IPAF POWERED ACCESS 2016

ipaf.org

Higher safety p10

The Big Debate tackles the industry's hot topics

Beating the bandits – the rise of organised equipment gangs p22

I SAY BOOM, THEY SAY HOW HIGH?

ACCESS PLATFORMS TO MAKE YOU

FEEL UNSTOPPABLE

POWERED ACCESS PLATFORMS WITH AWARD-WINNING ACTIV' SHIELD BAR*

TO REQUEST YOUR 2015 UK PLATFORMS CATALOGUE TEXT UKP TO 64121

*secondary guarding system

ukplatforms.com / 0845 450 1661

Safety / Value / Availability / Support

UK Platforms
POWERED ACCESS
PART OF HSS Hire

What's in a MEWP?

Hydraulic oil, electronics, metal – anything else? Some plastic, some chemicals, all bound together to produce some clever machines.

But, and this is increasingly important, there is also some very sophisticated engineering in some modern MEWPs. Using them correctly is to be safe and effective. Using them incorrectly is dangerous and counter-productive. Gone are the days when an operator could trust his instinct to know when the machine's limits were being reached.

This means that site managers must have an understanding of how to get the most out of MEWPs and know what to do if something goes wrong. Our Big Debate (page 10) tackles the sensitive issue of who to tell if something does go wrong on site. There can be a temptation to email safety bulletins out to all and sundry if a problem is encountered on site. But these can be counter-productive. Machines get stood down for the wrong reasons, which can lead to inappropriate alternatives being used. Our panel of experts has come up with practical advice for anyone confronted by this difficult situation.

Elsewhere in this issue you can read about important updates to the IPAF MEWP operator training programme, guidance on the correct use of harnesses in MEWPs, and order a wide range of free safety posters, decals and guidance notes from IPAF.

Please do circulate this issue to your colleagues and don't hesitate to contact IPAF if we can be of further assistance.

Tim Whiteman
CEO & managing director
International Powered Access Federation
www.ipaf.org

CONTENTS

Published by EMAP Limited
Telephone House
Paul Street
London EC2A 4NQ
Email cneditorial@emap.com

Supplement editor Andrew Gaved
IPAF news editor Berlinda Nadarajan
Printed by Headley Brothers

IPAF HEAD OFFICE Moss End
Business Village, Crooklands
Cumbria LA7 7NU, UK
Tel +44 (0)15395 66700
Fax +44 (0)15395 66084
email info@ipaf.org
website www.ipaf.org

IPAF calculates fatal injury rate to determine MEWP safety

Preliminary fatal injury rate calculations confirm that mobile elevating work platforms (MEWPs) are one of the safest ways to perform temporary work at height and appear to be getting safer. This latest analysis complements IPAF's release of the 2014 MEWP-related accident data and indicates that although the total MEWP rental fleet has increased in size, the fatal injury rate has fallen.

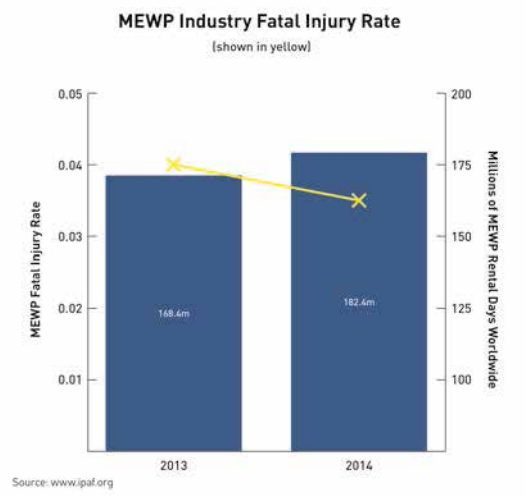
The MEWP fatal injury rate as calculated by IPAF takes into account the following factors:

- Estimated global rental fleet size, based on the IPAF Powered Access Rental Market Reports;
- Estimated average utilisation rates per country and worldwide (utilisation rate is defined as the share of the fleet out on rent at any time over a year);
- Average days worked per year (5 days a week for 50 weeks a year);
- The number of fatalities worldwide that involve MEWPs in a given year, based on the IPAF accident reporting project.

Chris Wraith, IPAF technical & safety executive, noted that IPAF is calculating the fatal injury rate based on the number of MEWP fatalities worldwide against the MEWP rental fleet worldwide and estimated utilisation rate, as no accurate data is currently available on the total number of end-user owned machines and their utilisation rate.

Mr Wraith said: "Comparing fatalities across the whole industry with the total fleet size will most probably bring down the fatal injury rate, so IPAF is currently taking a more conservative approach to the question, 'How safe are MEWPs?' and this is an initial attempt to measure and quantify MEWP safety."

Based on the estimated rental fleet size, the average utilisation rate and the average days worked per year, the number of days a rented machine was operated per year was estimated at 168.4 million worldwide for 2013. Taken with the 68 reported MEWP fatalities worldwide in 2013, the fatal injury rate



(ie the number of fatalities per 100,000 days a rented machine was operated) was estimated at 0.040. For 2014, the number of days a rented machine was operated per year was 182.4 million and the number of reported MEWP fatalities was 64, to give a fatal injury rate of 0.035.

The MEWP fatal injury rate was put into perspective with other existing data on accidents and fatalities worldwide. Information published by official bodies based on accidents as a proportion of workforce was found for France, Singapore, the UK and the US concerning the number of fatalities due to falls from height per 100,000 workers and the number of fatalities at work per 100,000 workers.

The comparison with fatal injury rates due to falls from height and fatalities at work showed MEWPs to be a safe way to work at height. In the US, for example, the MEWP fatal injury rate per 100,000 of the workforce in 2013 (the most recent year for which data is available) was 0.03, whereas the fatal injury rate per 100,000 of the workforce due to falls from height was 0.4 (the number of fatalities due to falls from height involving MEWPs was excluded from this figure) and the fatal injury rate per 100,000 of the workforce due to fatalities of any kind at work was 3.27 (the number of fatalities involving MEWPs was excluded from this figure).

Safer working
The comparison with fatal injury rates due to falls from height and fatalities at work showed MEWPs to be a safe way to work at height

The MEWP fatal injury rate was reviewed against other relevant industry sectors. But the research found little commonality between industries in the way that fatalities are reported or tracked. All calculations and comparisons have been checked and validated by consultant Ducker Worldwide.

IPAF CEO Tim Whiteman said: "We are examining the feasibility of distinguishing between accidents involving rented equipment and those involving end-user owned equipment. This groundbreaking project is helping us to create relevant safety campaigns and improve our training programmes – we would welcome comments and suggestions for improvement."

IPAF's accident reporting project, launched in 2012, is gradually creating a comprehensive record of known accidents. Newly released figures reveal that there were 64 MEWP-related fatalities in 2014. IPAF's *Rental Market Reports* estimate the worldwide MEWP rental fleet at more than 1.1 million (www.ipaf.org/reports).

The 2014 accident figures indicate a small decrease from that for 2013, which have been re-adjusted upwards in the light of new information to show 68 MEWP-related fatalities in 2013. This gives a fatal injury rate of 0.035 in 2014 compared with 0.040 in 2013. Analysis of the 2014 data reveals that falls from height and overturn remain the two main causes of fatal accidents.

The data enables IPAF to improve the content of training programmes, to develop technical guidance, to target specific high-risk professions or activities, and to provide research findings used to influence standards.

All manufacturers, rental companies, contractors and users are encouraged to report accidents (not just fatal and serious accidents) involving MEWPs and MCWPs (mast climbing work platforms) worldwide at www.ipaf.org/accident.

New PAL+ requirements on UK sites

MEWP operators on major UK sites will soon be required to hold a PAL+ card. The Mobile Elevating Work Platforms (MEWP) Good Practice Toolkit published by the UK Contractors Group (UKCG) has been reviewed and updated to include additional guidance around the selection of MEWPs, MEWPs for Managers requirements, ground conditions requirements and Powered Access Licence (PAL/PAL+) competence.

First issued in January 2014, the toolkit provides guidance for UKCG sites and for the supply chain on how they should plan, manage and use MEWPs on their sites, and on how to ensure that they comply with all requirements.

The revised toolkit highlights competence requirements for operators and users: "Operators of MEWPs will hold an IPAF PAL or CPCS qualification for the appropriate category of MEWP. The UKCG recommends that all IPAF PAL-qualified operators should obtain the PAL+ qualification within the first two years of obtaining their PAL qualification in order to demonstrate a higher level of experience and competence. It is likely that some UKCG members will have additional requirements, for example where there are high-risk work activities or where a challenging project means they only permit IPAF PAL+ qualified or CPCS Experienced Worker (blue card) operators to work on site."

The document also reiterates that the UKCG implemented a requirement on 31 October 2013 that safety net riggers, steel erectors and associated trades working on UKCG sites must hold a PAL+ qualification or a relevant CPCS Experienced Worker card. The document further states that: "Where inexperienced workers or trainees need to gain experience prior to obtaining the PAL+ qualification, the worker may operate a MEWP only when supervised (in the basket) by a PAL+ qualified or CPCS Experienced Worker operator."

PAL+ is an additional one day of category-specific training aimed at operators working in higher risk or challenging environments. More information about PAL+ is at www.ipaf.org/palplus.

Note: The UKCG merged with the National Specialist Contractors Council (NSCC) in September 2015 to form Build UK. IPAF is a member association of Build UK.

Further reading
The revised UKCG MEWP Toolkit is available at the Publications section of www.ipaf.org

Safely exiting at height

IPAF has released updated guidance E2 on exiting the platform at height. The document states that MEWPs are specifically designed to lift people to a position where they can work at height safely within the platform and that MEWPs are not designed for the purposes of transfer or exiting at height. Hence, people should only enter or exit the work platform at access positions at ground level or on the MEWP chassis.

The document outlines criteria for exceptional cases where MEWPs may be used to gain access to or from a work area at height, where exiting the platform at height may be permitted, what hazards should be considered in the risk assessment, and what control measures should be taken.

The guidance is available at the Publications/Technical Guidance section of www.ipaf.org.

How to conduct machine pre-start inspections

Safety videos are available from IPAF that provide visual tours of how to conduct pre-start inspections for scissor lifts (mobile verticals, 3a) and booms (mobile booms, 3b). Each video lasts about 10 minutes and is currently available in English (US and UK), German French, Italian, Dutch, Spanish, Portuguese and Chinese.

All inspection videos and resources can be found at www.ipaf.org/inspections.

Award-winning Smart PAL Card sets the standard

IPAF's machine-readable Smart PAL Card (Powered Access Licence) is now issued as standard to successfully trained operators. The Smart PAL Card can be used together with card readers fitted on machines that may be set to ensure that only correctly trained operators use equipment on site.

The Smart PAL Card won the Plantworx Innovation Award 2015 in the Safety category for its innovative use of smartcard technology to help improve site safety. The Plantworx Innovation Awards are organised by the UK-based Construction Equipment Association (CEA). The Smart PAL Card also won a Silver award in the Elite category and was Highly Commended in the Security category.

This is the second accolade for IPAF's Smart PAL Card, which won a LLEAP award 2014 in the category Aftermarket Support Products & Services. The Leadership in Lifting Equipment and Aerial Platforms (LLEAP) Awards are organised by US-based *Lift & Access* magazine and they bring recognition to products that are new, innovative and elevate the mobile access and lifting industry's performance and safety.

IPAF's Smart PAL Card was one of two products that earned the top median scores in the category Aftermarket Support Products & Services. The judges said: "The Smart PAL Card increases safety by permitting only properly trained operators to run machines – another example of IPAF leading the way in safety."

PAL Cards can be verified online at www.ipaf.org/checkpal and more about the Smart PAL Card is at www.ipaf.org/smartpal.

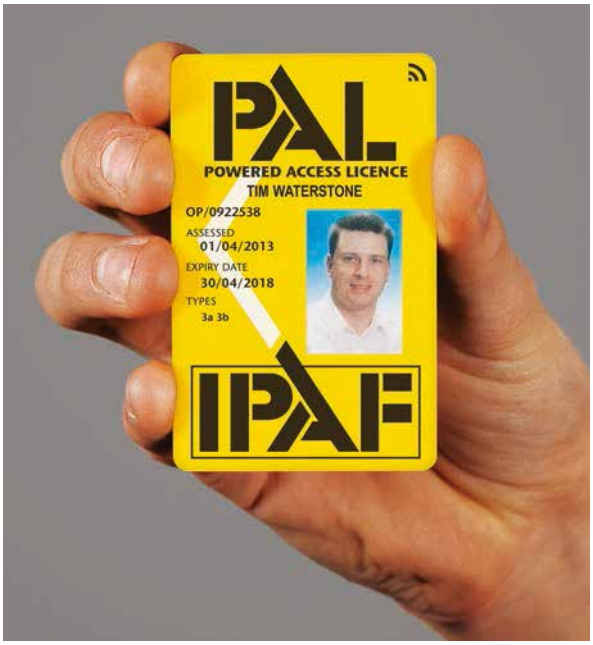
PAL Card unaffected by CSCS announcement

IPAF's PAL Card continues to be accepted by Build UK, formerly the UK Contractors Group (UKCG), and government bodies as proof of appropriate training in the use of mobile elevating work platforms (MEWPs). The confirmation follows a statement issued by the Strategic Forum noting that members of the Construction Leadership Council (CLC) have decided to specify and promote occupational card schemes carrying the Construction Skills Certification Scheme (CSCS) logo.

Under the CLC policy, some sites, notably those funded by public procurement, will specify that individuals must prove they have the agreed standard of qualification and skill for their trade/profession by producing a card with a CSCS logo on it.

Most PAL Card holders will already hold an occupational skill card relating to their particular trade/profession – eg as an electrician or steelworker – and will therefore be unaffected by the new policy. MEWPs are recognised as a safe means of performing temporary work at height and are used by many trades and professions on a daily basis.

The ability to operate MEWPs safely and effectively for work at height, as certified by holding a valid PAL Card, applies across many different sectors including but not limited to construction. The PAL Card will thus continue to be accepted and/or required as proof that the holder has successfully completed appropriate training in the safe use of MEWPs and MCWPs (mast climbing work platforms) across the UK.



Proof of training
There are more than 350,000 valid PAL Cards in the UK

Build UK has confirmed to IPAF that: "The PAL Card continues to be recognised by Build UK members as proof of successful completion of appropriate training to operate MEWPs."

There are more than 350,000 valid PAL Cards (Powered Access Licences) in the UK. PAL Cards are now issued as machine-readable Smart PAL Cards. All PAL Cards can be verified online at www.ipaf.org/checkpal.

One million PAL Cards issued across the world

More than 460 PAL Card holders across five continents won prizes in IPAF's Verify And Win free prize draw celebrating the one millionth PAL Card (Powered Access Licence) ever issued.

Winners from countries including Australia, Canada, Denmark, Germany, Ireland, Malaysia, the Netherlands, Turkey, UAE, UK and the US received prizes ranging from trips to the IPAF Summit and rental market reports, to T-shirts, hi-vis jackets, caps, pens and clipboards. The draw was open to any of the more than half a million valid PAL Card holders who verified their PAL Card at www.ipaf.org/checkpal. A full list of all prize winners can be found at www.ipaf.org/checkpalandwin.

The world authority
in powered access

Operate legally and safely
The essential, one-day course for those who plan, supervise and manage the use of mobile elevating work platforms in the workplace.

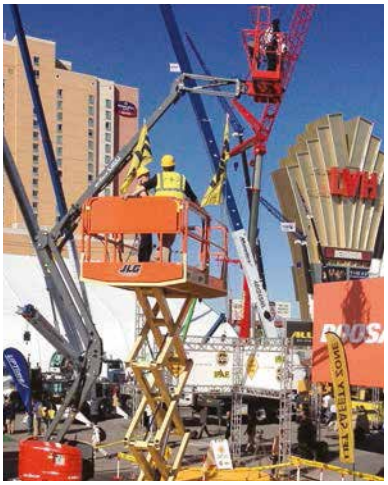
www.ipaf.org

MEWPS FOR MANAGERS
TRAINING COURSE

To book this course, contact your IPAF-approved training center or visit **www.ipaf.org**

Don't get MAD, stay away from live lines

The latest safety video from IPAF illustrates the safe and minimum approach distances (MAD) that a MEWP should be when working near power lines. See www.ipaf.org/aLive.



