

The guide to
**Low-level
Powered Access**



Pecolift - first choice for ISG



“...there was an observable increase in productivity from operatives using the (Pecolift) system.

...at ISG we are now promoting Power Towers' Pecolift as our preferred choice for low-level access works.”

Mark Mulholland, ISG plc Senior Project Manager.



Pecolift in use at the £50m fit-out by ISG plc of the News International Headquarters, London Bridge Place

CONTENTS

- 4-5 Introduction to low-level powered access.
- 6-7 Chronology of Low-level Powered Access and Power Towers.'
- 8-9 JLG Global Locations - Leicestershire - the source of inspiration.
- 10-11 100% designed and manufactured in the UK, sold worldwide.
- 12-13 2018 - Safer working at height.
- 14-15 Why use Low-level Powered Access
- 16-17 Machine types
- 18-19 Typical Power Towers' applications
- 20-21 Typical Power Towers' environment
- 22-25 The EcoRange Concept
- 26-27 Pecolift 1.2
- 28-29 Pecolift
- 30-31 Ecolift
- 32-33 Ecolift Wind Rated
- 36-37 Power Tower
- 38-39 Power Tower Duo
- 40-41 Nano
- 42-43 Nano SP Zero
- 44-45 Nano SP
- 46-47 Nano SP Plus
- 48-49 X Range, O&G and hazardous industry products
- 50-51 Powerpicker
- 52-55 Work at height regulations & training

This product booklet is intended as a guide only. All dimensions, weights and specifications are subject to change without notification. The contents of this guide are not legally binding, nor do they form part of any contract.

An Introduction to Low-Level Access

Safety has come a long way; the flat rung stepladder was patented by John H Balsley in 1862!

The term Low-Level Access, now describes an entirely new specialist sector within the access industry. The term is generally used to denote operating in environments up to a 4.5-5m working height internally, on flat, level surfaces, using manual or powered access equipment. This could be using basic 'A' Frame step ladders or a fully self-propelled powered access platform.

This guide covers specifically the Power Towers' products available in this sector, divided into two types: Push-around (manually manoeuvred) and Self-propelled.

1862, John Balsley patented the first flat-rung Stepladder. The first revolution in low-level access!



Chronology of Low-level Powered Access and Power Towers.

MARCH 2007

POWER TOWERS FOUNDED

The Power Tower was introduced with a working height of 5.1m and a larger working platform area.



2005



MID 2005

The first push-around, low-level, access platform was introduced from China, with a working height of up to 3.65m.

2007

2009



JANUARY 2009

Power Tower Nano push-around launched.

Power Tower Nano SP developed.

JANUARY 2010

Nano SP launched.



2010

2011



JANUARY 2011

Power Tower Nano SP Zero and Nano SP Plus launched.

MID 2011

Product range introduced to the Middle East.

SEPTEMBER 2012

Pecolift launched; a brand new concept. The first 'non-powered, powered access platform.'



2012

JANUARY 2015

ATEX rated Pecolift & Ecolift launched.

JUNE 2015

JLG, the World's largest MEWP manufacturer, acquire Power Towers Ltd.



2014



AUGUST 2014

Ecolift launched. Harnessing the same concept as Pecolift, Ecolift gives a working height of 4.2m.

2015

2016



FEBRUARY 2016

Power Towers range debuts at the A.R.A. in Atlanta U.S.A. under the JLG brand.



2017



Summer 2018

SummerPicker launched. Power Tower Duo launched.

MARCH 2017

Power Towers celebrate 10 innovative years.

New Nano SP launched.

JLG - Worldwide Support



Leicestershire, England
...the source of inspiration.



Genetic fingerprinting, discovered by Sir Alec Jeffreys at Leicester University.



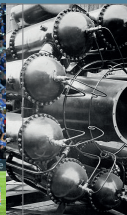
Power Towers, leaders in Low-level Powered Access.



National Space Centre.



Leicester City Football Club.



Sir Frank Whittle, single-handedly invented the turbojet engine in Leicestershire.

100% designed and manufactured in the UK. **Sold worldwide**



Power Towers was founded on 7th March 2007 by the three founders in Leicester, UK. Power Towers has today established itself as low-level access pioneer, innovator and market leader.

Power Towers' name derives from its first product, the Power Tower ('The Powered Scaffold Tower') launched in reaction to the then recently introduced Work at Height

Regulations in 2005 and initial demand from the UK hire giant Nationwide Platforms. With attitudes to Work at Height changing, the opportunity was irresistible for the founders, each with over 25 years experience in powered access design, manufacture and hire. Power Towers was born.

Each of Power Towers, now 12 product range, are characterised by innovation: Power Tower's automatic brake, Nano's pulley free mast, Nano SP drive system, Pecolift & Ecolift unique 'non-powered, powered' lift mechanism are all 'industry firsts'. The award winning Ecolift range being a complete step change in the industry. All remain 100% designed and manufactured in Leicester, UK



Power Towers' products have now gained the enviable position of being the No 1 specified low-level product by the UK's largest and most reputable hire companies, construction companies and fit-out contractors; working on many of the UK and Europe's largest construction projects, the Power Towers team are very proud of that!

Acquired by JLG, in June 2015, Power Towers now enters a second chapter, with the opportunity to help create a global presence in this rapidly developing sector.

The company harnesses state of the art design, engineering and manufacturing techniques and is now able to utilise the technical and financial resources of our new owners JLG Industries and The Oshkosh Corporation.

Simplicity and detailing is what sets our products apart, quality components are fitted as standard throughout. All our range comes with a 'simple, safe, easy' ethos. We are consistently designing and engineering new ways to produce better, more intuitive machines that constantly raise standards. We place huge emphasis on feedback from our customers, which in turn enables us to manufacture ever evolving high specification, high quality, products that are simple, safe and efficient, in turn promoting easier and safer methods of use and no more climbing!



Power Towers' manufacturing facility

Statistics of injuries and fatalities from unsafe practices using traditional mobile mechanical access equipment!

20% of major injuries in construction are caused by falls from height.

42% of fatal accidents in construction are caused by falls from height.

60% of major injuries result from falls below head height.

UK Working at Height statistics...

40 deaths

from falls from height in workplace environments.

43,000

non-fatal injuries from falls from height.

Power Towers' mission is to eradicate unnecessary climbing and balancing.



Why use

Low-Level Powered Access?

