POWER TOWERS - A SMARTER WAY TO WORK!**

WORK SAFELY: Using one of the PowerTower range of modern alternatives to ladders, scaffolding or podium steps.

**WORK STRESS-FREE:** Our ergonomic design allows operators to work comfortably over longer periods of time, while reducing the potential for musculoskeletal injury, stress, and fatigue.

**WORK EFFICIENTLY:** The benefits of working at height safely and comfortably include improved work efficiency, increased worker morale, reduced sick pay and workers' compensation claims, along with decreased absenteeism and employee turnover.



#### LOW LEVEL PLATFORMS





## LOW LEVEL ACCESS MARKET AT A HIGH

The market for low level aerial work platforms - with working heights of five metres or less - is reaching record levels, reflecting a growing awareness that such machines are safer as well as being more efficient and productive. We take a look at the market and the latest product launches.

#### Falls from heights of up to five metres are by far and away the biggest cause of life changing workplace injuries and fatalities. They are also the largest single cause of minor strains and muscle pulls, as tradesmen climb ladders and steps and then work without holding on.

It is estimated that in countries such as the UK or Italy well over a million people use one form of low level access equipment every day. This includes step ladders, mobile tower bases and podium steps etc. The market has been changing however, following the introduction of what is now referred to as 'low level aerial lifts/work platforms' - including battery powered push around and self-propelled manually powered models. The big change came in the UK in late 2005 as a result of the European Work at Height directive which the UK typically 'gold plated' and over rigidly interpreted and enforced.

The big change was that some form of fall protection was required regardless of height. Up until then the general rule was this was only required above two to three metres. Some major contractors were said to have banned the use of any type of ladder on their job sites. Panic began to set in, helped along by the rapidly spreading myth that ladders were banned by the UK's Health and Safety Executive. The fear was exacerbated by 'get rich quick'

opportunists offering 'free' work at height audits and advice as a Trojan horse to simply sell equipment. All this stoked the fire and the demand for alternatives to ladders. The Health & Safety Executive was obliged to issue a statement saying that ladders had not been banned and could continue to be used as long as proper risk assessments had been carried out and safe work practices followed. However, the practice of working from a ladder using two hands to carry out the work, especially for extended periods, was highlighted as unacceptable.

At the start of 2006 UK manufacturer NSG unveiled its Chinese-built Pop-Up push around lift at the Hirex show with a 3.63 metre working height. The company took an enormous number of orders for the new machine. Pop-Up sales continued to soar, causing other manufacturers to pile in. The market continues to grow with some UK rental companies now running fleets of more than 6,000 units. However, they still represent a small percentage of the total market potential if manufacturers' estimates are to be believed. This is certainly the case in Italy where campaigns are underway to reduce the use of ladders.



#### IN THE BEGINNING...

The original Pop-Up weighed 279kg and was priced at around £2,500 to £3,000, but generated rental rates of around £100 per week making it a decent investment.

In the USA, Custom Equipment shipped its first product - the 10ft self-propelled Hy-Brid HB-1030 scissor lift in 2004 with a five metre working height and an overall weight of less than 500kg. Its introduction was driven not by regulation but by the increasing use of suspended floors, with capacities that ruled out the increasingly heavy 15ft scissor lifts.

#### LOW LEVEL PLATFORMS



#### **AXOLIFT'S FIRST SCISSOR**

Italian low level aerial lift manufacturer Axolift launched a new 4.95 metre working height push around scissor lift, the P300, and says a selfpropelled version is on the way.

The new entry level machine - the company's first scissor lift - has a platform capacity of 240kg and is manufactured at its plant in Pove del Grappa - between Verona and Venice. It has an overall width of 765mm, an overall length of 1.27 metres, a stowed height of just under 1.78 metres and weighs 390kg. A simple 24 Volt system and AGM battery pack provides power for the lift function, while features include automatic two wheel braking when the platform is elevated and heavy duty castor wheels.

Chief executive Massimo Grossele said: "Our growth strategy to become a leading manufacturer of low level products is a continuous expansion of our product line. Compact scissor lifts are a natural progression, and thanks to its modular design the same chassis can be used for a self-propelled version of the P300. We are convinced that a classic product like this scissor lift will help us enter a wider variety of new markets, while increasing sales in existing ones."

#### **A HIGHER NANO**

Last September, JLG's Power Towers division unveiled a new 12ft push around - the Nano35 - with a working height of 5.5 metres. The new model uses a three section steel box section mast providing one metre more working height than the regular Nano and 400mm more than the original sigma type Power Tower, making it the highest reaching lift in its push around range. The extra height comes from longer mast sections which results in a greater step-in height requiring a step on the chassis, but both are below 400mm. The new model retains its dual, full height saloon style entry gate.

The platform is slightly smaller than the Nano at 840mm by 580mm and features JLG's new vertical guardrail supports, eliminating the mid rail that users tend to stand on to gain a little extra height. Maximum platform capacity is 200kg and is for indoor use only. The machine has an overall weight of 432kg and runs on two fixed wheels and two castors that can be locked in place. The overall working footprint is just over 1.2 metres by 760mm, while standard equipment includes a maintenance-free AGM battery.