IPAF Summit 2016 to be held in Madrid, Spain

The next IPAF Summit and International Awards for Powered Access (IAPAs) will be held on 17 March 2016 in Madrid, Spain. Watch for event details at www.iapa-summit.info.

Save the date

The 2017 IPAF Summit and International Awards for Powered Access (IAPAs) will take place on 4 April 2017. The venue will be announced on 17 March 2016 at the end of the 2016 IAPAs, which are being held in Madrid, Spain.

More than 1.1 m MEWPs in worldwide rental fleet

There are now 1,120,000 mobile elevating work platforms (MEWPs) in the worldwide rental fleet. This is up 8 per cent from the previous year, reveals new research commissioned by IPAF.

The US AWP rental market recorded strong growth of 10% in 2014 to reach approximately $7.9bn, according to the IPAF *US Powered Access Rental Market Report 2015*.

The US AWP rental fleet expanded by 7 per cent in 2014 to exceed 500,000 units. Strong demand from the construction sector allowed for fleet expansion and rental rates improvement, while balancing the negative impact of decreasing oil prices.

The Chinese MEWP rental market grew at a rate of 25 per cent to 30 per cent in the past two years to reach approximately 9,000 units.

The European MEWP rental market grew slightly in 2014 (+1 per cent) and is estimated at approximately €2.6bn, according to the IPAF *European Powered Access Rental Market Report 2015*. Fleet expansion continued at a slow pace to reach 285,000 units.

The IPAF rental market reports are presented in an easy-to-read format, highlighting key facts and figures for senior management, such as fleet size, utilisation rate and retention period. They include an estimate of the size of the MEWP rental fleet worldwide, with a breakdown by region and machine type.

New aspects covered in the 2015 reports include: average payback period by machine type (booms vs scissors), most commonly requested machine features/options, and the impact and consequences of new MEWP regulations and safety standards.

The US report includes Canada. The European report includes seven individual country/regional sections: France, Germany, Italy, the Netherlands, Nordic/Scandinavian countries (covering Denmark, Finland, Norway and Sweden), Spain and the UK.

The IPAF *US and European Powered Access Rental Market Reports 2015* can be purchased at www.ipaf.org/reports.

IPAF brings low level access to M&T Expo

IPAF promoted the benefits of low level access equipment at the construction and mining show M&T Expo earlier this year in São Paulo, Brazil.

The use of low level access is currently not widespread in Latin America and IPAF highlighted this category of equipment as a safe and effective way to perform temporary work at height.

M&T Expo is one of the largest events of its kind in Latin America. Despite the difficult economic situation, it attracted a record number of visitors from the region and internationally.

Alert to safety

Is the practice of contractors standing down machines after a serious incident doing the right thing in the wrong way? And what is a serious incident? These, and other hot potatoes, are the subject of our Big Debate, writes Andrew Gaved

Panellists (left to right)
Phil Godding, principal product safety and reliability engineer, JLG, and chair of the IPAF Manufacturers' Technical Committee
Andrew Gaved, Construction News
Mark Atkinson, H&S manager, Clugston Construction and UKCG representative at the Strategic Forum for Plant Safety Group (SFPSG) MEWP Safety Group
Chris Wraith, IPAF technical & safety executive
Tim Whiteman, IPAF CEO
Mark Keily, UK QHSE director, Nationwide Platforms

The practice of contractors standing down machines after a serious incident has swiftly become one of the most controversial topics among those who work with MEWPs. Often, they believe, it is a 'sledgehammer to crack a nut', with the particular model of machine taken out of operation on sites across the country for days at a time, sometimes even for weeks/months/years, when the incident has nothing to do with their company or the machine itself.

So for this year's Big Debate, IPAF assembled a group of experts to discuss these contractor safety alerts, with the intention not only to understand the issues, but hopefully to come up with a protocol that could be used throughout the whole industry.

IPAF chief executive Tim Whiteman set the scene: "We know that there is a problem in the industry with safety alerts. They come from a very principled stance – people think after a near-miss or serious accident: 'Wow, there is something wrong with this machine, so we have got to get the message out, so that people don't have the same incident again.' We often see a message going out from a site that a particular model is 'dangerous', so contractors or hirers are standing them down. The alerts take on a life of their own, with machines being stood down worldwide."

The discussion, he suggested, should come with a positive goal of how to improve the current, somewhat informal system, driven by individual firms' practice: "There is a genuine desire to do something about ensuring incidents don't happen and we don't want to stop safety alerts being sent out. So we want to discuss such questions as: 'How should people react when they receive a bulletin? What should they do if they have an incident and decide to produce a bulletin? How best can they share the information?'"

IPAF's technical and safety executive Chris Wraith, who often finds himself deluged by forwarded safety alerts from MEWP suppliers and users following an incident, was understandably keen to seek a better way.

He said: "I think the best place to start would be to understand why people generate these bulletins. The construction industry is much better at sharing information now, but the trouble is they don't always put the factual information in there. I have heard there is pressure on not just safety officers, but clients also to achieve a conclusion within seven days or whatever, and one of the actions is sharing information with the industry. So they issue a safety bulletin that does not contain all of the correct facts, and may have not consulted with the rental company or the manufacturer. If they had consulted with a rental company or manufacturer, they would have a better view of the incident."

Under pressure

Mark Atkinson, as both the representative of UKCG on the MEWP safety group and the manager responsible for raising safety alerts at Clugston Construction, was well-placed to respond to the charge.

He said: "If there is a catastrophic event, the right level of emphasis will be paid and everyone will be involved, but

the danger is that some safety alerts are damaging the industry over lesser events. I agree with a lot of what you've said – we are often put under pressure externally to provide information and advice. For instance, we had a serious incident on 1 December 2002 and two days later, a newsflash went around the industry. The Health and Safety Executive were very complimentary that we shared the information we had with the industry. We hope we can prevent similar incidents happening potentially across the board and not just in Clugston. I think we have got to understand that the newsflashes are a good way of sharing information with the industry."

But he said that from the contractor's perspective, the current state of communication with the equipment industry could do with a lot of improvement.

He offered a comparison to illustrate: "We had a serious incident recently with a piece of equipment that wasn't a MEWP and I have tried 11 times to get hold of the person directly responsible at the relevant manufacturer. As a contractor, we need to obtain the right information within a reasonable amount of time, but we need the full cooperation of the manufacturer to put that information in. Otherwise we are just left with someone's opinion."


Mark Atkinson

Phil Godding, principal product safety and reliability engineer at manufacturer JLG, was understandably keen to provide the manufacturer's perspective when a safety bulletin is issued that concerns one of his machines.

He said: "I think that the difference between the MEWP industry and other plant sectors is that we have dedicated product safety departments that actively want to get involved to support sites and users if there is an incident. We would rather work with the contractors if a design issue is suspected to make sure the information is accurate, that any photos going out are of the correct machine – even that it is the right manufacturer. Right from the start, everyone should understand that although the information has to go out quickly, it must go out with the correct details."

Attracting attention

Another expert well-placed to comment is Mark Keily, who has seen life from both sides of the fence, having formerly been a contractor, but now working for rental giant Nationwide Platforms.

Mr Keily said: "Another problem is people substituting different photos that don't relate to the incident. We have seen two recent alerts where the pictures are of the right machine, but not where it was and how it was at the time of the incident. They seem to have purposely made it look more dramatic. I can understand people wanting to attract attention, but that is not helpful."

Mr Atkinson was quick to pick up on Mr Godding's use of the word 'quickly'. He said: "I think 'quickly' is the issue here, because I don't think the manufacturers are able to provide the information quickly enough to satisfy the industry leaders who are asking, 'Have I got the same risk on our other sites?'"

Mr Keily said: "I have seen the problem from your side and the hirer's side, and the main issue is that the manager on site doesn't realise that it can take weeks to get the investigation done properly to get to the root cause. If you do it too quickly, you end up making assumptions and you may fix a part of their problem, but if you don't get to the root cause, it could happen again."

> "We have got to understand that the newsflashes are a good way of sharing information with the industry"
> Mark Atkinson

There was agreement about the need for definitive actions to be outlined in the alert, not just 'this is the problem.'

Mr Godding said: "That is often what is missing from alerts: What are the actions? Is the alert just for information at this stage while the investigation is ongoing? As more facts become established, you can add, 'The manufacturer is taking this action' or 'We are advising people about the particular site conditions.' Too often we just see something being prohibited."

Mr Godding then pointed out that usually the sometimes-hastily assembled initial report does not get updated: "We would have a lot more balance if, as an industry, we had the ability to go back to those alerts and look at them and update them if necessary."

Mr Whiteman stressed the point that safety alerts are issued out of a


Phil Godding


Mark Keily

principled stance – the desire to stop an incident happening again – and no one sets out to create bureaucracy. But the problem, Mr Wraith retorted, is that the safety alerts get raised for all sorts of things that belie the phrase 'serious'.

He said: "Sometimes an incident occurs on site and a report is written and the manufacturer just doesn't get to hear about it. Two or three weeks afterwards, a bulletin comes out about a specific machine, but the manufacturer hasn't had a chance to have any input."

This though, is down to the mechanics of what happens when there is an incident, contended Mr Atkinson, because it is important to try and identify the cause and recommend any action that can be taken to stop it occurring elsewhere. He said: "The last thing you want is an incident on a Tuesday and it happening somewhere else on a Thursday. Therefore, what happens in our own business and standing machines down should not be advice or instruction to the rest of the industry to stand down machines on their sites. They should thoroughly investigate to see if the risks are prevalent in their business and act on their own judgement."

> "Having an action plan with timescales attached would be great for contractors, because that guidance has come from the industry"
> Mark Atkinson

However, Mr Keily protested that this is simply the ideal – in reality, the alerts are issued before many investigations are concluded. He said: "If a newsflash is issued, quite often we as the hirer don't even get sent it directly, but within a day, we will probably have got it 50 times from different sources. One problem is that customers often forward a newsflash, but rebadge it under their name, so you don't know whether you have one incident or two. Some companies even change the wording or the picture, which just adds to the confusion, even if it is your machine."

High alert

Mr Wraith underlined the problem with forwarding around the industry: "Alerts spread like wildfire – people forward them, thinking they are doing the right thing, but I have seen emails with 900 people copied in."

Mr Keily added that often the hirer is called in to site to check their own machines following an incident with someone else's machine. "You often don't know what has happened as you have very little knowledge of the other incident but you have to take some action and send an engineer to site. The contractor is usually happy with that, even though the hirer doesn't know what he is checking for. We would do a general function check or operating check, but we are sometimes really looking for a needle in a haystack."

Mr Godding replied that this would be where the 'action plan' part of the safety alert would be important – an element that Mr Atkinson saw as a vital tool for the contractor.

Mr Atkinson said: "Having an action plan with timescales attached would be great for contractors, because that guidance has come from the industry. So we would say, 'Has the action been taken?' If the answer is no, 'Has the part been ordered?' or whatever the safety alert said. And if it is not ordered, that machine stays stood down until it is."

More controversially perhaps, Mr Atkinson said he thought that there is not enough guidance coming from the regulator – the HSE. "I don't believe I have the right to prohibit a machine if the HSE hasn't prohibited it – if the HSE is not prepared to stand them down, why should I? Too often machines are stood down and nobody knows why."

Mr Wraith agreed with the sentiment:


Tim Whiteman

Chris Wraith

"If the HSE feels something is unsafe, they will put a prohibition notice on it, so it follows that if there isn't one, that machine is still safe to use."

Timescales were also an important element to get right, Mr Keily offered. He said: "But I would say, within a day, a contractor should notify the rental company. The rental company should make an assessment within 1 to 2 days and notify the manufacturer if appropriate. Manufacturers are getting quicker. Then you really do need a week to ten days to do a proper investigation and issue a report."

Mr Atkinson retorted: "We have got clients who want reports within hours sometimes. The report needs to be issued when it is factually correct, and if it takes a bit longer, it takes a bit longer. But then we would want the subcontractor to write their own report. If you are taking seven to ten days, then we would require the same."

Mr Whiteman thought that might be too long: "That is coming towards a month. You would have to ask if that is realistic."

The Health and Safety Executive has itself been criticised for the speed it has responded to major incidents – it has taken more than two years to publish the results of its research into serious MEWP accidents. Mr Atkinson noted: "If the HSE are involved, everybody puts the shutters up and the brakes go on."

The discussion then moved on to whether alerts could be made more useful if there was cooperation *before* they were issued. Mr Wraith noted that the Strategic Forum MEWP Safety Group recommended having the rental company and the manufacturer involved before a contractor issues any alert, but complained that their recommendation has been generally been ignored by the contracting community.

Mr Atkinson felt that this might be impractical, given the pressure from the management and sometimes the client to get an alert issued. He returned to the point that manufacturers were not always quick to respond.

He said: "It has got to be quick. It is not the hirer often who is the problem, as they are usually told to 'Get here now' by the contractor – it is the manufacturer."

Mr Godding stressed that it all comes down to at what point the manufacturer is informed. He said: "Are they only told a few days after the hirer has been on site or it has been investigated? I would say that if it is serious enough to stand down a machine, you should definitely contact the manufacturer at the same time."

But, Mr Atkinson retorted, the contractors don't have access to the manufacturer, they go via the hirer, and rely on them.

This, said Mr Whiteman, is where IPAF can come in, providing a conduit between the three parties: contractor, hirer and manufacturer.

"IPAF has a page at www.ipaf.org/alerts where we ask all people to post alerts. We have the online reporting tool at www.ipaf.org/incident too. People could print out that data as a resource for their own reports. IPAF is ready to assist; we are more than happy to act as a conduit to get a useful alert out."

Data power

It was noted that much better use could be made of IPAF's database, partly no doubt due to the fact that people believe it is only for accidents, when in fact it is intended for all incidents.

Mr Atkinson was forthright: "In the UKCG's toolkit, it tells contractors to report to the database, and it only takes ten seconds to fill out the IPAF anonymous form, but it simply isn't being done. Once the form is filled in, IPAF can get onto it and involve the manufacturer."

Mr Keily pointed out that Nationwide Platforms are strong supporters of the IPAF database. The investigation process following an incident, however, can be onerous. He said: "We sometimes struggle and we have a team of five in our QSHE department. You often don't know at the outset whether something is serious in that sense or not. Remember that smaller rental companies won't have the resources that we do, so when a big contractor starts jumping up and down about investigations and processes, it can be overwhelming for them."

The panel agreed that the best option was probably to involve the relevant manufacturer as soon as possible who would have the resources to bring to bear on an investigation.

Mr Godding, as the manufacturing representative, agreed: "Where there is property damage or injury, we would prefer to know upfront and scale back later if appropriate, rather than learning about it later. I think the processes are in place for MEWP users, hirers and contractors to obtain support, but perhaps they need to be better signposted."

Mr Keily added that Build UK should be urged to develop a single template that could be applied to any incident, thereby discouraging people from creating their own versions.

Inconsistency was a major bugbear when it comes to issuing alerts – particularly when it came to the rush to get so-called 'dangerous' machines stood down from site – and everyone had their own experience of this.

Mr Wraith said: "I can remember an incident where there was a scissor lift

where one of the check valves blew, and the contractor banned all that rental company's machines, despite the fact that another rental company had the same machines on site. Sometimes it's the machine, sometimes it is the rental company that is blamed, there's no consistency. Half the people don't know what rental company they have used, let alone the manufacturer."

Mr Keily pitched in with another tale: "We have one contractor who won't allow a particular make and model of machine on site, even though they will allow older machines on site."

The issue of communication is another area that got the temperatures rising among the panel.

Mr Keily was concerned about tracking the right people down after an alert. He said: "Finding the right person to talk to from the site about the incident can sometimes take days, if not weeks. If the subcontractor has finished the job and moved on, you have to try and track them down. Another problem is if a machine that we use has been stood down after an incident with another hire company, then it is very difficult to get the information out as to what has happened."