In the UK before 2005, 'low-level access' meant traditional stepladders, early podiums and mobile scaffolds. That changed in 2005 when the HSE introduced the Work at Height Regulations, restricting the use of traditional forms of access. The market was ready for low-cost, low-level powered access...

Why choose

Low-Level Powered Access?

Q: Why choose Low-Level Powered Access?

A: It is easier, simpler, quicker, more efficient and safer to use than manual ladders, steps, podiums or small scaffold towers.

Q: Why choose Power Towers & JLG?

A: Power Towers design and manufacture premium, high specification, high quality low-level access powered access platforms.

Power Towers was acquired by JLG in June 2015. As the World's largest manufacturer of MEWPS (Mobile Elevating Work Platforms) JLG offer an unrivalled global dealer and support network. The acquisition has opened up huge opportunities and resources for both developing the market and in the continued innovative design and development of our market leading product range.

1 Whatever your low-level access requirement...

Power Towers Limited designs and manufactures its range of low-level powered access products 100% at their manufacturing base in Leicester, U.K. Constant product evolution and development ensures users benefit from the latest technologies.

- 2 The impressive range currently comprises twelve machines: nine push around machines, the Power Tower, Power Tower Duo, the Nano, the revolutionary Pecolift and Ecolift, and self-propelled machines with the Nano SP range.
- 3 Power Towers' products are simple, safe, easy and efficient to use. They can dramatically reduce working hours when compared with mechanical manual alternatives and represent excellent value for money. All Power Towers' products comply with the relevant European Machineries Directives and are CE marked to EN280. They are all third party approved by SGS International. All are now ANSI certified.
- 4 With the efficiencies gained by utilising class leading platform sizes combined with small working footprints, the Power Towers' range is now specified by many of the leading construction and rental companies in the UK, Europe, Middle East and increasingly worldwide.

This guide aims to introduce you to low-level access and the Power Towers product range. If you require further information please visit our websites at powertowers.com, Pecolift.com.

The leading contractors use the leading low-level powered access products.



Push-around Machines

Easier and more productive than manual access: the user simply steps into the fully guarded platform and presses a button or turns a handle. No need to erect and dismantle a scaffold tower or climb up the podium or platform steps. Position the platform height exactly where you want it.



Self-Propelled Machines

Low-level, light weight, self-propelled machines like the Nano SP range offer an even more productive alternative to push-arounds in the right application.

Where the user has many repositions through the working day, or regular movement when elevated, then self-propelled offers the convenience of not having to descend to move or not having to step out of the platform to move.



Features and benefits of Power Towers' LLPA

- Flexibility to work at the correct height
- Handrail protection already in place from the ground up
- Lightweight (120-550kg) & low ground pressure: ideal for raised access computer flooring e.g. Kingspan® or delicate flooring
- Fits through standard single doorways and into passenger lifts
- Transported in medium sized van
- Improved productivity: up to 3 times faster when compared to traditional forms of access such as scaffold towers
- Up to 300 lifts per charge; unlimited on Pecolift
- Automatic braked wheels on elevation
- CE marked and conforms to EN280 and European Machineries Directives
- All our powered machines are available with AGM (Absorbent Glass Mat) batteries for zero battery maintenance

Applications

- **The push-around Power Tower** is used where the application calls for access up to 5.1m. The Power Tower's large platform is favoured by dry-liners, pipework and ducting contractors. The **Nano** (4.5m W/H) is usually the preferred choice where the application requires a smaller footprint, yet large platform area.
- **Push-around - Self Powered machines:** The **Pecolift** has the smallest working footprint for very congested working areas and uses no batteries or power, simply a patented lift mechanism. **Ecolift** retains the **Pecolift** concept, but with a 4.2m working height.
- **Nano SP (self-propelled) range:** These can be driven (no need to push) even at full height and offers a selection of cantilever decks for increased outreach and platform size

Typical users of LLPA products:

Construction

Mechanical and Electrical. Heating & Ventilation. Air conditioning. Drylining. Glazing. Fit out. Shop-fitting. Finishing trades, including painting & cleaning.

PecoliftX and EcoliftX are ATEX versions and can also be used in zones 1 and 21 areas in oil, gas and chemical plants and offshore.

Facilities Maintenance & Refurbishment

Cleaning Painting Mechanical and Electrical, Offices, Schools, Hospitals and industrial maintenance. Retail refit and display.



Typical Low-level Access applications.

Retail

Apartments

Offices

Hospitals

Hotels

Construction

Maintenance

Refurbishment

Re-fit



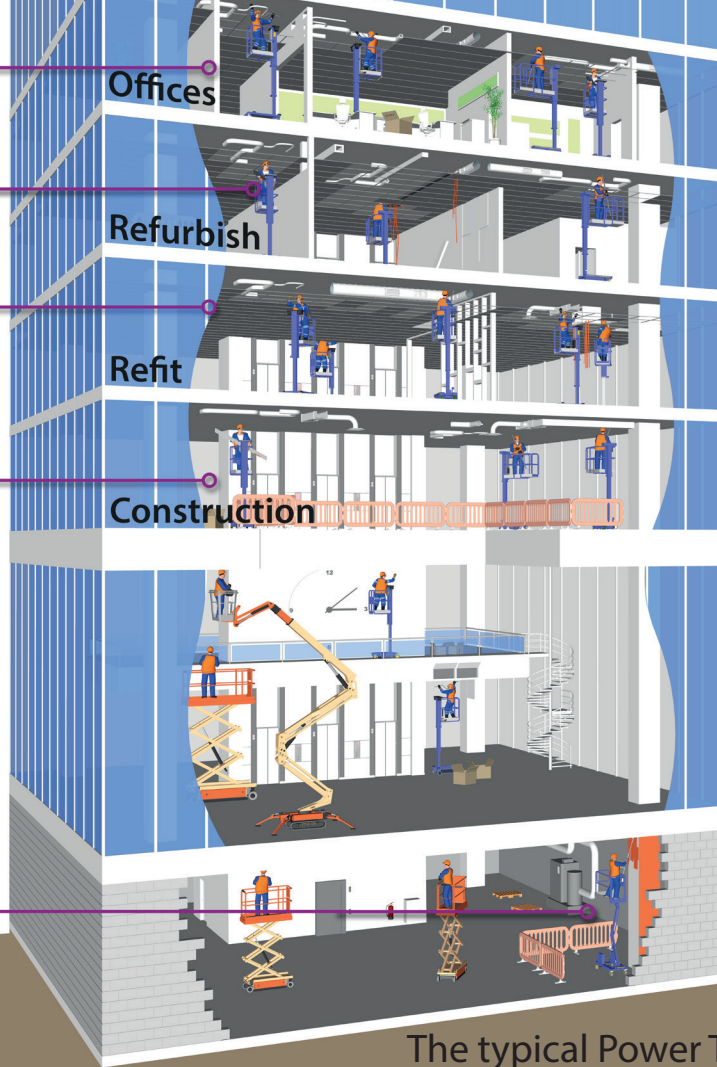
Ecolift & Pecolift



Nano SP



Power Tower



Offices

Refurbish

Refit

Construction

Typical floor to ceiling grid:
10' (approx. 3.1m)