#### SELF-PROPELLED OR PUSH-AROUND?

Snorkel has been producing push around and self-propelled low level lifts for many years and claims that in 2022 it had around 30 percent of the UK's self-propelled low level market. Its best sellers are the S3010P push around and S3010E self-propelled scissors, both with five metre working heights.

Asked where each model sells best, Snorkel's Andrew Fishburn said: "Those working on jobs such as shop fitting and M&E applications require high work output, so operators prefer to be able to drive whilst elevated. The S3010E also has a simple 'point and go' joystick, allowing the operator to instinctively master the controls. The rear wheel drive front castor steer allows it



JLG Nano35 has a working height of 5.5 metres

UpRight had introduced its 12ft TM12 with a 5.8 metre working height in 1994, but by 2001 its overall weight had grown to 630kg. Models such as this have since been introduced by JLG, Skyjack and more recently several Chinese manufacturers and ELS from Turkey. Another important manufacturer over the years in this market has been Italian manufacturer Bravi, which introduced its original Leonardo in 1995.

The end result of all this and other developments is that anyone looking for a platform - push around or powered - with a height of up to about five metres has plenty of choice.

#### **NEW PUSH AROUNDS**

Over the past few years new low level product development appears to have focused on selfpropelled models with few new push around products announced. That has however recently changed with both push around powered and non-powered models coming on stream.



VERTIKAL DAYS NEWARK SHOWGROUND 11th/12th SEPTEMBER 2024

STAND Nº 117



HEIGHT 22.0 m MAX. OUTREACH 14,0 m BASKET CAPACITY 250 kg

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#### LOW LEVEL PLATFORMS

to turn on the spot which is ideal for jobs such as hospital fit outs where several trades need to squeeze into five bed wards. If the work is more maintenance based or the contractor is working against tighter budgets, then the powered push around model is often preferred."

"In 2022 we added an outdoor version of the S3010P - the S3210P," he said. "Although it is only 60mm wider and 70kg heavier, it is ideal for work on outdoor shell and core applications and even railway platforms."

#### **MICRO SCISSORS**

The latest 13 to 14ft self-propelled micro scissor lifts offer an alternative to the driveable versions of push around scissors. One of the earlier models was Dingli's 13ft JCPT0607DC which was launched in 2013 and upgraded in 2015 to the JCPT0607DCI. Maximum working height is 5.9 metres, with a 240kg platform capacity and weighing 860kg. The 1.3 metre by 700mm platform extends to 1.89 metres with the 600mm deck extension. Since 2021 this sector has exploded with products from manufacturers such as Genie, Skyjack, Mantall, JLG, GMG, Sinoboom, LGMG, Snorkel, MEC, JCB, Imer, ELS, Hy-Brid and Bravi - to name a few! This year has seen Skyjack, Snorkel and Zoomlion launch new micro scissor lift models.



The Dingli JCPT0707DCM micro scissor was launched in 2022

#### **SKYJACK'S OWN MICROS**

Skyjack entered the market by badging models from Mantall but has now unveiled two new Canadian designed and built micro scissors - the 13ft SJ3213 micro and 19ft SJ3219 micro - although weighing in at 1,214kg the SJ3219 is more of a mini scissor than a micro, but its overall length is only 1.5 metres. The 13ft SJ3213 micro has a working height of 5.9 metres, an overall width of 810mm and overall length of 1.5 metres and weighs 869kg. Platform capacity is 227kg while a 500mm roll-out deck extension is standard.

The SJ3213 micro replaces the Mantal-built SJ3013 in North America while the 14ft SJ3014 will remain available in Europe for the immediate future. Unlike the badged machines which had electric rear wheel drive, the new models feature AC electric front wheel drive motors and a variable speed brushless hydraulic pump drive



The existing Skyjack Micros



motor. Overall stowed height is 1.9 metres with guardrails raised. Options include ECOtray leak containment, full telematics and bio-degradable hydraulic oil - which can also be added at the first oil change. The new models are said to be 90 percent recyclable.

#### **A NEW BREED**

In April this year, Snorkel launched its first of a new breed of micro scissors in Europe. The 13ft S3013mini - two person indoor/one person outside - weighs 794kg and has a platform capacity of 272kg. Features include Snorkel's fixed control box with wander lead, proven to save money for operators with the elimination of lost control boxes.

"We see this machine used on open Shell & Core environments, where floor loading restrictions prevent the usual heavier machines being used," said Fishburn. "A standard 19ft scissor lift can be twice the weight of a micro 13, yet up to 80 percent of its life is spent working at heights of five metres of less. With further environmental pressure cutting the use of concreate in buildings and the focus on Scope 3 emissions on transport to and from the job site, the S3013mini could feasibly be the first on site and the last off, as



it is more than able to carry out fine finish or fit out work as the job progresses."