The consensus was that concerns about commercial sensitivities might come into play, but that the 'public interest' factor should motivate the actions.

Mr Godding, speaking for the manufacturers, argued for a balance to be struck: "It may be something that the owner doesn't want to be shared around the industry. But as our responsibility is over the design and manufacture, we could tell the other hirer, for instance, that there is nothing we have identified in the design or manufacture which might have caused the incident and so we are not advising them to stand down machines. We would write to the owner of record, so it is very important that MEWP owners keep those records up to date, so that the current owner knows if there is a safety bulletin that affects their machine."

Operator error

One thing was agreed though: the majority of these safety alerts seemed to avoid the possibility of operator error being the cause. Mr Keily said wryly: "I can't remember seeing a safety alert that didn't have the incident down as a machine fault."

But, Mr Atkinson conceded, that probably comes down to human nature: "People aren't going to want anything implicating them as part of the problem. He isn't going to say, 'Our operator wasn't trained' or 'Our ground conditions were inadequate'. But if you aren't prepared to accept any responsibility, don't send the alert out!"

Mr Godding agreed: "That's where you need to have a filtering process and someone with the experience and responsibility to ask the right questions and say, 'The issue raised needs further investigation.'"

There was broad agreement that the process required to investigate and deal with an alert often resulted in a lot of resources being wasted on cases of operator error. However, Mr Wraith was keen to stress that the results could be potentially damaging – a position, it has to be said, that Mr Atkinson, as contractor, thought was a bit excessive.

Mr Wraith said: "I am not sure some of the contractors realise what damage they potentially are doing by sending out alerts for the wrong reasons – sometimes they are standing down machines and then using less safe means of access. They could actually be putting workers at risk – one contractor was seriously considering putting scaffolding in because of a concern over a scissor lift – but that turned out to be simply operator error. If they hadn't contacted us, they could have banned a machine unnecessarily."

Another area where Mr Atkinson took issue was with the b-word. He said: "I don't like the word 'ban'; it is 'standing down' the machines we are talking about, until we complete our investigation. And we will do that very quickly, because we have people who want answers."

The problem, though, was in defining 'serious', and some people thought the alerts were being sent out too readily.

Mr Keily agreed: "Even though the basket isn't going anywhere, the machine isn't going to tip over, yet we have seen alerts and machines banned for that."

The simple fact, Mr Atkinson said, is that this could be avoided through having properly trained and competent management.

He said: "What it comes down to is: Do you and your operators understand what the machine you are using is designed to do? That is why the principal contractor and the specialist contractor hiring the machine should have an IPAF MEWPs for Managers-trained manager on the job."

SAFETY ALERT CHECKLIST: POINTS TO CONSIDER

1) Is the safety alert needed?
2) Who will the alert be aimed at?
3) Has the supplier of the equipment and/or the manufacturer been consulted?
4) Ensure the alert is factual and includes: date and location of incident; machine make and model; description of the work being performed; description of the occurrence etc.
5) When including photos, ensure they are clear and do not mislead the reader.
6) Where possible, wait for completion of the investigation - an accurate alert is more useful than one with unanswered questions.
7) If you are required to release an alert when only an initial investigation has been completed, consider how updates will be communicated, or earlier revisions withdrawn.
8) Consider adding an expiry or review date of current alert.
9) Think about adding a unique reference number so the alert can be easily identifiable.
10) What is the recommended action for those receiving the alert? Try and make this practical – include the name and contact details of the person releasing the notification, in order for information to be verified.
11) Safety alerts should only be issued by a designated senior member of staff.

When *receiving* an alert, before forwarding to colleagues, consider:

1) Are the actions of the alert relevant to your company or work you are completing?
2) Is the information still valid and relevant? You may wish to contact the originator for an update on the findings.
3) Do not blindly forward without reviewing the content or ensuring the elements above are considered.
4) Do not add additional information or hearsay – verify any new details with the originator of the alert.

CUSTOMER TRAINING SOLUTIONS 0115 924 1349

A-PLANT

Working at Height?

Make sure your staff are correctly trained and working safely

WINNER iapa International Awards for Powered Access 26 MARCH 2015 IPAF TRAINING CENTRE OF THE YEAR

A-Plant offers IPAF accredited Access Safety Training courses from Training Centres of Excellence located across Great Britain. Alternatively we can deliver training courses at your premises to ensure minimal disruption to your working day, and in many cases matched to your own requirements.

For more information on our training courses, to request a FREE copy of our Customer Training brochure or book onto one of our courses please contact us.

0115 924 1349 **aplanttraining@aplant.com** **www.aplant.com/training**

Control Code: 10/15/3922

Process of change

IPAF president Andy Studdert tells Andrew Gaved how his background in one of the world's biggest airlines has driven his approach to powered access safety

Andy Studdert, the current president of IPAF, is passionate about establishing a safety 'culture' into organisations that work with MEWPs. Mr Studdert, whose day job is running NES Rentals, a top ten global equipment hirer, fervently believes that embedding such a culture requires structure – not just a 'policy' that is vaguely referred to, but a properly thought-through process.

This belief is informed by Mr Studdert's background in the airline industry, where such processes are the lifeblood of the industry, essential to keep planes running on time and carrying people safely to tight timescales. Given that this background refers to not some low-profile back office role but the chief operating officer of United Airlines, in charge of the day-to-day running of 600 planes and overseeing 105,000 people, his views carry considerable weight.

> "You need to foster a culture that says that anyone on the jobsite or anybody within the company can raise their hand and say 'that's not safe'"
> Andy Studdert

"The airline safety culture is considered to be the gold standard in the world. The idea of a repeatable structured process that really pushes the culture of intervention at all levels is key," he says. "You can say from experience that you know how to operate equipment in all environments, but unless you do a structured review and write it all down, you can't see how you are actually doing – it's only how you think you are doing."

The MEWP industry needs to look at what it does and how it does it, he contends: "You need to create a process map, with all parties involved in an uninhibited discussion so you can map out the key areas of strength and areas for improvement – then you need to agree on a new process, and undertake the training and education necessary to get you there. And you need to foster a culture that says that anyone on the jobsite or anybody within the company can raise their hand and say 'that's not safe'."

Staff buy-in

When Mr Studdert came to his present role at NES Rentals 11 years ago, he was keen to see this "overabundance of caution" applied to the day-to-day operation of equipment rental. But he wasn't getting the reaction from staff he wanted.

"We were consolidating 41 different companies and there had never been anything like a Standard Operating Procedure. That was a challenge and an opportunity for the CEO, because if you recognise it, you can really establish the process. But to be honest, we weren't making much progress in the first few months – people weren't taking it seriously enough."

That was all to change. It took something dramatic to bring the issue into focus – a rough terrain forklift hitting an overpass, bringing a piece of a bridge down onto a car. Mr Studdert seized the opportunity to get NES to wake up to its responsibilities: "I shut the company down for two days – 100 branches and 3,000 employees. Every piece of commerce was stopped and everyone was brought into the branch to be retrained."

The message he gave to all the workforce was one that he has often used since: "I told them 'I am tired of being lucky', so we need to change. That was 11 years ago and we haven't had an incident since. If you don't take that opportunity as the CEO, the staff

will never take you seriously."

Readers will be relieved to hear he doesn't advocate that approach for everyone, but he does believe that *everyone* in a business needs to buy into the safety culture.

Again, this is borne out from life at United Airlines. "I had an experience where, during an overnight stay of an aeroplane, it was the gate agent checking customers in who saw the catering truck hit the aeroplane. The co-pilot doing the walkaround had missed the incident, so it was then the responsibility of that gate agent to tell the mechanic and the pilot that there was now a hole, which happened to be out of their sight. It is important that the gate agent felt empowered to intervene in the process to make it safe."

This is a change in mindset that he wants to see happening in the powered access industry. "I think we already do that in a lot of places, but we need to do it more, and in all parts of the operations."

At NES, all the staff are required to acquire the PAL Card, whatever their position – the only exception being that staff with a fear of heights are absolved from the practical element. "Every employee does the e-learning process. It will mean that the guy driving the truck can know that the guys in the office know what he is going through."

Mr Studdert notes that the airline industry operates under an extreme level of external scrutiny, so without that, it is even more imperative that the MEWP industry sets up its own processes. "If we knock a boom over, it makes the local paper, but you bounce an aeroplane into Heathrow and that makes the national headlines for two weeks – even if no one was hurt," he says. "There are two million parts in every 747, so the airline safety regime must be thorough. We can take some of these elements and apply them. At NES, we have a safety review after any accident or incident and learn from it."

Foundations of safety

However, Mr Studdert notes that the MEWP industry has probably made quicker progress in safety than airlines: "You have to be impressed with how far the industry has come in 30 years with respect to safety culture. If you look back to when airlines were 30 years old – 1936 – there wasn't much structure and focus. While we still have a lot of work to do, the MEWP industry has made some great strides in building the foundations of safety."

The airline industry operates under an extreme level of external scrutiny

He contends that embedding that safety culture should help to eradicate another persistent bugbear – people who want to sidestep the rules. "We had a driver go to a jobsite and discover that the boom he was delivering couldn't safety be operated, so he refused to unload it. The customer got very belligerent and offered to take responsibility and all sorts, but the driver stood firm and refused to deliver," he says. "We backed the driver and sacked the customer. That's where this culture of intervention comes in. If someone sees a boom that is overloaded, or at the wrong angle, they need to feel able to do something about it."

It is the only way to eliminate the 'rogue element' he says: "The incidence of mechanical failure is rare in our industry, so it often comes down to the weakest link, which is the human factor, people not understanding the limits of the machine or setting out to defeat them. We should convey the message that a safe, well-organised jobsite is actually more productive and less costly than a haphazard and unstructured jobsite."

One of the big frustrations for Mr Studdert though, as a US-based president of IPAF, is that his homeland's industry is not yet as engaged in MEWP safety as the UK is: "The UK has become the benchmark for MEWP safety culture in the world, thanks in large part to IPAF's work, and I have had some frustration in getting the same engagement in the US, " he says. "In the US we do only what is required for regulatory purposes, whereas in the UK, the contractors have done a nice job of setting standards. We need our US contractors and insurance companies to do the same. I would like to see a unified direction on how to get every operator certified."

This is where IPAF's new eLearning platform comes in (see page 26), he believes – to the point that he sees it as one of his main priorities in his presidential term: "We have an opportunity with eLearning to break down some of the barriers. We are starting to see traction with the union labour force and with contractors and rental companies on that front."

When Mr Studdert describes the benefits of eLearning, it is possible to see how the system fulfils his demands for process and structure, while also making the world of operator training more accessible and flexible.

"You don't want to take away the personal interaction with the instructor or their personality, but you can get a much more current and uniform presentation of the data with eLearning," he says.

Mr Studdert has a triple goal for his presidency. The first two will be obvious given his views – the rollout of eLearning in multiple languages and raising the level of safety engagement in the industry. The third is interesting, though – ensuring the worldwide IPAF board, councils and staff embrace the rate of change being thrown at the organisation.

For Mr Studdert, this represents a key challenge for the industry: "We need to bring excitement about change at all levels of the organisation. No matter how secure you are in your knowledge, change can be threatening."

One thing seems certain – for this ex-airline man, nothing can stand still for long.

ANDY STUDDERT ON...

Big booms "You had well be as safe at 6 m as you are at 60 m. It doesn't take 60 m to get yourself killed."

Renting in the US "If you want to rent a Ford F150 pickup truck, you have to show a government-issued licence and proof of insurance. But if you want to rent a 150 boom lift, all you have to do is pick up the keys and have some familiarisation training. We have to move more towards the UK standard."

MEWP training in the US "The penetration of PAL Cards to machines in the US is pitiful – we have around 3,000 cards for 500,000 machines, so we need to do something."

On smart technology "I can envision a time when the PAL Card is electronic and carried on your phone. I can also envision a time when you have to watch a refresher video of operating your particular piece of equipment on your phone before you can use

A message from above

Working on or near fragile roofs and roof lights needs to be thought through and properly planned, writes Ray Cooke, HM principal inspector, head of Construction Sector Safety Unit, Health & Safety Executive

You would think that given the history and numbers of serious and fatal accidents involving people falling from or through fragile roofs or roof lights that this ought to be a thing of the past. Not a bit of it!

Unfortunately, on average seven people are killed each year and many others suffer permanent disabling injury. And remember, it is not just the individual who suffers, but their family and friends too.

During HSE investigations into incidents, one thing that often comes through is that not all understand what the risk is. Fragile surfaces are those that will not safely support the weight of a person and any materials they may be carrying.

The fragility, or otherwise, of a roof should be confirmed by a competent person before work starts. If there is any doubt, the roof should be treated as fragile unless, or until, confirmed that it is not. And it is not just the roof surface that needs to be considered.

There have been a number of serious and fatal accidents where the surface was not fragile, but the trusses/purlins supporting it had corroded or rotted and created a fragile roof, or the supports were spaced so widely that they did not adequately support the roof.

The following surfaces are likely to be fragile and of particular risk:

- Non-reinforced fibre cement (including asbestos cement) sheets, irrespective of profile type;
- Old roof lights;
- Old liner panels on built-up sheeted roofs;
- Corroded metal sheets, either as the primary waterproofing system or as the structural deck supporting a membrane roofing system;
- Glass (including wired glass);
- Chipboard or similar material where rotted;
- Others such as wood-wool slabs, slates and tiles.

It is important to remember that fragile roof incidents are not inevitable. They can be prevented by careful planning, using trained and experienced workers, with suitable equipment and the right level of supervision.

Preparation is everything
The fragility of a roof should be confirmed by a competent person before work starts

It is important to remember that fragile roof incidents are not inevitable. They can be prevented by careful planning

Risk avoidance

But what does this mean? The hierarchy of control in the Work at Height Regulations 2005 start by requiring that work at height should

Scaffolding –
PERI UP Rosett Flex
Flexible – safe – fast

Access –
Technology for industry, public and construction sites

Shoring –
Easy to assemble, with system-integrated safety

Events –
Bridging, ground levelling and grandstand support solutions

PERI Scaffolding Solutions

Safe, adaptable and fast system scaffolding with universal components for all applications

PERI®

Formwork
Scaffolding
Engineering
www.peri.ltd.uk

be avoided where reasonably practicable, and if not, then undertaken from an existing safe place. In some instances, gutters can be cleaned or fragile roofs inspected from ground level, using pole-mounted equipment. Or inspection might be from an adjacent higher building.

But that is not always possible, so the next step is to prevent falls by selecting the most appropriate equipment. For fragile roofs, this is first about the need to avoid being above a fragile surface. For example, on some profiled roofs, the roof sheets or roof lights might be able to be replaced from beneath, working from a suitable platform such as a MEWP. This though may require adapted roof fixings and is therefore only suited to certain roofs.

If you cannot do this, then the next step would be to avoid putting a platform directly onto the fragile roof, perhaps working above it from a MEWP, for example. There is an incredible amount of flexibility here in terms of what situations can be accommodated, largely due to the wide range of MEWPs available. The range is certainly impressive, with new models and extended reaches seeming to appear almost weekly.

Of course, it is not just about providing the correct equipment that is important. The work must also be planned and supervised properly, and be undertaken by operatives with the right skills, knowledge and experience (competence). Many quite rightly start their enquiries by asking whether operatives have a card from a scheme that confirms a specific relevant qualification or training. This should then be followed up by asking about their experience, and determining what level of supervision is appropriate.

The right people
Work must be planned and supervised properly by operatives with the right skills

Only if it is not reasonably practicable to undertake these precautions should you be considering putting a work platform onto the fragile roof itself, perhaps using stagings with edge protection. Further information on such methods of work can be found in HSE guidance HSG33 Health and safety in roof work at www.hse.gov.uk/pubns/books/hsg33.htm.

HSE inspectors often get asked about short duration work, as people often seem to think that if it is short duration, then they will not need to take any precautions. The first thing to say is that short duration work is measured in minutes, and might include things such as inspection or replacing a few tiles or minor adjustment to a TV aerial. Work on a fragile roof is still dangerous even if it only lasts a short time. Appropriate safety measures are essential.