Typical floor to beam height:
11'6" (3.5m) - 14' / 15' (4.5m)

The typical Power Towers' environment.



PATENTED*
STORED
POWER
SYSTEM

the NON-POWERED
ECORANGE CONCEPT

BATTERY FREE
POWER FREE
OIL FREE
QUICK. EASY.

SAFE
& AWARD WINNING!

Welcome to a new concept in
Low-level Powered Access...
'Non-Powered, Powered Access®'



Standard Pecolift and Ecolift

*Ecolift & Pecolift Patent: U.K. Patent no. 2500997
Europe wide Patent no. 13724311.9

Non-Powered, Powered Access...
...a major step change in low-level access.

It's so easy, fast and efficient to use, it's intuitive. Just step in and turn the handle! And you don't need power; no batteries to charge or mains.



1 Step into the machine...



2 Simply turn the handle...



Gone are the days of climbing steps or podiums, no more slips, trips or having to balance!

3 and elevate to your working height.



Stop wherever you want up to 3.5m working height.

Pecolift converts **10% human energy into 100%** of the power required to elevate to full working height, in just 11 seconds!

PATENTED* STORED POWER SYSTEM

Auto-braked on elevation



You're fully guarded from the ground up. And being virtually maintenance free, it's so simple!



PUSH AROUND
Self Powered, Indoor Use

Working Height: 3.2 m

Applications: Pipe Work, M & E. Cleaning, Painting, Retail, FM.
All applications where outreach is required.

**BATTERY FREE
POWER FREE
OIL FREE
3.2METRE
WORKING HEIGHT**

The smaller, lightest Pecolift.

With a platform height of 1.2m and a working height of 3.2m. Pecolift1.2 is the perfect replacement for podiums.

We call it 'Non-Powered, Powered Access.'

No more climbing!

KEY FEATURES

- Intuitive to operate - turn handle to elevate
- Patented* lift mechanism, no power required
- Lightweight, easy to manoeuvre
- Small footprint (985mm x 700mm)
- Unlimited lift cycles, can be used 24/7
- Robust design for years of trouble free service
- Minimal operational costs, virtually maintenance free



OPERATING SPECIFICATIONS

Maximum working height:	3.2m
Maximum platform height:	1.2m
Platform dimensions:	625mm (L) x 480mm (W)
Working footprint:	965mm x 730mm
Safe working load:	150kg (1 person + tools)
Maximum manual force:	200N
Maximum gradient for operation:	0 degrees
Maximum wind force: Internal use only,	0 (zero) m/s
Maximum wheel force:	110kg
Maximum castor point load:	110kg
Sound pressure level:	Less than 70dB(A)

CLOSED DIMENSIONS

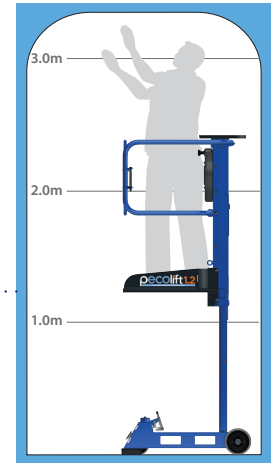
Length:	965mm
Width:	730mm
Height:	1435mm
Weight:	117kg

LIFT CYCLES

Unlimited, subject to maintenance program being adhered to.

SAFETY FEATURES

- Auto-braked on entering basket
- 'Auto-lok' brake on elevation
- Dead Man's handle
- Fail-safe lifting mechanism



eco compliant

Pecolift is hydraulic oil and battery free, and with no need to charge, has no energy consumption. Pecolift is an eco friendly solution to Powered Access needs.

BATTERY FREE
POWER FREE
OIL FREE
3.5METRE
WORKING HEIGHT

Battery and electric power free, the Pecolift is elevated by simply and easily rotating the handle; with only 10% operator input and 90% mechanism input, the patented lift mechanism glides you smoothly to your chosen working height in seconds.

Pecolift is truly an Eco friendly solution. It's tiny footprint and simplicity of use finally provides a purely mechanical solution that doesn't involve erecting, unfolding or climbing.

We call it 'Non-Powered, Powered Access.'

KEY FEATURES

- Intuitive to operate - turn handle to elevate
- Patented* lift mechanism, no power required
- Small footprint (985mm x 700mm)
- Unlimited lift cycles, can be used 24/7
- Robust design for years of trouble free service
- Minimal operational costs, virtually maintenance free



OPERATING SPECIFICATIONS

Maximum working height:	3.50m
Maximum platform height:	1.50m
Basket dimensions:	720mm(L) x 600mm (W)
Working footprint:	985mm x 700mm
Safe working load:	150kg (1 person + tools)
Maximum manual force:	200N
Maximum gradient for operation:	0 degrees
Maximum wind force:	Internal use only, 0 (zero) mph
Maximum wheel force:	125kg
Maximum castor point load:	125kg (1.23kN)
Sound pressure level:	Less than 70Dba

CLOSED DIMENSIONS

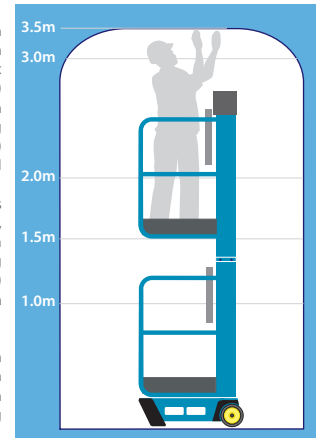
Length:	985mm
Width:	700mm
Height:	1.55m
Weight:	180kg

LIFT CYCLES

Unlimited

SAFETY FEATURES

- Auto-braked on entering basket
- 'Auto-lok' brake on elevation
- Dead Man's handle
- Fail-safe lifting mechanism



Can be specified for ATEX approval for Zones 1 and 21.

eco compliant

Pecolift is hydraulic oil and battery free, and with no need to charge, has no energy consumption. Pecolift is an eco friendly solution to Powered Access needs.