#### MICRO LION

Last year Zoomlion unveiled its first micro, the 14ft ZS0407E. With direct electric wheel motor drive and electric linear actuators to operate the steering and platform lift, it eliminated the need for hydraulic oil. Working height is 5.6 metres, platform capacity 240kg with indoor and outdoor ratings. Overall width is 760mm, while the overall length is just 1.44 metres, putting it firmly in the micro scissor class as does the 895kg overall weight. Sadly, the stowed height with guardrails up is 2.05 metres, requiring guardrails to be folded to 1.7 metres to allow

passage through a standard doorway. The ZS0407E has a 600mm roll out platform extension and features include lithium ion battery, IP67 rated drive motors, a brushless maintenance free DC lift motor, a real time lift height display - said to be accurate to within three percent - and a load indicator with a live display of the actual load on the platform with an accuracy of within five percent.



The new ZS0407E

# What strength do you prefer?





## Madras...

## Vindaloo...

The Snorkel **S3010E** is already a hot little number and loved by anyone who needs to safely work indoors at heights of up to 5m! This super compact, lightweight and highly productive machine has an even hotter new partner in town....the new Snorkel **S3013M Mini!** 

The **S3013M** has a 5.8m working height as well as outdoor capability, not to mention a class leading 273kg capacity expanding its appeal to a wider range of users..! One machine.... thousands of uses...!

The S3010E and all new S3013M are both electric drive and available to order now.





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## LOW LEVEL PLATFORMS THE BENEFITS OF PUSH AROUNDS

With demand for low level 'powered' access continuing to grow, JLG has been expanding its product line to meet the changing market demands. Its director of sales and business development for Power Towers, Richard Puglia, talks about the market sector and its products.

"The popularity of push around lifts has been increasing over the past few years, driven by a growth of applications where ladders and scaffolding might previously have been used, as more companies look for safer ways to work at height," says Puglia. "Low level lifts are also designed to reduce strain on the body and lessen the risk of musculoskeletal injuries caused by repetitive movements, such as climbing up and down a ladder. When an individual is working safely, they are more comfortable, more focused and more efficient."

#### **FIT-OUT DAMAGE**

"Usage is also increasing in construction fit out where slab electric scissors are used in very low, tight finished spaces. Contractors are realising that driving these machines into such spaces can result in damage leading to increased costs and penalties. Push around alternatives can significantly reduce the risk of such damage, while for rental companies, small electric scissors can be freed up for applications that require their full height, instead of renting them out at lower rates for lower working heights."

#### **GROWTH DRIVER**

"With space at a premium in urban areas, internal areas within buildings have shrunk, creating a greater need for lighter weight products with smaller footprints to cope with sensitive flooring and the need to use elevators to travel between floors. Push around platforms can also be used on catwalks, landings and other hard to reach areas. They are ideal for applications such as mechanical and electrical work, HVAC and ductwork, drywall, painting, retail refit and display, and cleaning, providing productivity improvements over ladders by enabling craftsmen to work freely with both hands."

"The growing number of manually powered lifts also offer an eco-friendly solution with no batteries, hydraulics or oil, making them leak and fume free and completely quiet, ideal for working in environmentally sensitive areas such as clean rooms, data centres and hospitals. At the same time there is no need to worry about charging batteries or worrying about run times."

"In summary, low level platforms are safe and simple to use, improve productivity and reduce fatigue and strain injuries," says Puglia.

JLG's low level range includes Pecolift and Ecolift, the electric push-around Nano 25, Nano 35, Power Tower and Power Tower Duo, and selfpropelled Nano SP and Nano SP Plus lifts.







#### **A FEW CASE STUDIES**

JLG has conducted several customer case studies, which have highlighted the benefits of low level access equipment compared to ladders, podium platforms or scaffold towers.

#### Long term test

Nano 35

In Germany specialist fit-out contractor ISG substituted ladders for low level platforms over a two year period. Until then ladders made up 90 percent of its access needs, however at the end of the two years ladders were only used for 10 percent of the work. The company reported the following factors when using the low level platforms:

- Subcontractors delivered better quality work, with greater efficiency reducing the time needed to complete tasks.
- · Improvements were noted in the overall health of those carrying out the work.
- · Paperwork was reduced as daily ladder permits were unnecessary.

The lead health and safety professional on site, Artur Stala, said: "There was a clear improvement in quality, efficiency, ergonomics and worker health when using the Pecolift in our region compared to the access equipment we had used."

#### 42% improvement at Battersea

The Pecolift was also credited with improving productivity on a project at Battersea Power Station in London, where Imtech replaced podium platforms with Pecolifts for the installation of 600 metres of electric cable containment. The company claimed a 42 percent productivity improvement. Users liked being able to elevate the platform to the exact working height and found repositioning the platform to a new location was easier, thanks to eliminating the need to climb steps each time.

#### Six minutes vs 25 minutes

UK contractor Laing O'Rourke used a Power Tower platform in place of scaffold towers on a project and claimed significant time savings. In fact, a task that took 25 minutes to complete with scaffolding took less than six minutes with the Power Tower.



#### No matter your specialisation, you deserve our special attention.

The same dedication that we attribute to the manufacturing of our aerial platforms. No less than 14 models divided into six families, designed to respond perfectly to your requirements and your specific professional needs: from treecare to the maintenance of buildings, installations and infrastructures; from restoration to work on high-voltage lines.

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