Fragile materials

Work on or adjacent to fragile materials is a regular theme in HSE enforcement notices and in prosecutions. A visit to HSE's databases for these (www.hse.gov.uk/enforce/prosecutions.htm) can be quite enlightening.

It is not always just the contractor who HSE looks at. For example, a recent prosecution following a fatal fall while fixing a leak on a fragile fibre cement roof resulted in a four-month suspended prison sentence, fine of £3,000 plus £11,756 costs for the roofing contractor, and a fine of £93,750 plus £12,580 costs for the client at whose site the accident occurred. There had been inadequate assessment of the job and unsuitable equipment was in use. The prosecuting inspector in that case was quoted as saying the work should have been "undertaken without the need to directly access the roof, for example by using an aerial work platform".

So, working on or near fragile roofs and roof lights needs to be thought through and properly planned. If you can avoid the need to work at height, then do so. But if not, then select the equipment that is most appropriate to that particular task and roof. Be sure you have adequate supervision to ensure the safe planned method of work is followed and is undertaken by operatives competent to do the work; and get on with it.

Follow this and neither you nor your operatives should become another fragile-roof statistic. ■

JLG® MID-SIZE BOOM LIFTS—GREATER CAPACITY AND LIFT SPEEDS

Ramp up productivity with the new 400S and 460SJ boom lifts. Faster lift speeds mean you'll spend more time working, less time positioning. And the higher platform capacity and improved work envelope maximizes efficiency on the job. Get impact protection and a more modern look from the new DuraTough hoods, which also allow for better serviceability.

Learn more at www.jlg.com/en-gb/destination/boom-lifts

JLG® reachingout™

JLG Industries (United Kingdom) Limited | Bentley House, Bentley Avenue | Middleton, Greater Manchester | M24 2GP

Beat the bandits

The rise of organised equipment gangs could leave your fleet exposed if you are not extra-vigilant. Andrew Gaved hears from the front line how to battle the bandits

Organised criminals have set their sights on the equipment industry with a series of extremely sophisticated scams that have already netted them millions of pounds' worth of kit. The machines on your site could be next.

That is the stark message from a man who has been battling the 'equipment bandits' on the front line in Eastern Europe for the past ten years.

Stefan Ponea, chief executive of Industrial Access, which hires and sells MEWPs and other equipment in Romania and surrounding countries, has become something of an expert in the ways of the bandit. With his company, he has developed strategies for foiling these gangs.

The wisdom he has picked up in that time could prove invaluable for UK sites, because the criminals who once operated only in areas where the security and the infrastructure are less developed are now operating in a wide region across Europe and have no qualms moving their stolen kit across international borders.

Anyone who thinks that these bandits are the sort of folk who can be dissuaded with a set of tough locks and a high fence should think again – these gangs do their business through the front door, except they set up fake companies in order to create a 'bona fide' customer that can hire high-capital value kit only to then disappear without trace with the asset.

There is good news, though. By training your staff to be vigilant and to follow some simple rules, the bandits can be kept at bay. In fact, by putting in robust credit checking and always keeping in mind 'avoid customers who want to avoid paperwork', many of the scams can be avoided.

"Automated checks on credit can probably eliminate 80 per cent of the problems," says Mr Ponea. "On our system, within 200 seconds you can get a report, verifying a customer without any human intervention."

> "Sometimes you need to look at your process from a criminal perspective"
> Stefan Ponea

Mr Ponea, not surprisingly, has built up something of a portfolio of stories, having built up a business over the last decade operating out of Romania, Moldova, Bulgaria and Serbia. In Eastern Europe, the criminal gangs have found rich pickings, since police procedures, business security and rental agreements have not been as enforced as they are in the west.

"The tradition of organised criminal gangs targeting valuable equipment exists everywhere," he says, "but I can share what I have learned from my own experience in this part of Europe."

Dodgy dealings

Mr Ponea tells a story of how he almost saw £150,000 of telehandler equipment disappearing through a dodgy transaction, only stopping the deal when the machine was on the back of the truck. "The customer was from a reasonable background, and had passed the background checks, but on making further investigation it turned out that even he had history – one of the signs should have been that he simply accepted the list price without negotiating."

The first part of the process of tackling the bandits, he says, is to learn the identifying signs of the criminal process – or, for those brought up on police dramas, the modus operandi.

"You need to look out for customers who don't want to negotiate price; those who are determined to pay in cash; those who don't ask any questions."

STEFAN PONEA'S TIPS TO BEAT THE BANDITS

Watch out for:

- Immediate acceptance of the list price
- Cash or credit card payment instead of transaction via a bank
- Urgency for delivery
- Customer wants to use own transportation for pick-up
- Uncertainty as to model, make, or even type of machine
- Frequent attempts to hire same item of equipment using different names and company names
- Use of generic non-company emails and only mobile phones
- No meetings on customer premises
- Customer more interested in appearance of machine than what it does
- Seeking out the youngest/newest sales rep
- Customers emphasising their importance and status as a means to get things done quickly

Simple ways to check:

- Run thorough credit references before spending any time with the new customer
- Ask for landline numbers and office addresses
- Google the company!
- Offer to meet the company at their offices
- Ask the project client whether they know the company or individual seeking equipment for their contract
- Ask for and check the individual's identification
- Don't be afraid to share information with colleagues and industry peers
- If in doubt, ask more questions
- Trust your instincts!

Modus operandi
Mr Ponea (left) says that "you need to look out for customers who don't want to negotiate price; those who are determined to pay in cash; those who don't ask any questions."

So hand in hand with the automatic credit check, Mr Ponea insists that his salesmen go through a list of pre-defined checks, with 10 to 15 basic questions to establish the credentials of a new customer (see box, left).

"A key question is to find out whether the rental client understands what the machine is going to be used for," he says. "So we will ask what the project is and what application he has in mind for the machine."

This is based on the simple principle that while the criminal gangs are run by people with pretty sophisticated business minds, the people they tend to send to do the operational stuff are not so well clued-up. Throwing in a couple of questions about operating envelope and ground-bearing pressure, for instance, could be a useful way of separating the bona fide from the bandit.

He also adds a sobering thought: "Some insurance companies won't pay out for a theft if basic checks have not been carried out on a company's credentials."

The thefts, Mr Ponea says, are on the increase as the criminal gangs get bigger and more sophisticated. As formerly profitable laundering routes are progressively shut off, as specialist police units close supply down, the gangs are turning increasingly to the equipment sector as a high-capital, low-security option.

They are also getting bolder, he notes: "A gang was recently discovered with 40 stolen machines, using a company that had been running since 1993 – no one was trying to arrest them. But the ringleader actually asked the prosecutor to give him back the machines that weren't traced to third parties."

Similarly, some gangs have created sophisticated networks of companies purely to move the machines around. "We have seen companies that are worth €6m that have simply been set up to handle stolen machines. We have also experienced gangs who steal the machines to do 'real' construction jobs while they travel from country to country."

Use of security technologies such as IPAF's Smart PAL Card, which can be programmed to only start with certain operators, could serve well as an additional barrier to criminals in future, he says, but he cautions against relying on just a few deterrents. "Anything that makes more problems for the criminal is a good thing, but sometimes you need to look at your process from a criminal perspective, as they eventually will find a new way to get round things – it is like computer viruses, they keep developing."

Similarly, Mr Ponea is sceptical about simply relying on trackers, alarms and the like. He says: "The alarms often appear too late, and the thieves know to look for the GPS trackers. We actually now fit at least two trackers on machines above €100,000 in value, because most thieves stop looking when they find one."

Sophisticated methods

As the thieves have become smarter in their business dealings, so they have increased the sophistication of how they deal with the stolen equipment. As a result, anyone buying secondhand kit now needs a practised eye to inspect the machines. Mr Ponea stresses: "We have seen machines stolen in Italy and two months later they turn up in Romania with the original serial numbers removed and new identification plates attached – fortunately manufacturers have databases that allow you to check the serial numbers. We discovered one stolen machine where the original plates had been removed everywhere but the engine – that was the one place the thieves forgot to look. That is why you need to train your staff properly to look for the signs."

Another of Mr Ponea's initiatives is to encourage his staff to talk among themselves to share experiences and, hopefully, to spot patterns of behaviour. "We have set up a forum on the company CRM, and we encourage them to have free discussion," he says.

The company CRM system is one of the keys to success, he believes, because it allows everything to be logged and referred back to in case of queries. "We recently had five different fake companies over a three-month period trying to get the same type of generator – it was clear that this was something that someone had been told to get hold of. Another warning sign is when no office details are supplied – just mobile numbers and Gmail addresses. That is where the CRM can be very useful – in fact nearly all of our enquiries have come from queries on the CRM."

Mr Ponea believes that the criminals have learned to exploit the fact that salesmen are often under pressure to meet targets – picking on those who 'need' to make a sale. This phenomenon has led to him deciding to make some changes at his business. "In our industry, while the management level has a certain level of education, it has not been the same for the rest of the staff, but I think we need to have a minimum level of competence. That way, they don't get caught out by the criminals."

He also stresses that equipment companies should be proactive, particularly if a customer postpones an agreed drop-off, or off-hire, because things tend to escalate quickly. "You should phone them quickly, as it won't be long before that phone number goes dead."

Mr Ponea ends by summing up his philosophy: "The criminal gangs are operating everywhere in Europe now, so it is important to be alert, wherever you are. But the best way to prevent problems is to keep close attention to the details. We have seen 'customers' wanting to spend €100,000 a day on machine rental in cash – so if a deal seems too good to be true, ask again, because it probably is." ■

See Stefan's presentation at the Resources section of www.ipaf.org

A bolt from the blue

Classroom training is being transformed by the advent of e-learning. Paul Nicholas hears how it can work for IPAF

How many times have you attended a one-day training course and come away feeling that, with the exception of the free sandwiches and coffee, you got nothing of any value out of it?

Sadly, that's not an uncommon feeling. Spending a day, or more, locked in a room, being bombarded with PowerPoint presentations and filling a folder with handouts you'll never look at again is hardly a rewarding experience – especially if there's something useful you could be getting on with at work.

But this training is essential to gain the underpinning knowledge for safe operation of equipment and best practice on site. So maybe we need a new approach to training; an approach that grabs the trainee's attention and ensures they retain the knowledge it imparts; an approach to training that makes it stimulating and enjoyable, rather than something to be endured.

That's exactly what IPAF is doing. Despite the undeniable success of its extensive portfolio of training courses, IPAF acknowledges that the classroom approach is not a one-size-fits-all solution. Different people learn in different ways; furthermore, there can be a huge variation in the quality of the teaching at the point of delivery – some instructors are inspirational, but some have difficulty just keeping their trainees awake.

IPAF's search for an alternative approach has resulted in its collaboration with Bolt Learning, a specialist online learning company that not only employs imaginative and memorable teaching methods but delivers it in a tailored way while monitoring each individual's progress.

Bolt rejects the conventional training manual in favour of more modern learning and cognitive theories that actively engage the trainee, provoking interest and stimulating their sense of curiosity. It uses techniques designed to stimulate the trainee's sense, obliging them to see, hear and feel what they are learning.

One of the familiar shortcomings of traditional training methods is the tendency for students to glaze over while the tutor drones on. "When you're not being stimulated, boredom soon sets in," explains Bolt's founder and chief executive Tamlin Roberts.

That's largely because the message is being delivered in only one way – verbally – with maybe a little visual illustration to back it up. According to Mr Roberts, there are actually four cognitive learning styles: visual, auditory, reading/writing and kinaesthetic (summed up by the acronym VARK).

New approach
Bolt Learning rejects the conventional training manual in favour of more modern learning and cognitive theories

If that sounds a bit scientific, it boils down to a few simple truths: audio learners respond best to speech and conversation; reading/writing learners retain information best through text while kinaesthetic learners acquire skills through practical exercises. But the reality is most people learn through a combination of some or all of these methods.

All learners, meanwhile, respond best when learning is an active, rather than passive, process. Passive training involves the students sitting down and listening while a tutor delivers the information verbally and, if you're lucky, with the help of visual aids up to and including videos. The student is required to do little more than absorb the content.

Reactive thinking

Even when the training involves group discussions, the student's contribution is usually more reactive than active, Mr Roberts contends. Truly active training requires the trainee to take the initiative and adopt a lead role – thinking ahead, evaluating information and actually making decisions. "This is the real purpose of training, because these are the skills that people need to employ in real-life situations," explains Mr Roberts.

One shortcoming of the classroom approach that surely everybody can relate to is the tendency for students to switch off after a while. This is the inevitable consequence of the passive

> "When you're not being stimulated, boredom soon sets in"
> Tamlin Roberts

PERFORMANCE IIS LIGHTLIFT 26.14

TRACKED AERIAL PLATFORMS

- **230kg** unrestricted capacity
- **25,7m** working height
- **13,6m** working outreach
- **10m** up & over to allow easy clearance of obstacles at height
- Height in transport configuration is less than 2m
- Lengthened undercarriage for greater stability
- 3 working stabilization areas
- Working movements with optimized speeds
- IIIS self-stabilization and remote assistance
- Extraordinary performances enclosed in a compact machine

HINOWA S.p.A.
www.hinowa.com - info@hinowa.com
Via Fontana ▪ 37054 Nogara ▪ Verona ▪ ITALY
Tel. +39 0442 539100 ▪ Fax +39 0442 539075

Hinowa®

role students are forced to adopt, he notes. A skilful tutor might be able to delay the switch-off point long enough to deliver a short presentation, but sooner or later the trainee's brain will switch to 'standby' simply because it's not doing any work for itself.

"You can avoid this by re-stimulating people at frequent intervals," he says. The best way of doing that is to make the learning process active. According to Mr Roberts, in a traditional classroom environment, students typically retain only 10 to 20 per cent of the information they are fed. When they are actively learning, the retention level can be as high as 80 per cent.

As an example, Roberts conjures up something that most of us have been taught at some point in our school careers: the six wives of Henry VIII. The traditional way of teaching this is to give the names, dates, and how each marriage ended. The students dutifully write it all down but they actually remember almost nothing.

"Now, suppose you handed out a set of cards, each one with the wife's portrait and name on the front and all the key information on the back," says Roberts. "Then ask your students to arrange the cards according to one criterion – date of birth, say.

"Then you ask the students to sequence the cards according to different criteria – and crucially this time the student decides which criteria to choose. To do that, they have to process the data themselves".

Alongside the active processes, Bolt's methods are designed to help trainees store the information they've gathered in a way that makes it easy for them to retrieve.

This is done by presenting the information progressively so that concepts are embedded first and then populated with actual data. "We build a filing system in the brain and then the student can access the knowledge quickly and easily," says Mr Roberts.

"When the brain actively processes information, it creates pathways – like a pathway worn in the grass. And that can be done either by repeatedly going over the same ground, or by making a single deep impression," he continues. One example of the latter is the use of dramatised scenarios that have a strong emotional impact – a technique that has proved especially effective in health and safety training.

Bolt uses these and other techniques, along with another fundamental feature of its methodology: online learning. Online learning is a more active method than classroom learning because the trainee is in control.

IPAF ELEARNING

IPAF's mobile elevating work platform (MEWP) operator eLearning module is gradually being rolled out in the UK and other countries in 2016.

Together with supervised written and practical testing of operator skills, the eLearning module can lead to a PAL Card (Powered Access Licence), which proves that the operator has successfully completed the training.

The eLearning experience brings several benefits to operator training. It is flexible. Trainees complete the theory (traditional classroom) part of the course online at their own pace and time, using the same material as in a classroom session and learning the same subjects.

ELearning caters to different learning styles. It provides different tools to help trainees learn in a way best suited to their abilities, aptitudes and interests. For instance, some people are text-based learners who benefit more from a reading/writing/lecture-type environment. Others are kinaesthetic learners who benefit more from activities and practical exercises.

MEWP operator eLearning does not replace practical training. Trainees who complete the online session must still pass a supervised theory test at an IPAF-approved training centre and must successfully complete a half-day of practical training and testing before being issued a PAL Card as proof of successfully completed operator training.