**BATTERY FREE
POWER FREE
OIL FREE
4.2METRE
WORKING HEIGHT**

As part of the Eco range the Ecolift still harnesses the same ECO friendly revolutionary 'Patented Stored Power System' as the Pecolift but at 4.2m offers almost a metre extra in working height.

With no batteries (to charge and look after) and no hydraulic oil, the Ecolift is truly an Eco friendly solution.

We call it 'Non-Powered, Powered Access.'

KEY FEATURES

- Intuitive to operate - turn handle to elevate
- Patented* lift mechanism, no power required
- Lightweight, easy to manoeuvre
- Small footprint (1.28m x 700mm)
- Unlimited lift cycles, can be used 24/7
- Robust design for years of trouble free service
- Minimal operational costs, virtually maintenance free



OPERATING SPECIFICATIONS

Maximum working height:	4.20m
Maximum platform height:	2.20m
Basket dimensions:	850mm(L) x 644mm (W)
Working footprint:	1.28m x 700mm
Safe working load:	150kg (1 person + tools)
Maximum manual force:	200N
Maximum gradient for operation:	0 degrees
Maximum wind force:	Internal use only, 0 (zero) mph
Maximum wheel force:	234kg
Maximum castor point load:	234kg (2.29kN)
Sound pressure level:	Less than 70DbA

CLOSED DIMENSIONS

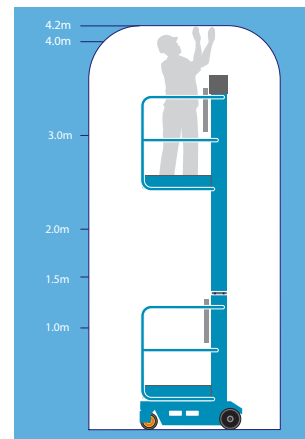
Length:	1.28m
Width:	0.70m
Height:	1.94m
Weight:	305kg

LIFT CYCLES

Unlimited

SAFETY FEATURES

- Auto-braked on entering basket
- 'Auto-lok' brake on elevation
- Dead Man's handle.
- Fail-safe lifting mechanism



Can be specified for ATEX approval for Zones 1 and 21.

eco compliant

Pecolift is hydraulic oil and battery free, and with no need to charge, has no energy consumption. Pecolift is an eco friendly solution to Powered Access needs.



4.2m Non-Powered, Powered Access

**BATTERY FREE
POWER FREE
OIL FREE**

**4.2METRE
WORKING HEIGHT
& WIND RATED!**

As part of the Eco range the Ecolift still harnesses the same ECO friendly revolutionary 'Patented Stored Power System' as the Pecolift but at 4.2m offers almost a metre extra in working height.

We call it 'Non-Powered, Powered Access.'

KEY FEATURES

- Operable on gradients up to 3° and in winds up to 12.5m/s
- Intuitive to operate - turn handle to elevate
- Patented* lift mechanism, no power required
- Lightweight, easy to manoeuvre
- Small footprint (1.28m x 950mm)
- Unlimited lift cycles, can be used 24/7
- Robust design for years of trouble free service
- Minimal operational costs, virtually maintenance free

**PUSH AROUND -
Self Powered. Indoor & Outdoor Use.**

Working Height: 4.2 m

Applications: ATEX Compliance Environments. Passive Fire Protection. Gas Detection. Valves & Flanges. Pipe Supports. Cable Trays. Warehouse & Stores.



Ecolift Wind Rated is operable on gradients up to 3° and in winds up to 12.5m/s

OPERATING SPECIFICATIONS

Maximum working height:	4.20m
Maximum platform height:	2.20m
Basket dimensions:	850mm(L) x 644mm (W)
Working footprint:	1.28m x 950mm
Safe working load:	150kg (1 person + tools)
Maximum manual force:	200N
Maximum gradient for operation:	3°
Maximum wind force:	Internal/External use. 12.5m/s
Maximum wheel force:	245kg (2.4kN)
Maximum castor point load:	245kg
Sound pressure level:	Less than 70DbA

CLOSED DIMENSIONS

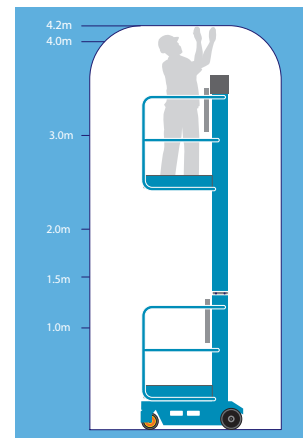
Length:	1.28m
Width:	0.95m
Height:	1.94m
Weight:	335kg

LIFT CYCLES

Unlimited

SAFETY FEATURES

- Auto-braked on entering basket
- 'Auto-loc' brake on elevation
- Dead Man's handle
- Fail-safe lifting mechanism



Can be specified for ATEX approval for Zones 1 and 21.



Pecolift is hydraulic oil and battery free, and with no need to charge, has no energy consumption. Pecolift is an eco friendly solution to Powered Access needs.

THE POWERED, PUSH AROUND RANGE



Nano

Power Tower

Power Tower Duo

THE SELF- PROPELLED RANGE



Nano SP Zero

Nano SP

Nano SP Plus

POWER TOWER

PUSH AROUND
Indoor use

Working Height: 5.1 m

Applications: Dry-lining,
Pipe & Ductwork. Air conditioning,
M&E. Shopfitting. Painting.

The Powered Scaffold Tower.

With a large work platform (1520mm x 750mm), the Power Tower gives the user more room to work and more room for tools and equipment, in fact more than 50% larger than its nearest competitor

The Power Tower requires less moves to cover the same area for many applications. And at only 780mm wide will still pass comfortably through a standard single doorway.

KEY FEATURES

- 3.1m platform height, 5.1m working height
- 250kg safe working load (1 Person)
- Compact - Only 0.78m wide, passes easily through standard doorways
- Large 1.52m x 0.75m platform size
- Only 0.78 x 1.6m working footprint
- Easy access gate



OPERATING SPECIFICATIONS

Maximum working height:	5.10m
Maximum platform height:	3.10m
Platform dimensions:	1.52m x 0.75m
Working foot print:	1.60m x 0.78m
Safe working load:	250kg

CLOSED DIMENSIONS

Length:	1.60m
Width:	0.78m
Height:	1.85m
Weight:	342kg

POWER OPTIONS

Battery:	12V c/w automatic charger.
Mains:	110V or 230V.
Controls:	Simple push button basket controls.

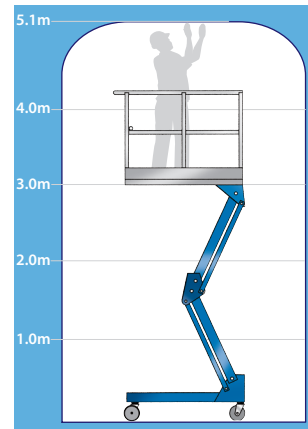
Construction:	Heavy duty fabricated steel superstructure, stainless steel bushed pivots, tough powder coated finish.
Safety:	CE marked, complies fully with EN280 and relevant European machinery directives. Full fail-safe hydraulics, automatic locking wheels.
Options:	Tilt alarm c/w auto cut-out. Narrow basket for suspended ceiling grid access. Pipe Carrying kit (max 2" pipe). Tool tray. Foam buffer kit.

SAFETY FEATURES

- Fail-safe hydraulic circuit complete with check valve on lift cylinder
- Improved heavy-duty Auto-Lok wheels on elevation provide secure base
- Emergency descent from ground level
- Audible ascent and descent drive alarm



Suspended ceiling grid, narrow basket. Available as an option. Size: 550mm x 550mm



780mm



The 2 Person Powered Scaffold Tower.

With a platform height of 3.1m, a working height of 5.1m and a 2 person, the safer and more efficient replacement for the Scaffold Tower is the Power Tower Duo.



KEY FEATURES

- Patented stabiliser deployment on elevation
- Stabilisers interlocked preventing elevation until stabilisers deployed correctly
- 2 person capacity
- 3.1m platform height, 5.1m working height
- 250kg safe working load (2 Persons plus tools)
- Compact - Only 0.78m wide, passes easily through standard doorways
- Large 1.52m x 0.75m platform size
- Only 0.78 x 1.6m working footprint
- Easy access gate

OPERATING SPECIFICATIONS

Maximum working height:	5.10m
Maximum platform height:	3.10m
Platform dimensions:	1.52m x 0.75m
Working foot print:	1.60m x 0.78m
Safe working load:	250kg

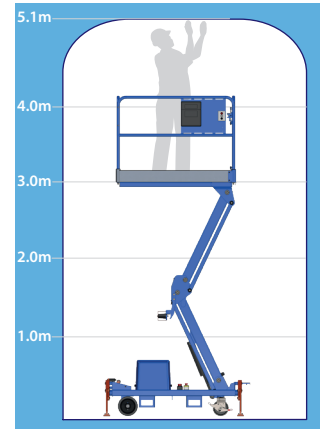
CLOSED DIMENSIONS

Length:	1.60m
Width:	0.78m
Height:	1.85m
Weight:	342kg

POWER OPTIONS

Battery:	12V c/w automatic charger.
Mains:	110V or 230V.
Controls:	Simple push button basket controls.

- Construction: Heavy duty fabricated steel superstructure, stainless steel bushed pivots, tough powder coated finish.
- Safety: CE marked, complies fully with EN280 and relevant European machinery directives. Full fail-safe hydraulics, automatic locking wheels.
- Options: Tilt alarm c/w auto cut-out. Pipe Carrying kit (max 2" pipe). Tool tray. Foam buffer kit.



SAFETY FEATURES

- Fail-safe hydraulic circuit complete with check valve on lift cylinder
- Patented stabiliser deployment on elevation
- Stabilisers interlocked preventing elevation until stabilisers deployed correctly
- Emergency descent from ground level
- Audible ascent and descent alarm



nano

PUSH AROUND
Indoor use

Working Height: 4.5 m

Applications: Construction: Finish work, M&E, HVAC contractors, painters, etc. FM: Cleaning, painting, decorating and general building maintenance in offices, schools, hospitals and industrial maintenance.

Push into position, step in, press a button. Simple. Safe. Efficient.

At Power Towers we believe safety is paramount. In line with the Power Tower range, the Nano has Auto-Lok wheels on elevation, as standard.

With a 2.5m platform height and 4.5m working height, the heavy-duty Nano maximises platform size whilst minimising working footprint, giving the operator more room to work in confined areas.

KEY FEATURES

- 4.5m working height
- Low platform entry height only 360mm
- Only 1.19m x 0.75m working footprint
- Passes easily through single doorways
- Large 1.0m x 0.73m platform size, gives the user more room to work
- Heavy duty Auto-Lok wheels on elevation



Largest platform size in class; small working footprint.

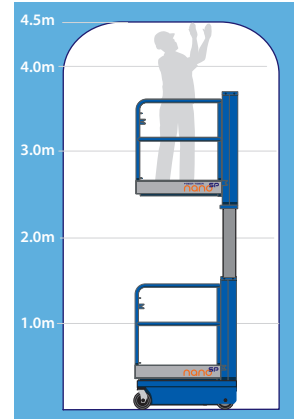
OPERATING SPECIFICATIONS

Maximum working height:	4.50m
Maximum platform height:	2.50m
Closed platform height:	0.36m
Platform dimensions:	1.00m x 0.73m
Working footprint:	1.19m x 0.75m
Safe working load:	200kg (1 person plus tools)

CLOSED DIMENSIONS

Length:	1.195m
Width:	0.75m
Height:	1.56m
Weight:	285kg

- Power: 12V D.C. Battery.
Controls: Simple push button heavy duty pendant controls for ground and platform.
Construction: Heavy duty fabricated steel superstructure and 2 stage mast with Ultra-Glide technology. Tough, powder coated finish.
Safety: Full fail-safe hydraulic circuit. Auto-Lok wheels.
Options: 110V or 230V mains power. Tilt alarm with auto cut-out. Protective storage cover.