"The PAL Card still means the same emphasis on practical training and assessment," says Giles Councell, IPAF director of operations. "Students can choose between classroom and eLearning for the theory part, but nobody gets tested online. They will still have to complete the written test and the practical part of the training at an IPAF-approved training centre."

The IPAF operator training programme is certified by TÜV as conforming to ISO 18878. This industry-led training programme is offered by leading manufacturers and rental companies, and requires that accredited partner training centres pass initial, annual and unannounced audits as part of the quality management system. Instructors are certified and undertake ongoing professional development, which includes free annual updates to the training materials and use of a central register of trained cardholders.

There are now over half a million valid PAL Cards worldwide.

PAL Cards can be verified online at www.ipaf.org/checkpal.

More about MEWP operator eLearning is at www.ipaf.org/eLearning.

Practical considerations

There are basic practical advantages too. An online training course can be delivered to any location – and at a time to suit the trainee. This does away with the 'training-as-penance' scenario in which trainees must interrupt their normal work patterns in order to be lectured in a classroom.

Online training allows people to learn at a speed that suits them. They can pause, go back over a topic and take their time – within reason.

Another advantage of online learning is consistency of quality, says Mr Roberts: "Excellent classroom tutors are few and far between, and even they can have off-days. That doesn't happen online."

Appraisal and assessment is very precise with the online model, he stresses. "In the classroom, there's no test of the trainee's learning until right at the end of the course, whereas online you are testing them all the way through."

The online course is set up so that the trainee cannot progress to the next level until they have passed the previous one. This not only ensures that the knowledge is sinking in, but also overcomes another common shortcoming of the classroom environment: "The online system is not motivated by people passing, whereas classroom teachers often are," says Mr Roberts.

Since it started working with IPAF late last year, Bolt has been working on producing online versions of the existing MEWP training courses. "So far we have the Operator's course set up and running, first in the US and now here in the UK," says Roberts. "The MEWPs for Managers course will be next," he adds.

There are, of course, many IPAF training centres doing sterling work all over the world. Mr Roberts is keen to assure them that online courses are not going to put them out of business. "You can't take practical training online so there is always going to be a need for training centres," he says. "And theory training goes hand-in-hand with that, so the online courses will be administered through existing training centres, as part of their business, with their branding."

facelift
access and safety made easy

nifty SiOPS®
sustained involuntary operation prevention system

We now operate the UK's largest fleet of SiOPS® fitted equipment - SiOPS® eliminates sustained involuntary operation by interrupting all machine movement if an operator is pushed against the cage controls.

Mobile Elevating Work Platforms offer a safe and efficient way to work at height. Occasionally however, operators can become trapped between the machine and surrounding objects forcing their torso onto the controls. In extreme cases, this can result in sustained involuntary operation of the machine's controls which can inadvertently move the machine and operator towards the obstacle, worsening the injuries caused. SiOPS eliminates sustained involuntary operation by interrupting all machine movement if an operator is pushed against the cage controls.

T 0844 22 54 360
E hire@facelift.co.uk
W www.facelift.co.uk

CPA
constructionline
CIRAS
Confidential Reporting for Safety
Link-up
Qualified via Audit
FORS
SAFEcontractor
APPROVED
CHAS

Safe loading and unloading

Data collected from IPAF UK rental company members has focused on the risks to delivery drivers, who play a crucial role in almost a million deliveries or collections of mobile elevating work platforms (MEWPs) each year on UK sites

Slightly more than a third of MEWP-related incidents reported by UK rental companies involve delivery drivers. What are the pitfalls to avoid – and how can delivery drivers keep safe?

Almost a million deliveries or collections of mobile elevating work platforms (MEWPs) take place each year on UK sites. Delivery drivers play a vital role. They are probably the only face and actual contact point between the rental company and the end-user on site. Any incident involving drivers during delivery and collection of a MEWP has the potential to be serious and could also affect contractor relations and site operations.

Recent data collected from IPAF UK rental company members has increased focus on the risks to delivery drivers. Since January 2013, all IPAF UK rental company members are required to report all MEWP-related incidents involving their own staff to the IPAF accident reporting database (www.ipaf.org/accident). Analysis of the 2014 data confirms some trends identified from the previous year and highlights specific situations that involve a significant proportion of drivers.

A total of 428 incidents involving MEWPs were reported by rental companies in 2014. Of these, 35.5 per cent (152) involved delivery drivers and 24.5 per cent (105) involved engineers. Operators, including contractors, truck-mount operators and employed operators, were involved in 28.7 per cent (123) of the incidents reported.

A majority of the incidents (44.2 per cent or 189) took place on site, with another 25.7 per cent (110) occurring in the depot/yard, 13.6 per cent (58) occurring in the workshop and 11.2 per cent (48) occurring on the public roadway. The most common types of injury incurred were cuts and bruising of the upper limb, lower limb and head.

Most of the incidents involving delivery drivers occurred during loading and unloading (48.7 per cent or 74 of 152). The main causes of driver-related incidents were identified as insecure load (18) and the machine falling off between ramps (14). Closer analysis of the incidents caused by insecure load revealed that these were mainly due to the canopy becoming detached from the MEWP during transport (9 of 18 cases). Almost all the machines that fell off between ramps (11 of 14 cases) were small electric machines (mobile verticals, 3a).

Engineer incidents

Most of the incidents involving engineers occurred during maintenance (66.7 per cent or 70 of 105). The main causes of these engineer-related incidents were identified as using hand tools (21) and slips/trips (16). Closer analysis of the incidents caused by using hand tools revealed that these were due to using hammers (6 of 21 cases). Almost half of the slips/trips happened while walking (7 of 16 cases).

Most of the incidents involving operators occurred when the MEWP was being operated from the platform controls (51.2 per cent or 63 of 123). The main cause of these operator-related incidents was identified as lack of observation and failure to check the route, ie colliding with stationary objects while driving on unfamiliar sites.

The findings from the accident reporting project are being used by IPAF to improve its course on loading and unloading MEWPs. This is currently a one-day course specifically aimed at drivers delivering MEWPs, but the key lessons are relevant to anyone managing or supervising these operations and those loading or unloading general types of equipment.

Since the introduction of the Certificate of Professional Competence (CPC) requirements (EU Directive 2003/59/EC) for UK and European drivers, IPAF training centres who have gained approval from the Joint Approvals Unit for Periodic Training (JAUPT) are able to deliver the loading/unloading course and other IPAF courses, including the IPAF operator course, as part of the CPC training programme requirements.

As the management duties and responsibilities for loading and unloading on site are important aspects for site management, this subject is also covered in the IPAF MEWPs for Managers course.

Continual improvement
The findings from the accident reporting project are being used by IPAF to improve its course on loading and unloading MEWPs

To enrol for these courses, find a training centre near you using the locator at www.ipaf.org

NEW GUIDANCE UNDER WAY

IPAF working groups are currently drafting several good practice guides relating to drivers and the management of safe loading and unloading of MEWPs:

- Guidance to identify the responsibilities of contractors, rental companies, transporters and drivers when planning and carrying out loading/unloading activities
- Guidance for loading and unloading MEWPs on the public highway
- Guidance on operating MEWPs on public highways

Take responsibility for safety

IPAF's technical and safety executive Chris Wraith explores why so many operators still fail to attach the lanyard in a boom-type MEWP and considers what can be done to prevent further unnecessary incidents of falls from MEWPs

Have you noticed that nearly everywhere you go, you see a boom, scissor or vehicle mounted platform en route? And if you are like me, you take a second look to see if everything is as it should be. It is amazing how often you can observe operators of boom-type platforms not wearing a harness, or not clipping on. So why is this, when many acknowledge how successful IPAF's Clunk Click campaign has been?

On most major construction sites, it is now widely accepted and enforced that you must wear a full body harness and attach the lanyard to the designated anchor point inside the platform of static and mobile boom-type MEWPs (1b and 3b type machines), in line with the IPAF H1 statement. On these sites, proactive management regimes supported by appropriate supervision reinforce training programmes and drive good practice to become the accepted norm.

However, many construction workers do not work on major construction sites. Many are involved in small commercial projects, involving short duration repairs and refurbishment work or domestic projects, involving extensions, repairs and refurbishment work for domestic clients. About 18 per cent of all SMEs in the UK private sector operate in the construction sector (www.fsb.org.uk/stats).

It is the actions of these construction workers, away from the control of principal contractors, that has prompted the HSE to acknowledge that "small builders are those at most risk of injury and ill health on construction sites and suffer the majority of construction fatal accidents each year" (www.hse.gov.uk/construction/areyou/builder.htm).

The availability and versatility of MEWPs to provide a safe work platform at height has led to 45 per cent of all MEWP rentals being in the non-construction sector (2015 edition of the *IPAF Powered Access Rental Market Report*). Based on the facts above, it is estimated that only 30 to 35 per cent of all MEWP use is on major sites. Conversely, the majority (65 per cent) of the 53,000 MEWPs in the UK rental market are used on smaller building sites or outside the construction industry altogether – the equivalent of approximately 18,000 boom-type MEWPs.

The challenge ahead

The challenge we as an industry have is reaching the operators of those 18,000 MEWPs – many of them self-employed and experienced tradesmen. I say "we" because it is in everyone's interest for all operators to follow the H1 guidance and stay safe; we as an industry suffer every time an incident happens when someone falls from a boom. We as an industry will gain as falls from MEWPs are eliminated.

So how do we get the message across as to how important it is to wear a harness and attach on when in a boom at all times? How do we convince everyone that failing to wear a full body harness and attach a restraint lanyard at all times when in a boom-type MEWP is not acknowledging the potential risk of being catapulted out of the platform or the possibility of not being in a position to avoid unexpected and sudden movement of the platform caused by one of the following:

- Driving the MEWP over uneven surface;
- The MEWP structure being hit by obstacle or vehicle;
- Incorrect use of platform;
- Unintentional movement of the platform.

Of course, training is the first and most essential step – educating operators as to the potential hazards and action required to eliminate or reduce the risk of ejection from the platform. This is something IPAF covers in detail in its Operator, MEWPs for Managers and Harness training courses – courses that are attended by over 80,000 people in the UK each year.

Take charge if you have a MEWP working on your premises, or you are responsible for the work being carried out, you have a legal and moral duty of responsibility for the safety of the operator

But experience tells us that training alone is not the answer; many who have undergone training still think accidents always happen to others and will never happen to them. As previously stated, on major construction sites, it is the proactive management regimes supported by appropriate supervision that reinforce the training and drive good practice to become the accepted culture.

The industry – and by that I mean not just contractors and general MEWP users, but manufacturers, rental companies, training organisations, suppliers, the press and so on – have to develop that same positive safety culture, setting the right example and leading from the front. It is essential for management everywhere to ensure that all employees wear a harness and attach the lanyard at all times when in a boom-type MEWP. There should be processes and checks in places to make sure boom operators follow the guidance. And everyone should be empowered to challenge those who are not complying.

Of course, you may not work within the industry, but if you have a MEWP working on your premises, or you are responsible for the work being carried out, you have a legal and moral duty of responsibility for the safety of the operator. The tradesman coming to do that small work at height task using a MEWP is your responsibility.

Ignoring bad practice should not be an option. Turning a blind eye, or looking the other way, is condoning that unsafe action. If we are to eliminate the practice of not wearing a harness or not attaching when in a boom-type MEWP, then we all have to take responsibility each and every day.

Further guidance on fall protection in MEWPs can be found in IPAF technical guidance note H1, freely available at www.ipaf.org/clunkclick.

Familiarise yourself

Technical standards are changing. What does this mean for site managers and operators? Berlinda Nadarajan gets the facts from IPAF's technical & safety executive Chris Wraith

Technical design standards for mobile elevating work platforms (MEWPs) are being updated. The same machine model built according to a more recent standard may look similar to one manufactured to an earlier standard, but may react differently when operated. Are site managers prepared for this? Do operators need additional training, as has been argued, or is it more about proper familiarisation?

If you are operating MEWPs in the UK, or anywhere in Europe, chances are that they have most probably been designed, manufactured and tested according to European EN280 standards. Conformity to this design standard provides assurance that MEWPs are inherently safe by design.

What is EN280?

EN280 is a machine-specific, harmonised "C" standard detailing design calculations, stability criteria, construction, safety, examinations and test requirements for MEWPs. The most recent version of this design standard is EN280:2013.

As with many other European standards, EN280 has a special legal status and defines minimum acceptable design levels for health and safety by supporting the essential requirements of the European Machinery Directive 2006/42/EC.

Manufacturers are only allowed to display the CE marking on MEWPs that can demonstrate compliance with the Essential Health and Safety Requirements (EHSRs) as required in the Machinery Directive. As a harmonised and machine-specific standard, EN280 is the most direct way for manufacturers to demonstrate compliance with EHSRs.

Look for the CE marking

To know if your MEWP conforms to European standards, look for the CE marking on the manufacturer's data plate. Supporting evidence that a MEWP is compliant with the EHSRs is available in the form of an EU Declaration of Conformity, which is provided by the manufacturer with each individual MEWP at the point of first sale.

BS EN280:2013 was published in June 2013, and replaces BS EN280:2001+A2:2009. After an 18-month transition period, it came into force in January 2015. This means that the revised standard applies to all CE-approved MEWPs placed into the European Union from January 2015. The 18-month transition period allowed manufacturers to distribute existing production stock not sold prior to June 2013, and at the same time develop new designs compliant to the 2013 requirements. Thus MEWP manufacturers started introducing EN280:2013 compliant MEWPs at differing times between June 2013 and January 2015.

Be safe

Never assume similar machines operate the same. Make sure that you know and understand the specific features of the MEWP you are operating at all times

What are the main differences and how will it affect you?

The revised design requirements of EN280:2013 are not "retrospective" and as such do not require updates to be carried out on machines built to previous versions of EN280. This means there may be differences in functionality between MEWPs built to the revised 2013 standard and those built to previous versions of EN280.

Travel and lift function cut-out

EN280:2013 states: "While travelling out of the transport configuration, the device shall prevent the chassis exceeding the limits of inclination permitted by the manufacturer. When the chassis has reached the limits of inclination and the safety device has been triggered, it shall prevent continuation of travel in the selected direction."

Thus all self-propelled MEWPs must 'disable' the drive function when in an elevated work position if the chassis inclination exceeds the operating specifications. This means that on machines compliant with the new standard, it will no longer be possible to drive an elevated platform onto a slope that exceeds the limits of inclination permitted by the manufacturer. This is intended to further reduce any risk of overturn.

The operator will be faced with an audible alarm and/or clear visual indicators, which show that the drive function has been stopped in one or both directions. The operator then needs to assess the degree of the slope that the MEWP is on, and follow the instructions provided both on the machine and in

the operator's manual to lower the platform before moving the MEWP to a safer and more level surface.

Lanyard anchorage points

Anchorage points shall be designed for restraint purposes and be marked with "Restraint only" in words or symbols and identify the number of persons who, at the same time, can attach to it.

Electronic guarding

EN280:2013 allows for the replacement of ridged guarding of scissor lifts of all widths, with an electronic guarding in the form of a descent limiter. Downward movement of the work platform shall be stopped automatically at the 'first descent limit' by a safety device. This means that any downward movement of the platform will be stopped at the first descent limit. Further downward movement shall only be possible after a time delay of at least three seconds. A further lowering command is then required by the operator, which will cause a distinctive, readily audible alarm to sound and a distinctive visual warning to operate for at least 1.5 seconds before the platform continues to lower.

Stopping and resumption of descent at any position between the 'first descent limit' and the fully closed down position shall be subject to the above delay and warning, as shall descent where the work platform has not been raised above the 'first descent limit'.

In all cases, the audible alarm and visual warning shall continue to operate throughout any lowering of the scissor structure below the 'first descent limit'.

Emergency lowering systems

Trained operators and managers will know that familiarisation with machine features, including the emergency lowering system, is essential.

Right standard
Anchorage points shall be designed for restraint

EN280:2013 now states: "Overriding of safety functions is permitted only by the use of a mode selection device that is independent from the control station selection device. Such a mode selection device is a safety device that shall be operated by hold-to-run controls."