750mm

SAFETY FEATURES

- Fail-safe hydraulic circuit complete with check valve on lift cylinder
- Improved heavy-duty Auto-Lok wheels on elevation, provide secure base
- Emergency descent from ground level
- Audible ascent and descent drive alarm





SELF PROPELLED Indoor & Outdoor use

Working Height: 4.5 m

Applications: **Construction:** Finish work, multi-storey projects. **M&E, HVAC contractors, painters, etc. FM:** Cleaning, painting, decorating and general building maintenance in offices, schools, hospitals, and industrial maintenance.

A self-propelled platform that's almost as easy to use as a push around.

The SP Zero will fit standard lifts, can be transported in most small vans and be driven on delicate flooring. The SP Zero can be used indoors and outdoors and is wind rated to 12.5m/s.

The SP Zero really is user friendly. Simple, intuitive joystick controls enable the user to smoothly manoeuvre.

KEY FEATURES

- Fully self-propelled when elevated
- Ultra compact, only 1.2m x 0.75m footprint
- 4.5m working height rated for indoor and outdoor use
- Only 456kg easily transported, can be used on delicate floors
- Simple intuitive single joystick controls



OPERATING SPECIFICATIONS

Maximum working height:	4.50m
Maximum platform height:	2.50m
Closed platform height:	0.36m

Basket dimensions:	1.00m x 0.73m
Working footprint:	1.19m x 0.75m
Safe working load:	200kg (1 person plus tools)

Maximum manual force:	200N
Max. gradient for operation:	1.8°
Max. wind force:	12.5 m/sec
Maximum weight Inc payload:	456kg + 200kg = 656kg
Maximum castor point load	200kg (2.00 kN)
Drive speed max.	4.6KpH
Drive speed slow	0.7KpH

CLOSED DIMENSIONS

Length:	1.20m
Width: 0.75m	
Height:	1.59m
Weight:	456kg

POWER SOURCE/DRIVE

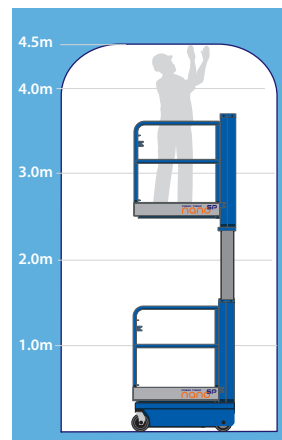
Standard 24v DC Electric Motor
24V D.C. Motor/Gearbox Drive

BATTERY CHARGER SPECIFICATION

Input Voltage:	90-265V AC
Frequency:	45-65 Hz
Output:	24VDC, 7A

SAFETY FEATURES

- Fail-safe hydraulic circuit complete with check valve on lift cylinder
- Built-in pothole protection
- Tilt sensor complete with alarm and cut-out
- Automatic basket overload cut-out
- Automatic elevated drive-speed reduction
- Emergency descent from basket and ground
- Automatic dynamic parking brake





SELF PROPELLED Indoor & Outdoor use

Working Height: 4.5 m

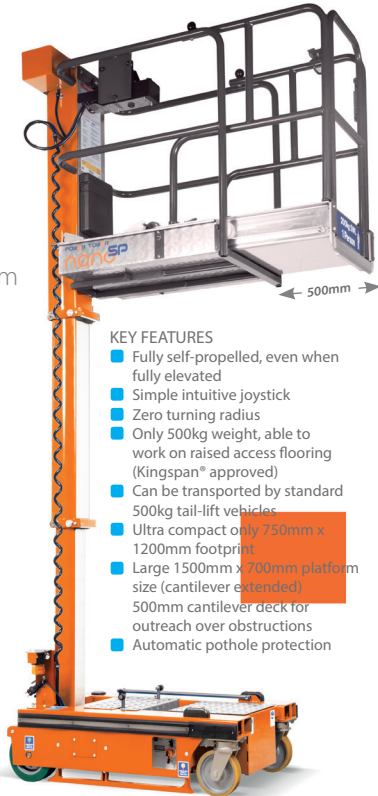
Applications: Pipe Work, M & E. Cleaning. Painting, Retail, FM.
All applications where outreach is required from small footprint.

The ultimate in self-propelled, low-weight, Low-level access.

The Nano SP provides the user with a tiny working footprint of 1.2m x 0.75m (closed) and a large platform of 1.5m x 0.72m (deck extended).

ENHANCEMENTS

Ground clearance 75mm
Increased gradeability: Now 40%
Increased torque drive motors;
Improved steering and control performance
LED display at ground controls with fault finding diagnostics and data
Larger diameter with lower ground pressure drive wheels
Solenoid lock swivel castor locks
Enhanced durable castors and wheels
Enhanced motor gearbox
Increased clear platform space
Enhanced cantilever design
Quieter motor/pump with increased efficiency
IP67 battery charger with clear LED charge display
Maintenance free AGM batteries



KEY FEATURES

- Fully self-propelled, even when fully elevated
- Simple intuitive joystick
- Zero turning radius
- Only 500kg weight, able to work on raised access flooring (Kingspan® approved)
- Can be transported by standard 500kg tail-lift vehicles
- Ultra compact only 750mm x 1200mm footprint
- Large 1500mm x 700mm platform size (cantilever extended)
500mm cantilever deck for outreach over obstructions
- Automatic pothole protection

OPERATING SPECIFICATIONS

Maximum working height: 4.50 m
Maximum platform height: 2.50 m
Outreach inc. cantilever to cage edge: 0.50
Basket dimensions: 1.00 m x 0.73 m
Basket dimensions with cantilever: 1.50 m x 0.73m
Basket dimensions without cantilever: 1.00m x 0.73m
Working footprint: 1.22 m x 0.75 m
Safe working load: 200 kgs (1 person plus tools)

Maximum manual force: 200 N
Max. gradient for operation: 0°
Max. wind force: 12.5 m/sec
Maximum weight Inc payload: 500kg + 200kg = 700 kgs

Maximum castor point load: 210 kgs (2.10 kN)
Drive Speed Max.: 3.0 KpH
Drive Speed Slow: 1.0 KpH
Elevated Drive Speed: 0.7 KpH
Max. Wheel force: 2.2 kN
Gradeability: 40%