The design standard goes on to state: "Features shall be provided to protect against misuse of the overriding safety device(s) and to give visible evidence that they have been used or tampered with. This evidence shall remain until the features are returned to the condition they were in prior to the safety device(s) being operated or accessed. Resetting the features to their original condition should require the use of a tool (eg password or physical tool)."

This has led to a situation where some MEWP emergency lowering systems have now been tagged with a seal. If the seal is broken, this indicates that the emergency lowering system has been used and must be re-tagged before using the MEWP. Furthermore, some manufacturer manuals now state that their emergency lowering systems do not need to be function-tested prior to use as these 'self-check' and alert if there are any faults or issues with the system.

NOTE: IPAF strongly recommends that any emergency lowering system is function-tested as part of pre-use checks and emergency rescue plan.

Folding guardrails on mobile verticals

Folding guardrails are allowed in EN280:2013, provided they do not open outwards, and are securely fastened to the work platform with locking devices that are secured against unintentional disengagement or loss.

To prevent operators from standing or kneeling in the MEWP platform once the guardrails have been folded down, the 2013 standard requires means to prevent normal working on the work platform if the guardrails are not in the correct position, eg by interlocking systems or folding of the guardrails in a defined sequence.

Are MEWPs now going to operate the same way?

No, and they never have! While the trend is towards standardisation and internationalisation, most standards are written in "descriptive" language as opposed to "prescriptive" language. This allows manufacturers to develop new and innovative means of complying with the design standards. It provides opportunity to consider advances in technology and allows continual product development, something prescriptive standards would stifle. Hence the new standard, like previous versions, may be interpreted differently by individual manufacturers. The scope of changes may vary by type, model and manufacturer. Some changes may affect function operation, and not all changes may be visible or evident to users.

For instance, under EN280:2013, clause 5.7.3 states: "The direction of all movements of the MEWP shall be clearly indicated on or near the controls by words or symbols. All controls shall where possible be arranged for logical operation." This requirement allows for considerable variation on MEWP control panels, with many manufacturers using a drive-enable system with indicator light and switch alongside colour-coded directions arrows. Even the arrows may vary in colour, size and shape from manufacturer to manufacturer (yellow-blue, yellow-green, black-white, green-red). However, the descriptive text has now led to the development and introduction of direction-sensing drive, which means the controls are always orientated with the operator – even when the boom is rotated more than 90 degrees from the normal stowed position.

Familiarisation is the key

Some individuals have already suggested that more 'training' will be required due to the new operating characteristics and functionality of 2013-compliant MEWPs, and have started to communicate this information directly with their customers. While good training is essential, what it boils down to is that:

- Managers must make sure specific machine familiarisation takes place for all operators;
- Operators should ensure that they are familiarised with each specific machine prior to operating.

To be safe, never assume similar machines operate the same. Always make sure that you know and understand the specific features of the MEWP you are operating at all times.

More information on familiarisation can be found in IPAF technical guidance note F1, available at the Publications/Technical Guidance section of www.ipaf.org.

Why register your equipment?

Using specialised aerial equipment to work at height (eg MEWPs, telehandlers) helps employers create a safer and more productive worksite for everyone. To keep the equipment productive and safe for the life of the machine, as well as ensure maximum return on investment, registering the equipment with the original equipment manufacturer (OEM) is paramount. Lee Vickers, product safety and compliance manager at Terex Aerial Work Platforms, explains

For decades, we have been told about the benefits of registering products when newly purchased, and more recently, manufacturers have been reinforcing the importance of receiving product updates, safety bulletins and product recalls. The same applies to construction and industrial equipment. The importance of receiving product bulletins (eg safety, performance enhancements etc) is paramount, not only for employee safety, but also for productivity and efficiency.

There are a number of reasons why an owner should register their product, including checking:

- The known machine ownership history;
- If the machine is compliant with the applicable market (eg CE, AS etc) and can legally be used in the applicable community (eg Europe, Australia etc);
- Any important safety, maintenance, and operating information.

Manufacturers release information that is imperative to owners of equipment to maintain the safe condition or to enhance productivity, efficiency and serviceability. Terex AWP, for instance, releases bulletins for Genie equipment that inform current owners of a lot of important updates. These include:

- Safety Notices – Provides information about the safe use of a product as well as mandatory product updates or recalls of products and parts;
- Product Notices – These communications concern mandatory changes to the machine that affect the performance and reliability, and therefore can affect the return on investment of a product if not acted upon;
- Service Advisories – These are non-mandatory advisories that provide information and updates regarding machine servicing;

- Product Advisories – These are non-mandatory advisories that provide information on improving machine performance, product use, maintenance and inspections, and product updates.

Manufacturers have dedicated teams of specialists who are constantly working towards technical updates to make machines more productive and efficient.

Registering your machines should be a key part of your process when taking delivery of new or pre-owned equipment to ensure owners are provided with the latest information and updates to help maximise their investment. Equipment manufacturers having accurate product owner information will facilitate the timely notification to owners regarding important safety, maintenance, and operating information applicable to their product(s).

Right process Registering machines ensures owners are up to date with the latest information

By receiving and acting upon all updates, notices, and advisories, you can keep your equipment current and protect your return on investment.

Take five minutes out of your day to check that all your machines are registered https://terex.wistia.com/medias/wapkkwujnh.

For more information about how to register your machine, watch this short video using the QR code to the left.

Work Smart with Power Towers.

Major construction companies and contractors in the UK, Europe and Middle East have already chosen to do so...

ALEC Building Excellence · amey · Balfour Beatty · bam · Bowmer & Kirkland · Brookfield MULTIPLEX · BM · carillion · COSTAIN · GallifordTry · Interserve · isg · KHANSAHEB · KIER · LAING O'ROURKE · mace · MORGAN SINDALL · NG Bailey · Sir Robert McALPINE · SKANSKA · VINCI CONSTRUCTION UK · WILLMOTT DIXON CONSTRUCTION · wates

Nano SP | Nano | Power Tower | Ecolift | Pecolift

work smart
...IT PAYS TO SPECIFY POWER TOWERS' PRODUCTS

WINNER EUROPEAN RENTAL AWARDS 2014 rentall · iapa 2014 WINNER Low-level Access PRODUCT OF THE YEAR pecolift

IPAF

Power Towers' products are 100% designed and manufactured in the UK.

*patent applied for.

0116 200 1757 | powertowers.com

POWER TOWERS
Low-level Powered Access
a JLG company

Inspect before delivery

A MEWP pre-delivery inspection (PDI)/in-service inspection course is available from IPAF CAP assessment centres. What does this course cover and who can benefit from it?

When you hire a mobile elevating work platform (MEWP) from a rental company, you can expect the machine to be in good working condition and ready for use. Most equipment rental companies have service and maintenance schedules in place to ensure that their fleet is in top form. IPAF Rental+ companies, for instance, are required to have qualified staff for service, maintenance engineering and pre-delivery inspections (PDIs), and are required to subject their machines to PDI checking prior to the start of a hire.

IPAF's new PDI course trains staff to perform PDIs of MEWPs in a structured and systematic way. At the end of the course, attendees should be able to conduct a PDI to verify that a MEWP is functioning correctly, is safe and ready for rental or sale. The course is targeted at rental company staff, and in particular, new service technicians/mechanics or yard-based personnel.

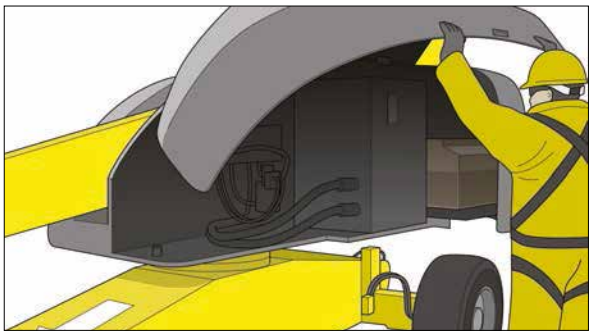
The one-day course gives a rounded approach to PDIs, going from relevant legislation and legal requirements for a PDI, to common faults, when to pass or fail a machine under inspection, and how to conduct a PDI for specific categories of MEWPs. It features group exercises and hands-on practice, and includes a theory and a practical test.

The PDI course covers:

- Relevant current legislation;
- The purpose and legal requirements for a PDI;
- The importance of familiarisation;
- Common faults found during PDI;
- A logical approach to a PDI;
- The need to risk assess the PDI area;
- PDI documentation;
- The role and responsibilities of a person conducting a PDI;
- When to pass or fail a machine under inspection;
- How to conduct a PDI for the selected category of MEWP(s).

The course is grounded in the legal need for a PDI. Under the Lifting Operations and Lifting Equipment Regulations (LOLER 1998), lifting equipment, including MEWPs, has to be thoroughly examined to ensure that it is safe to use: "Lifting equipment is to be "inspected by a competent person at suitable intervals between thorough examinations to ensure that health and safety conditions are maintained and that any deterioration can be detected and remedied in good time."

Hence, PDIs and in-service inspections as part of a service plan alongside the thorough examination schedule are vital in ensuring that MEWPs remain safe to use.



Thinking clearly IPAF's new PDI course emphasises a safe and logical approach to in-service inspections

Methodical approach

"The course emphasises a safe and logical approach to PDIs and in-service inspections," says Rupert Douglas-Jones, IPAF research & development, who has led the creation of the course. "This means starting off by reviewing the manufacturer's manual and relevant bulletins, and using a checklist or form for the process. The machine should be prepared and cleaned for the PDI, and the work area assessed for any risks. The process and findings should be documented – if you don't keep records of the PDI, you can't prove it was carried out. If you find an issue with a machine, do not try to 'fix' any faults found. If in doubt, stop the machine from going out on hire, isolate, tag and report."

CAP assessment centres can be found using the training centre locator at www.ipaf.org.

TYPES OF INSPECTIONS

Pre-use inspections are a visual inspection of the MEWP and a function check of all controls. They are usually performed by trained operators before use each day or at the beginning of each shift.

Pre-delivery and interim inspections are a visual examination and function testing of the MEWP to confirm that it is in a safe condition and is safe for use, and to ensure that any deterioration is detected and remedied in good time. They are usually performed by trained mechanics, service technicians and operators.

Thorough examinations are more detailed and cover an assessment of the condition of the MEWP to establish if the machine is structurally sound, in good working order, and functioning correctly, including assessing the correct function of all safety devices and identifying defects or weaknesses that could compromise the safe use of the MEWP. They are usually performed by trained and experienced engineers who have been assessed and certified as competent persons for this purpose.

PDIs, interim inspections and thorough examinations are legal requirements in the UK under the Provision and Use of Work Equipment Regulations (PUWER 1998) and the Lifting Operations and Lifting Equipment Regulations (LOLER 1998).

Major inspections cover validation of the structural integrity and functionality of critical components of a MEWP and are aimed at keeping equipment safe beyond the manufacturer's design life. There is a statutory requirement for MEWPs to have a 10-year inspection in certain countries – Canada, Australia and Finland. IPAF guidance on major inspections is available at the Publications/Technical Guidance section of www.ipaf.org.

More about inspections is available at www.ipaf.org/inspections

MCWPs – the workshops in th

Mast climbing work platforms are one of the safest ways to work at height – but to erect and dismantle them properly requires a programme of rigorous training from an accredited source. Berlinda Nadarajan speaks to some experts in the field

If you have to carry out temporary work at height, mast climbing work platforms (MCWPs) and mobile elevating work platforms (MEWPs) are one of the safest and most efficient types of equipment you could use.

MCWPs need to be installed and assembled before use. The safety of an MCWP depends largely on the assembly and correct planning before installation, ie wall ties, ground resistance and other equipment interference. The use of MCWPs comes with safety rules that must be followed. If these rules are followed, the equipment will perform safely. An example of these rules for installers would be:

- Make sure ground conditions will achieve stability throughout the duration of use;
- Respect the manufacturer's tie distance, platform lengths and configurations for installation and dismantle;
- Once the first anchor/tie is secure, make sure the mast is vertical, then make sure the base is still properly supported;
- Anchor/tie installations MUST take account of concrete strength, edge distance, hole depth, anchor spacing AND torque;
- Inspect the drive unit BEFORE installation/dismantle to ensure that it is fully functional;
- Before handing the unit over for use, complete a full inspection.

This is an example of the rules for safe installation, and there will be a similar but different set of rules for dismantling. The only way to learn how to erect and dismantle MCWPs

INDUSTRY RESPONSE TO ACCIDENTS IN NORTH AMERICA

IPAF and the Scaffold and Access Industry Association (SAIA) have issued a joint statement in response to the accidents earlier this year involving MCWPs in Raleigh, US and Toronto, Canada. The statement notes that: "Since their introduction in the 1960s, MCWPs have been used extensively without incident throughout many sites worldwide and in the US and Canada... When installed and used correctly, they are as safe as or safer than other forms of powered access or scaffold. The key to the safe use of MCWPs is appropriate training... The MCWP industry has collectively strived for many years to ensure that all operators and erectors benefit from this level of appropriate training, but since there are no specific national training regulations for MCWPs in the US or Canada, employer education and outreach is a continual priority of the industry. The MCWP industry will continue to take a proactive approach to employer education and appropriate training and will continue to work with OSHA to find opportunities to reinforce this requirement."

Full statement at www.ipaf.org/news

e sky

Think ahead
The safety of an MCWP depends largely on the assembly and correct planning before installation

properly is by completing rigorous training from an accredited source.

Once the installation is finished, operators should not alter any part of the MCWP. For this reason, it is important for rental companies to use a comprehensive handover certificate that shows how the machine was assembled.

"MCWPs have proved to be one of the safest systems of working at height throughout the world," says Steven McEwan, business development and training manager at BFT Mastclimbing. "However, in instances where operators have removed ties without the knowledge of the site management team, then unfortunately accidents could – and have – occurred. During an MCWP induction, users are told that they must not tamper with any of the safety systems on the platform and to raise any concerns with the Management Appointed Person on site. One possible solution would be to fit tags onto the tie assembly, indicating that the tie must not be removed or the person would be in breach of health and safety legislation."

This is where proper training and inspections come in.

"If someone alters an anchor/tie assembly post-installation, a properly trained operator should pick this up in his/her daily inspection," says Romina Vanzi, IPAF's head of regional development & MCWPs. "Additionally, a properly trained installer should pick this up in the pre-dismantle inspection."

Load capacity

Overload is one of the risks. MCWPs are not equipped with overload sensors and their load capacity depends on the configuration – normally, the longer the platform, the lower the safe working load (SWL). The load must be evenly distributed on the platform. The operator is responsible for ensuring that the SWL is not exceeded. A specific load chart should be carried on the machine after installation so that the operator has this as a reference.

MCWPs function as 'workshops in the sky' and many people potentially have access to them. An MCWP can be on a jobsite from the beginning until the end, with many tradesmen working on the platform and operating it. Like booms and scissor lifts, the unauthorised use of MCWPs is a major problem on job sites.

"Due to the nature of MCWPs, many different trades can be working from the platform throughout the day, so it is the employer's responsibility to make sure that all users on the platform are aware of how to carry out pre-use checks of the MCWP and that they have been trained to operate it," says Mr McEwan.

Installation is one of the most intricate processes for MCWPs and one of the areas with the most potential for things to go wrong. Accidents can occur during installation and after installation if not done correctly.

"It is extremely important that every MCWP installation is carried out by a qualified and trained installer," says Mr McEwan. "To comply with LOLER [Lifting Operations and Lifting Equipment Regulations], MCWP rental companies will send an independent competent person to site to check the installation of the MCWP, carry out a thorough examination and issue the hirer with a handover certificate and a LOLER test certificate. MCWP installers cannot 'hand over' an MCWP that they have personally installed. An independent competent person has to make sure that the platform has been installed correctly and is safe to use."

Under the guidance of BS7981 (Code of practice for the safe use of MCWPs), users of MCWPs have to be given a familiarisation of the platform that they will be using.