CLOSED DIMENSIONS

Length: 1.22 m
Width: 0.75 m
Height: 1.59 m
Weight: 500 kgs

POWER SOURCE/DRIVE

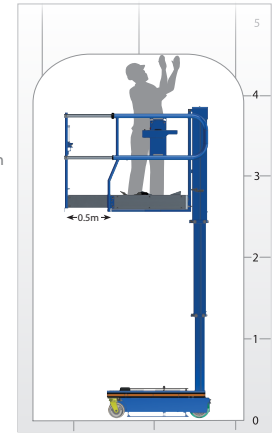
Standard 24v DC Electric Motor:
24v DC Motor/Gearbox Drive:

BATTERY CHARGER SPECIFICATION

Input Voltage: 180-265v AC
Frequency: 45-65 Hz
Output: 24V DC, 7/8A
Emission EN 55014N, EN 61000 – 3 – 2
Power Sound Level:
Less than 70dba

SAFETY FEATURES

- Fail-safe hydraulic circuit complete with check valve on lift cylinder
- Automatic pothole protect ion on elevation
- Tilt sensor complete with alarm and cut-out
- Automatic basket load sensing, complete with alarm and cut-out
- Automatic elevated drive-speed reduction
- Emergency descent from basket and ground
- Audible ascent and descent drive alarm
- Amber flashing beacon.
- Automatic dynamic parking brake.





SELF PROPELLED
Indoor & Outdoor use

Working Height: 4.5 m

Applications: Retail, Maintenance, over machinery. Any application where up to 2000 mm outreach is required.

Simply the most versatile Low-Level self-propelled platform.

The SP Plus has a full 1.0m cantilever deck and yet maintains a compact 1.2m x 0.75m footprint. In addition a large 2.0m x 0.73m platform area to work from and 1.5m working outreach with cantilever extended.

The SP Plus has simple, intuitive joystick controls and at only 540kg is able to work on raised access and other delicate flooring and be transported by small a van or truck.

KEY FEATURES

- Large 2.0m x 0.73m platform size (cantilever extended)
- Fully self-propelled when elevated
- 4.5m working height
- 1.0m cantilever deck: 1.5m working outreach
- Ultra-compact, only 1.2m x 0.75m footprint
- Only 540kg, able to work on raised access flooring (Kingspan® approved)



OPERATING SPECIFICATIONS

Maximum working height:	4.50m
Maximum platform height:	2.50m
Closed platform height:	0.39m
Outreach with cantilever, deck to cage edge	1.00m
Working outreach:	1.50m
Basket dimensions:	1.00m x 0.73m
Basket dimensions inc cantilever:	2.00m X 0.72m
Working footprint:	1.20m x 0.75m
Safe working load:	200kg - main platform, 120kg - cantilever deck.
Maximum manual force:	200 N
Max. gradient for operation:	1.8°
Max. wind force:	12.5m/sec
Maximum weight, Inc payload:	540kg+200kg = 740kg
Maximum castor point load	210kg (2.10 kN)
Drive speed max.	4.6kP/H
Drive speed slow	0.7Kp/H

CLOSED DIMENSIONS

Length:	1.20m
Width:	0.75m
Height:	1.59m
Weight:	540kg

POWER SOURCE/DRIVE

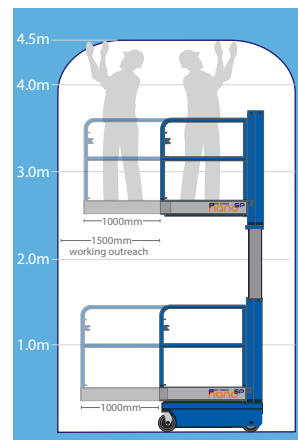
Standard 24V DC Electric Motor. 24V
D.C. Motor/Gearbox drive

BATTERY CHARGER

Input Voltage: 90-265V AC
Frequency: 45-65Hz
Output: 24V DC, 8A

SAFETY FEATURES

- Automatic pothole protection
- Tilt sensor complete with alarm and cut-out
- Automatic basket load sensing, with alarm and cut-out
- Automatic cantilever load sensing alarm and cut-out





**PUSH AROUND -
Self Powered Outdoor Use**

Working Height: 3.5 m / 4.2m

Applications: Electrical & Instruments
Fire and Gas, OPS, Fabric & Maintenance
Mechanical, Rigging and LOLER,
Decommissioning , Repair Orders...



Designed specifically for the O&G and hazardous industries, the battery and electric power free, 'X' is an upgraded and highly specified version of the standard products. Including increased ballast, A4 stainless components and a rugged 3 stage paint process.



KEY FEATURES

- Intuitive to operate - turn handle to elevate
- Patented* lift mechanism, no power required
- Lightweight, easy to manoeuvre
- Small footprint (985mm x 700mm)
- Unlimited lift cycles, can be used 24/7
- Robust design for years of trouble free service
- Minimal operational costs, virtually maintenance

3 Stage
Galvanised
paint process,
A4 (BS3111)
Stainless Steel
components
throughout.

ATEX RATED:

ATEX Certified for Zones 1 & 21

Wind Rated to 12.5 m/s (27.9mph)

Can be deployed up to 3 degrees angle,
on hard flat surfaces

Triple Guardrails

Tool Tether Points



WIND RATED MODELS	PECOLIFT	ECOLIFT
Maximum working height:	3.50m	4.20m
Maximum platform height:	1.50m	2.20m
Basket dimensions:	0.72m x 0.60m	0.85m x 0.64m
Working footprint:	1.06m x 0.84m	1.28m x 0.95m
Safe working load:	150 kg	150kg
Maximum manual force:	200 N	200N
Maximum operational gradient:	3°	3°
Maximum wind force (Applies to both):	Int/Ext. use 12.5m/s (27.9mph)	
Maximum wheel force:	140kg	165kg
Maximum castor point load:	140kg (1.37kN)	165kg (1.62kN)
Sound pressure level:	Less than 70DBa	Less than 70DBa
CLOSED DIMENSIONS		
Length:	1.06m	1.28m
Width:	0.84m	0.95m
Height:	1.55m	1.95m
Weight:	263kg	354kg
LIFT CYCLES:	Unlimited	Unlimited



The Powerpicker: a safe and efficient powered alternative to traditional step ladders, platform steps or small scaffold towers.

The Powerpicker provides a safe working platform to working heights of up to 4.4m. Its robust heavy duty construction and innovative operating and safety features, will provide the operator with many years of reliable, trouble free service.

KEY FEATURES

- Max working height 4.40m
- SWL - 130kg Platform
- 70kg Load tray
- Automatic gate lock on elevation
- Elevation function locked until gates closed
- Automatic dead-man parking brake
- Low platform entry height, just 350mm
- Power assisted load tray adjustment



OPERATING SPECIFICATIONS

Maximum working height:	4.38m
Maximum platform height:	2.38m
Minimum platform height (entry):	0.35m
Platform dimensions:	0.55m x 0.65m
Working footprint:	1.24m x 0.78m
Safe working load:	130Kg (1 person)+70Kg on load tray
Maximum manual side load:	200N
Maximum gradient for operation:	0
Maximum wind force:	Indoor use only 0 MPH
Manual pushing force:	5-7Kg

CLOSED DIMENSIONS

Platform dimensions:	0.55m x 0.65m x 1.50m
Total weight:	297Kg

POWER AND CONSTRUCTION

Power Source:	12v DC Powerpack
Battery:	AGM

CONTROLS: Simple push button at platform. Manual emergency lowering at ground, + emergency stop/battery isolator.

HYDRAULICS/MAST: Synchronised two stage cylinder, no pulleys, steel ropes or chains. Ultra-low friction for minimum power consumption, Failsafe circuit.

HEAVY DUTY STEEL SUPERSTRUCTURE: Chassis, mast, platform & tray. Stainless steel pivots, axles and fixings, tough powder coated finish.

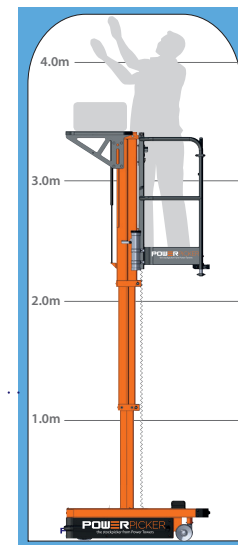
HEALTH & SAFETY FEATURES: CE marked, complies fully with EN280 and European Machinery directives.

SAFETY FEATURES:

- Failsafe Hydraulic circuit.
- Elevation locked until gates closed.
- Automatic gate lock on elevation - gates cannot be opened when platform elevated.
- Automatic dead-man parking brake - brakes applied automatically when operator release dead-man button.
- Manual emergency descent from ground.

Options:

- Tilt alarm c/w cut-out.
- Numeric keypad ignition in place of key.
- Motion alarm



U.K. Work at Height Regulations



Brief summary of the Work at Height Regulations (WAHR) 2005, for more information; visit www.hse.gov.uk/falls.

In 2013/14 falls from height accounted for 39 fatal accidents and 28,528 major injuries. They are the single biggest cause of workplace deaths and one of the main causes for major injury.

What is 'Work at Height' (WAH) ?

A place is 'at height' if a person could be injured from falling from it.

'Work' includes working or moving around at work at height. e.g. a sales assistant on a stepladder would be working at height or a tradesman on a scaffold tower.

Do the rules apply to you?

WAHR apply to all work at height where there is a risk of a fall liable to cause personal injury. They place duties on employers, the self-employed, and any person who controls the work of others.

If you are an employee or working under someone else's control you must:

- Report any safety hazard to them.
- Use the equipment supplied properly, following any training and instructions.

What you must do as an employer

You must do all that is reasonably practicable to prevent anyone falling. The regulations set out a simple hierarchy for managing and selecting equipment for work at height.

Duty holders must:

Avoid work at height where they can.

- Use work equipment or other measures to prevent falls.
- Where they cannot avoid working at height and where they cannot eliminate the risk of a fall, use work equipment or other measures to minimise the distance and consequences of a fall should one occur.



Planning

- Ensure that no work is done at height if it is safe and reasonably practical to do it other than at height.
- Ensure that the work is properly planned, appropriately supervised, and carried out in as safe a way as is reasonably practical.
- Plan for emergencies and rescue.
- Take account of the risk assessment carried out under regulation 3 of the management of Health and Safety at Work Regulations.

Training

HSE regulations require operators of access equipment to be adequately trained for the piece of access equipment they are using.

We recommend that the user of low-level powered access products should have two levels of training, a general formal course, either for push-around machines or self-propelled machines and in addition specific product training.

For push around machines the Push Around Vertical (PAV) course by IPAF or similar approved body is recommended (as below) followed by specific product training. Note: Many large companies or organisations recommend that product specific familiarisation is adequate training for push around type machines.

For self-propelled machines the category 3A course by IPAF or equivalent for Self-Propelled Vertical machines is recommended followed again by specific product training.



In 2017 falls from height in the UK alone, accounted for 40 fatal accidents and 43,000 major injuries.

Push Around Vertical (PAV) Course

Who should attend?

This programme is designed for the operators of push around verticals (PAV's), renewal of PAL cards or to learn how to operate PAV's.

Aim

To instruct an operator to prepare and safely operate various types of PAV's and to obtain an IPAF MEWP operator's licence.

Knowledge

By the end of the course delegates will also:

- Be aware of the relevant Health & Safety regulations
- Be aware of the needs to wear Personal Protective Equipment (PPE)
- Be aware of the need to refer to the machine operating manual



Training Methods

- Classroom based tutorials, demonstrations, practical and test.

Mobile (self-propelled) Vertical, Category 3A Course

Who should attend?

This programme is designed for the operators of self-propelled scissor lifts or mast lifts that can be driven when closed or at full height. Attendees will learn how to operate typical vertical self-propelled type machines.

Aim

To instruct an operator to prepare and safely operate various types of vertical self-propelled machines and to obtain an IPAF MEWP operator's licence, category 3A.

Knowledge

By the end of the course delegates will also:

- Be aware of the relevant Health & Safety regulations
- Be aware of the needs to wear Personal Protective Equipment (PPE)
- Be aware of the need to refer to the machine operating manual

Training Methods

- Classroom based tutorials, demonstrations, practical and test.

Further information: www.IPAF.org





Power Towers Limited
West House, West Avenue,
Wigston, Leicester
LE18 2FB UK
Tel: +44 (0)116 200 1757
Fax: +44 (0)116 284 9243
sales@powertowers.com
powertowers.com

JLG EMEA BV
European Sales and Service
Polaris Avenue 63
2132 JH Hoofddorp
Netherlands
Tel: +31 (0) 23 565 5665
jlg.com



*Ecolift & Pecolift Patent:
U.K. Patent no. 2500997
Europe wide Patent no. 13724311.9