"Some of the major contractors in the UK have asked for an operator course rather than user induction," says Mr McEwan. "IPAF has introduced an MCWP operator course. Whether the user/operator undertakes the basic induction or the operator course, what matters is they must have an understanding of the daily/pre-use checks of the MCWP, how to safely operate the platform and how to lower the platform on the manual descent in the event of a breakdown. Building sites don't just change from day to day; they can change from minute to minute, and users of the MCWP need to realise that someone could have tampered with the platform when they have been away from it, so they need to carry out pre-use checks.

"Contractors who have MCWPs on site know that they need to have the MCWP users trained to use the platform. What they sometimes don't realise is that these users have responsibilities when using MCWPs. An MCWP is a very simple piece of equipment to use, but it is extremely important to know the hazards that can be associated with operating the platform."

Romina Vanzi explains: "Despite their operational simplicity, MCWPs are still equipment that require basic knowledge to be operated safely. It's true that climbing up and down is the only movement that an MCWP does. But what do operators need to know in performing this simple operation? What pre-use checks should operators carry out before using the machine? Operators should also be trained to detect when an MCWP can be dangerous to operate. Alterations made by third parties or weather conditions can make the machine unsafe and operators must be able to detect these hazards. MCWP use would be a lot safer if everyone followed the basic rules."

TRAINING/SAFETY RESOURCES

IPAF's MCWP operator course covers the basic principles of machine assembly, operation, pre-use and weekly inspections, and emergency descent. It is a four-hour course based on a theory session and practical demonstration followed by written and practical assessment. Operators who successfully complete the course receive a PAL Card. More details from mcwp@ipaf.org. Technical guidance on MCWPs, covering safe use, handover, load chart, thorough examination and fall protection, is available at www.ipaf.org/mcwp.

Be safe with Andy and Hugh

Introducing the new safety campaign from IPAF featuring the characters Andy Access and Hugh Hazard

The latest safety campaign from IPAF featuring the characters Andy Access and Hugh Hazard drums home the basics of the safe use of mobile elevating work platforms (MEWPs) in a direct way.

Six simple posters form the basis of this campaign. Each poster illustrates a specific safety message on how to use MEWPs correctly and comes with supporting toolbox talk notes that end-users, contractors and rental companies can use in their daily operations.

Andy Access was born out of an initiative by the IPAF UK Country Council to do more for safety and bring out issues to reach the main users of MEWPs.

"Andy Access is the good guy," says Chris Wraith, IPAF technical & safety executive, who has been behind the project to bring the campaign to life. "Andy knows that MEWPs are one of the safest ways to perform temporary work at height, but he also recognises that they can pose significant and unnecessary risks when used by untrained people or used incorrectly and inappropriately. Andy serves as the guardian of MEWP safety and he conveys key messages ranging from the use of harnesses and the need to assess ground conditions, to avoiding the potential risks of entrapment and electrocution.

Quick fixer

"Hugh Hazard is the antagonist," explains Wraith further. "He is not inherently bad; he does his job as best as he can, but often succumbs to time and resource pressures. Hugh is susceptible to cutting corners, such as not performing a risk assessment before starting the job, or tampering with safety devices to get a quick fix for the immediate problem instead of looking for the safer, proper solution. Hugh shows 'how not to do it' while Andy highlights the errors and reinforces good practice."

Access all areas
Andy and Hugh demonstrate the correct – and incorrect – way of using MEWPs on site

The situations highlighted in the six posters were all based on findings from IPAF's accident reporting project (www.ipaf.org/accident). They are aimed at addressing the most common causes of MEWP-related fatalities around the world, as well as the most common causes of non-fatal MEWP-related incidents reported by UK-based rental companies.

Join Andy Access and Hugh Hazard on their journey through MEWP safety. Free posters can be obtained from January 2016 by emailing info@ipaf.org or visit www.ipaf.org/andyaccess.

IPAF Rental+ raises standards

The IPAF Rental+ quality mark is an industry-driven standard to ensure the very best in customer service, safety, staff training and machine inspection

With hundreds of rental companies, how does a contractor select from the multitude of powered access equipment suppliers to be sure they adhere to specific audited standards? The IPAF Rental+ sign provides an indication of quality and initiatives are under way to make it even better.

The IPAF Rental+ quality mark awarded to independently audited IPAF member access rental companies is being given more bite in an industry driven by safety and safe operations. Work is under way to achieve Safety Systems in Procurement (SSIP) accreditation for IPAF Rental+.

"We believe that contractors like the reassurance that an industry-specific third-party audit provides them," says Lynn Price, IPAF audit and QC manager. "This provides an assurance that their company and all their MEWP suppliers are working to an audited and legally compliant standard."

The SSIP acts as an umbrella organisation to facilitate mutual recognition between health and safety assessment schemes wherever it is practicable to do so. SSIP assessments are all judged on core criteria approved by the UK Health & Safety Executive (HSE): "HSE recognises that an accreditation assessment carried out by any of the member schemes satisfies the requirements of Core Criteria. Any client wishing to procure the services of a business which has achieved accreditation can be confident that a reasonable and robust judgement has been made that the standard for competency in CDM 2007 has been met for the first stage of procurement."

The Construction (Design & Management) Regulations (CDM 2007) introduced core criteria for assessing health and safety competence of contractors and consultants working in the construction industry. These core criteria describe what it means for a construction business to comply with basic health and safety law.

A working group of IPAF Rental+ members including 2 Cousins, AFI, Horizon, Lifterz and Riwal is currently validating the suitability of IPAF Rental+ for SSIP accreditation and drafting proposed improvements to the IPAF Rental+ audit programme in line with SSIP requirements.

"We are taking IPAF Rental+ to the next level," says Giles Councell, IPAF director of operations. "Developing it into a quality mark that:

- Is recognised by other bodies and audit schemes;
- Measures the essential areas as required by law;
- Is a management tool to signpost where and how businesses can continually improve their Health & Safety, Quality and Environmental performance."

Find an IPAF Rental+ company in the directory at the back of this magazine or at www.ipaf.org

WHAT IS IPAF RENTAL+?

IPAF Rental+ is an independent quality mark awarded by IPAF to member access rental companies who have been audited against defined standards in customer service, safety, staff training, contract terms and machine inspection.

These standards are industry-driven and self-regulating. They are set by a committee of experienced individuals in the powered access rental business. Each audited company gets a return visit from the auditors every year.

There are currently close to 30 IPAF Rental+ companies worldwide, the majority based in the UK.

WHAT CONTRACTORS CAN EXPECT

The IPAF Rental+ sign distinguishes reliable suppliers of access equipment who go that extra bit further to provide customers with top-quality service from knowledgeable hire desk staff whose training and competency have been checked by the IPAF Rental+ auditor.

Procedures ensure the right questions are asked to ascertain the most appropriate machine for the job, and if the customer is uncertain, to offer to conduct a site survey. Auditors check staff's knowledge of safety legislation and equipment to ensure contractors are given the best support and advice to help them operate safely and legally.

All IPAF Rental+ companies use delivery drivers trained to IPAF Demonstrator level. They can explain and demonstrate features of the machine, including manufacturer's instructions and warnings, control functions, safety devices and emergency lowering procedures, as part of the familiarisation process.

When a machine is handed over to a customer by an IPAF Rental+ company, there must be an offer of a familiarisation demonstration. There must be evidence that this question has been asked and a system in place for when such familiarisation is not possible. Accredited companies have qualified staff, from full service and maintenance engineers to pre-delivery inspection (PDI) inspectors, and procedures to retain and review appropriate PDI and maintenance paperwork and records. They also demonstrate that all machines on hire carry a valid thorough examination report, thus meeting the legal requirement that access equipment used to lift people must be thoroughly examined by a competent person at appropriate intervals – at least every six months in the UK.

IPAF Rental+ companies are required to have an appropriate fleet management system in place to ensure that they always know where their machines are, making it easier to provide support and back-up. The IPAF Rental+ audit also verifies that the rental company has appropriate insurance accompanied by processes and policies for health and safety, and measuring customer satisfaction.

Controlling emissions – a use

As concern about fumes and particulates from diesel engine gathers pace, we assess the latest emission regulations and discuss th

The fumes and particulates that are emitted by engines, particularly diesel engines, are an increasing concern for those authorities involved with protecting health. Everything from cars to trucks is coming under the spotlight. London's Low Emission Zone is just one example of the ways that authorities are seeking to combat this, regulating vehicles with older engines using the capital's roads.

MEWPs with diesel engines are thus within the scope of concerns, particularly where they are used in enclosed work spaces. The World Health Organisation (WHO) classifies emissions from diesel engines as carcinogenic, making the use of diesel-powered machines in fully or partially enclosed work spaces a particular problem – and that describes most construction sites.

And even if machines meet the current European emission standards 3a, 3b or 4 or the US standards Tier 4i or Tier 4f, there is no guarantee that they will be "clean" enough for indoor use in air quality terms. Simply put, current engine emissions standards do not necessarily match up to health and safety requirements.

There are currently no MEWPs that are equipped with diesel particulate filters (DPFs) as standard – if end-users were to ask a manufacturer for a fully integrated factory-fitted solution, there would be no chance. So customers have to settle for a retrofit DPF that has to be attached externally.

Material and labour costs for the retrofit version are relatively low, but the running costs are high. Interchangeable filters must be removed after about eight hours' running time and regenerated in an external furnace, although end-users could continue work with a second filter.

Disposable filters are cheaper to purchase and can be used significantly longer – around one week – but they cannot be regenerated and must be disposed of and replaced. Over a longer period of time, this makes disposable filters considerably more expensive, but they are easier and more convenient to use.

Contractors would not welcome any additional costs but they clearly have to comply with the regulations and have little choice but to accept the extra costs – assuming that MEWPs with particle filters are available from rental companies at all. It would be unrealistic to expect rental companies to have their entire platform fleet equipped with particle filters at all times.

Complex issue

It is also a complex topic for MEWP manufacturers. Companies operating globally are confronted with many different legal requirements. If, say, Switzerland's requirements were the norm, then filters would already come as standard. But in the current situation, the industry will have to live with retrofitted solutions.

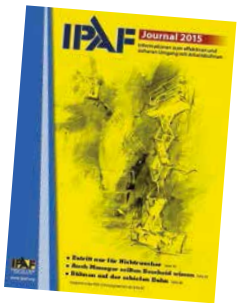
It is up to manufacturers how they achieve the requirements of the European emissions level 3b or level 4 for off-road machines. Some already use DPFs, although truck-mounted units usually use SCR (Selective Catalytic Reduction) technology predominantly for NOx reduction. However, the level 5 for off-road machines will be introduced throughout Europe from 1 January 2019 and the allowed particle levels will be so low that this practically mandates DPF use. While engines below 37 kW have been virtually exempted until now, this means that MEWPs in the lower power ranges will also have to be fitted with permanently installed DPFs.

This means that for new machines, the soot particle issue will effectively be resolved in four years' time. Retrofitting DPFs, however, will remain in demand as various governments consider introducing mandatory DPFs for all construction machinery operated in urban low emission zones.

Unfortunately MEWP applications could be described as the "worst case scenario" for engines with permanently fitted DPFs. MEWPs go up to height and then idle or run at part-load for most of the time, which only lets the engine reach exhaust temperatures of about 150 deg C – no factory-fitted filter will

THE BIG DEBATE

This feature was based on the Big Debate in the German *IPAF-Journal*. Pictured (left to right) are: filter expert Thomas Kaltwasser; Corinne Ziegler, BG Bau; Josef Molnar, Mateco; Rene Gutzmann, JLG; editor Harald Späth; Joachim Heinzelmann, Züblin



r's guide

ne technology we will need to control them. By Andrew Gaved, based on the big debate in IPAF's German magazine, *IPAF-Journal*

regenerate under these conditions. For this reason, clip-on or interchangeable filters are the most viable solutions.

Disposable filters, however, are not advisable if temperatures become very high, such as if the machine needs to run at full load for extended periods of time. In that case, the most commonly used materials in disposable filters, paper and plastic, will very quickly be destroyed. In addition, most filters contain activated carbon to prevent odour. But carbon also absorbs unburned fuel residues, so if it heats up significantly or if a spark enters, the filter will go up in smoke.

Another factor is the accumulation of condensation, due to extended start/stop operation. In extreme cases, this can soak the cardboard and a burst from the accelerator could cause its disintegration, spreading the carbon all over the work area.

There are, of course, electrically heated systems that regenerate on board, but while they work well, they require connection to a power outlet and they do not come cheap.

Other systems incorporate a diesel burner – not exactly cheap either – but they work at exhaust temperatures as low as 150 deg C. They are designed as standstill burners, which means that the vehicle must be parked for 30 to 45 minutes for regeneration, similar to electrically heated systems.

In contrast, fully electrical burners work during normal operation, raising the exhaust temperature to between 550 and 650 deg C. Oxidising of the filter load releases a fair amount of additional energy. If, for example, 500 g of soot is burned off inside the filter, the escaping exhaust gases will be as hot as 800 to 900 deg C – so caution should be exercised around them.

Hot topic

There are also HC dosing systems that inject fuel upstream of the filter which is then oxidised in a catalytic converter, generating the temperatures required for self-cleaning. But these systems require at least 200 to 220 deg C to even start working, which could pose a problem during normal MEWP use. At the same time, engine manufacturers argue that retrofitting DPFs can result in technical problems and may invalidate the warranty if maximum exhaust back pressure is exceeded.

Filter manufacturers will generally assume the warranty if an engine problem develops that is demonstrably caused by the filter. All filter manufacturers install monitoring systems with a data logging function and only in rare cases is the filter the culprit for the engine problems.

Increasing exhaust back pressure causes fuel consumption to rise too. An increase of half a bar back pressure can cause fuel consumption to rise 3 to 4 per cent. Plus, it does not do the engine any good. But this only happens when the relevant warning signals are ignored or systems are disconnected – because they are perceived as "annoying".

Correct procedures for particle filters should become a part of operator training and familiarisation – clearly some people are careless about the filter and warning systems because they simply do not know enough about them. People's risk awareness is also a problem: both of potential machine damage or accidents, but also of the hazardous substances in the ambient air.

Opening up a DPF and showing people the black muck inside that would have otherwise have ended up inside their noses and lungs – this changes opinions and really makes people want to use filters. When the Tier 5 emission level arrives, the soot will no longer be measured by weight, but by volume of particles. This will make closed filter systems inevitable, because the particles emitted by modern engines are much finer than those from older machines – which makes them even more dangerous.

From an environmental viewpoint, there would not be any emission limits or particle limits for standard machines with less than 19 kW engine output. But if these are used for indoor work, relevant health and safety regulations apply – a small 10 kW one-cylinder diesel engine may emit fewer soot particles than a 100 kW six-cylinder, but that does not make it any less hazardous to health. ■

STAGE V ENGINES

MEWPs manufacturers are concerned about the introduction of stage V engines in 2019/2020.

They contend that the new introduction of Particulate Number (PN) limits can only be met with the use of a wall flow monolith type DPF and that the very low duty cycle and exhaust gas temperatures experienced by the smaller MEWPs in the 19 kW to <56 kW category will not meet these requirements without having a bespoke solution created purely for MEWP application.

Since MEWPs account for a very small percentage of the engines sold, there are deep concerns that the engine manufacturers will not have the investment or resources to spare for identifying and developing a bespoke solution in time for the introduction of Stage V.

MEWPs have such a low duty cycle (25 to 30 per cent, of which approximately 80 per cent is at idle) and would require the use of more fuel to regenerate the DPF, resulting with increased daily engine emissions output. The FEM MEWP Product Group and IPAF have written to the EU to propose that MEWPs are granted an exemption to the PN limits and instead have start/stop technology enforced. This way, the other engine emissions limits introduced by Stage V (NOx, HC, CO, PM) can be reached and the daily engine emissions output and fuel consumption is significantly decreased.

High ambitions

One of the clear benefits of using a MEWP is the variety of machines and the wide range of applications that they can be put to. Here we present a selection of interesting projects from IPAF members in the past year

Specialist access contractor **Brogan Group** has provided mastclimbing work platforms and scaffolding to the redevelopment of the 16-storey Archway Tower in Islington, north London. Brogan says the project required a complex, combined access design, calling for full-height perimeter access in the form of scaffolding and MCWPs, along with access to the full façade of the building's South elevation to carry out demolition and recladding works.

Access to the façade was provided by double-stacked mastclimbing work platforms, which due to the location, could not be founded at ground level or from the existing station roof. To overcome this, Brogan designed a cantilevered soldier bracket system fixed to the building façade above the station roof, to support the MCWPs at four separate locations.

Canterbury Cathedral hosted a major inspection this year, in order to assess the preservation of the World Heritage Site. Using an **Ommelift** 4200 RBDJ crawler-mounted boom lift, shown here in a time-lapse photo, the cathedral's expert inspectors were able to access the seldom-seen 25 m-high interior vaulting of the Nave.

The team used the same machine for external inspection of the stonework on the West Towers, a whopping 42 m above ground. The manufacturer says the non-marking tracks reduced ground pressure on the 6,805 kg machine, so there was no risk of damage to the floor of the Nave – as well as working comfortably outdoors, even on the sloping terrain.

Two boom lifts from the **AFI** fleet were hired by specialist contractor Littlehampton Welding to help erect and dismantle a 40 m-high sculpture at the Goodwood Festival of Speed.

Speed was also a factor in the type of boom lift chosen for the project, AFI says – the JLG Ultra 1350SJP can raise its platform from ground level to 135 ft in only 95 seconds. The JLG 1350SJP, which has a working height of 43.15 m, was used alongside a Genie S125 telescopic boom.

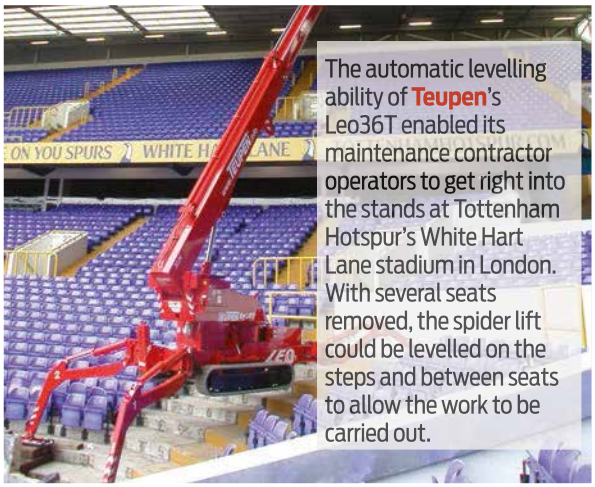
The sculpture, weighing 120 tonnes and comprising 720 stacked steel beams, featured two Le Mans racing cars.

National signage contractor Sapphire Signs installed a huge 8 m x 5 m flex face sign for its client Hobbycraft, at its new store in Derby, using a **Genie** G60 rough terrain articulated boom. The G60 has a 20.39 m working height and 11.05 m outreach.

A **Genie** SX-150 helps with maintenance and inspection work at the port of Seattle in the US. The super boom, with a vertical reach of 46.3 m and horizontal reach of 24.4 m, is used for construction, maintenance and large utility applications.

Truck-mounted platform manufacturer **CTE** makes a specialism of lightweight articulated booms with a high degree of outreach. Its ZED 23.2 JH is pictured here in action in Rovereto, northern Italy. The ZED 23.2 reaches 22.7 m of working height and can accommodate a maximum 230 kg of capacity, making it well suited for cleaning a building façade, using two operators.

Kimberly Rentals Group had three of its biggest players at Twickenham, UK to prepare the stadium for the Rugby World Cup. Three of the hirer's Super Boom Fleet of Z135s were used in a range of tasks including high-level hanging of banners. Each machine has a working height of 43.15 m and an outreach of 21.26 m.



The automatic levelling ability of **Teupen**'s Leo36T enabled its maintenance contractor operators to get right into the stands at Tottenham Hotspur's White Hart Lane stadium in London. With several seats removed, the spider lift could be levelled on the steps and between seats to allow the work to be carried out.

Safety resources

As the global not-for-profit organisation promoting the safe use of aerial and access equipment, the International Powered Access Federation offers a full palette of safety materials that are available free to readers. These range from posters, key rings and guidance notes to decals, videos and online resources. To order, fill out the form below, entering quantity required in the boxes and fax back to 015395 66084, email info@ipaf.org, call 015395 66700 or visit www.ipaf.org.

RESOURCES

More technical guidance is available at the Publications section of ipaf.org:

- MEWP Inspection Checklist
- Guidance for Major Inspections of MEWPs
- Best Practice Guidance for MEWPs: Avoiding Trapping/Crushing Injuries to People in the Platform
- Guidance on Selection of Secondary Guarding Devices for MEWPs
- UKCG MEWP Good Practice Toolkit

Many IPAF safety videos are online at the Publications & Films section of www.ipaf.org or on our YouTube channel: www.youtube.com/user/IPAForg/videos:

- Don't get MAD, stay away from live lines
- Pre-start inspections for vertical lifts/boom lifts
- Spread the load!
- Training saves lives!
- Spot the mistake!
- Only dummies don't wear harnesses on booms

Key tags

❑ Pre-use inspections

Posters

❑ Machine categories

❑ Spread the load!

❑ Atrium lift machines

Stickers/ decals

❑ Clunk Click

❑ Are you trained?

❑ Emergency descent symbol

❑ Spread the load!

Technical guidance

❑ F1: Familiarisation

❑ H1: Fall protection in mobile elevating work platforms

Name and mailing address .....

Email address .....

DIRECTORIES

IPAF Training Centres

IPAF training is provided by a network of approved training centres that operate independently. This directory helps you find your nearest training centre in the UK and around the world. All active IPAF training centres are subject to audits and expected to meet stringent quality procedures. New centres are being added every month. To see the most up-to-date list, visit www.ipaf.org

United Kingdom

EAST ANGLIA

Access Training UK Ltd
Thetford
01842 828999
www.access-training.co.uk

Alan Barker T/a SkillsTec
Norwich
01508 550430
www.skillstec.co.uk

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Norwich
0845 6008572
www.aplant.com

Aurelia Ltd
Kentford
01638 751492
www.aureliatraining.co.uk

Brand Energy & Infrastructure Services UK Ltd T/A SGB
W Thurrock
01708 686640
www.sgb.co.uk

Eastern Counties Access Solution
Norwich
01603 735130
www.ecaccesssolutions.com

Facelift Access Hire
Purfleet 01444 881166
www.facelift.co.uk

HSS Hire Service Group Ltd, Training Department
Wymondham
0845 7667799
www.hsstraining.com

JPS Tool & Access Hire Ltd
Waltham Abbey
0845 6017738
www.jpstoolandaccess.co.uk

Mark One Hire Ltd
Chelmsford
01702 561818
www.mark1training.co.uk

Nationwide Platforms Ltd
Peterborough
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Besthorpe
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
West Thurrock
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Luton
0845 6011032
www.nationwideplatforms.co.uk

National Construction College, Study Centre C
Kings Lynn
0844 844 0466
www.nationalconstructioncollege.co.uk

Safetymen Ltd
Thorpe le Soken
01255 863125
www.safetymen.co.uk

Sigma Access Training
Sutton Coldfield
01986 896948
www.sigma-access-training.co.uk

Sky High Access
Ipswich
01473 834100
www.skyhigh.org.uk

Smart Platform Rental Ltd
Hemel Hempstead
0333 900 9100
www.smartplatforms.co.uk

Specialist Access Training t/a Britannia Int. Tr
Wymondham
01953 606100
www.britanniaits.com

Star Platforms Ltd
Kensworth
07847 625236
www.starplatforms.co.uk

Warren Access Upton Ltd
Huntingdon
01480 891581
www.warrenaccesstraining.co.uk

EAST MIDLANDS

AFI-Uplift Ltd
Castle Donington
01332 855350
www.afi-uplift.co.uk

Alimak Hek Ltd
Rushden
01933 354700
www.alimakhek.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Nottingham
0845 6008573
www.aplant.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Milton Keynes
0845 6008573
www.aplant.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Lenton
0845 6008573
www.aplant.com

Banner Plant Ltd
Dronfield
01246 299400
www.bannerplant.co.uk

Elavation Ltd
Milton Keynes
01908 317602
www.elavation.net

Genie Europe
South Witham, Grantham
01476 5834328
www.genielift.co.uk

Harris Safety Training Services Ltd
Worcester
01905 886379
www.harrissafetytrainingservices.co.uk

Harris Safety Training Services Ltd
Lincoln
01905 886379
www.harrissafetytrainingservices.co.uk

Hire Station Limited
Shrewsbury
0115 9737400
www.hirestation.co.uk

HSS Hire Service Group Ltd, Training Department
Derby
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Wellingborough
0845 7667799
www.hsstraining.com

ISS Damage Control
Mansfield
0188 957 0777
www.iss-damagecontrol.co.uk

JJ Training (UK) Limited
Glossop
01457 899 322
www.jj.training.org.uk

JLG Industries (UK) Ltd
Lutterworth
0870 200 7700
www.jlg.com

Kingscote Ltd t/a Webbs Training Services
Milton Keynes
0845 1112331
www.webbs-training.com

KNT Training
Sheepbridge, Chesterfield
01246455400
www.knt-training.co.uk

Loxam Access Ltd
Nottingham
0115 900 8855
www.loxam-access.co.uk

Mainline (1982) Ltd
Swadlincote
01283 222 044
www.mainline-hire.co.uk

Mentor Training Solutions Ltd
Chesterfield
01246 555222
www.mentortraining.co.uk

Midland Access Platforms Ltd
Croft
01455 556699
www.midlandaccessplatforms.co.uk

Nationwide Platforms Ltd
Newstead
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
North Hykenham
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Leicester
0845 6011032
www.nationwideplatforms.co.uk

Ormerod Management Services (T/as OMS)
Leicester
08451300616
www.height-safe.com

Plantool Ltd
Daventry
01327 312922
www.hirecentres.com

Speedy Support Services Ltd
Nottingham
0845 6046682
www.speedyhire.co.uk

TIME - Versalift
Burton Latimer
01536 721010
www.versalift.co.uk/

Total Hire & Sales
Derby
01332 776622
www.totalhireandsales.co.uk

UK Tool Hire Ltd T/a UK Powered Access
Ilkeston
0115 944 4575
www.uktool.co.uk

Universal Training Services (Midlands) Ltd
Corby
01536 202 549
www.uetraining.co.uk

Workplatform Ltd
Barrow Upon Trent
01332 856359
www.workplatformltd.co.uk

GREATER LONDON

Advanced Access Platforms Ltd
Sutton
02086417050
www.accessplatformsuk.com

ALS Safety Limited
Wembley
0800 7999 257
www.alssafety.co.uk

Brogan Group (UK) Ltd T/A Brogan Group
New Southgate
020 8361 0090
www.brogangroup.com

Height for Hire (Safety Training) Ltd
Grays
0845 6001550
www.boomtraining.co.uk

HSS Hire Service Group Ltd, Training Department
London
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
London
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Beckton
0845 7667799
www.hsstraining.com

Kingfisher Access Limited
London
0870 3503601
www.kingfisheraccess.com

KNT Training
Bedmond
01246 455400
www.knt-training.co.uk

Mr Plant Hire PLC
London
02083513434
www.mrplanthire.co.uk

National Construction College, Study Centre C
London
0844 844 0466
www.nationalconstructioncollege.co.uk

Nationwide Platforms Ltd
Cowley
0845 6011032
www.nationwideplatforms.co.uk

Speedy Support Services Ltd
London
0845 6046682
www.speedyhire.co.uk

IRELAND

Access & Forklift Services Ltd
Dromkeen
+353 61 384658
www.aafs.ie

Euro Access Ltd
Cork
+353 214354000
www.euroaccess.ie

Height for Hire (Safety Training) Ltd
Ashbourne
+353 1 6914008
www.heightforhire.ie

HSS Hire Service Group Ltd, Training Department
Dublin 9
08457667799
www.hsstraining.com

M Walsh Hire Ltd T/a MW Hire Group
Urlingford
+353 56 8831418
www.mwhire.com

NORTH EAST

Adastra Access Ltd
Walsall
01922 745125
www.adastra-access.co.uk

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Stockton on Tees
0845 6008573
www.aplant.com

Height for Hire (Safety Training) Ltd
Gateshead
0845 6001550
www.boomtraining.co.uk

Expedient Training Services Ltd
Jarrow
0191 4890212
www.expedient-training.co.uk

Health & Safety Training Ltd
Newcastle upon Tyne
0191 2960707
www.hst.uk.com

HSS Hire Service Group Ltd, Training Department
Gateshead
0845 7667799
www.hsstraining.com

Nationwide Platforms Ltd
Durham
0845 6011032
www.nationwideplatforms.co.uk

NIS Training Ltd
Newcastle upon Tyne
0191 268 9396
www.nistraining.co.uk

North East Access Training Ltd
Birtley
0191 4421989
www.northeastaccesstraining.co.uk

Northern Safety Ltd
Thornaby
01642 754880
www.northernsafetyltd.co.uk

Pyeroy Group
Gateshead
0191 4932600
www.pyeroy.co.uk

RS Industrial Services Ltd
Billingham
01642 674250
www.rsis.co.uk

Taylor Training Services (UK) Ltd
Jarrow
0161 7759840

TDB Training Specialists Ltd
Ashington
01670 851244
www.tdbtraining.co.uk

Tyne & Wear Access NE Ltd
Sunderland
0191 5689770
www.tyneandwearaccess.co.uk

Warren Access Ltd
Newcastle Upon Tyne
0191 2367120
www.warrenaccesstraining.co.uk

NORTH WEST

1 Up Access Ltd
Bolton
0114 275 1595
www.1upaccess.co.uk

Adapt (UK) Training Services
Liverpool
0151 5490549
www.adapt-training.co.uk

Adept Training Services Ltd
Chester
01244 351809

Aerial Platforms Ltd
Leigh
01942601752
www.apltraining.co.uk

Alliance Learning Ltd
Bolton
01204 696744
www.alliancelearning.com

Astley Hire Ltd
Leigh
01942 608822
www.astleyhiretraining.co.uk

Bolton Hire And Training Ltd
Bolton
07818542745

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Bury
0845 6008573
www.aplant.com

Height for Hire (Safety Training) Ltd
Manchester
08456001550
www.boomtraining.co.uk

Facelift Access Hire
Liverpool
01444 881166
www.facelift.co.uk

IPAF Training Centres

G H Training Ltd
Wigan
07806 559688

Gen II Training & Technology
Workington
01900 701300
www.gen2.ac.uk

Global Skill Solutions Ltd
Haydock
01942 718130
www.globalskillsolutions.co.uk

Hewden
Stretford / Manchester
0161 7722444
www.hewden.co.uk

Heyrod Construction Ltd
Oldham
0161 6834294
www.heyrod.co.uk

Higher Access
Burnley
08456044054
www.higheraccess.co.uk

Hire Safe Solutions Ltd
Newton-Le-Willows
0845 548 4455

Horizon Platforms Ltd
Warrington
01925 825520
www.ipaftrainingcourses.co.uk

Horizon Platforms Ltd
Warrington
01925 825520
www.ipaftrainingcourses.co.uk

HSS Hire Service Group Ltd, Training Department
Manchester
08457667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Preston
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Greater Manchester
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Tebay
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Salford
0845 7667799
www.hsstraining.com

JLG Industries (UK) Ltd
Manchester
0870 200 7700
www.jlg.com

MHA Training Ltd
Warrington
01925 446718
www.mikehammetttraining.co.uk

Nationwide Platforms Ltd
Kirkby
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Blackburn
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Haydock
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Hawarden
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Warrington
0845 6011032
www.nationwideplatforms.co.uk

One Stop Hire
Chorley
01257 422781
www.onestophire.com

Severfield UK Ltd
Bolton
01204 699999
www.severfield.com

SIM Training Services Ltd
Warrington
01925 411171

Simian Skill Ltd
Warrington
0845 6022418

Smart Platform Rental Ltd
Trafford Park
0333 900 9100
www.smartplatforms.co.uk

Smiths Equipment Hire
Blackpool
0333 323 2100
www.smithsequipmenthire.com

Speedy Support Services Ltd
Newton-le-Willows
0845 604 6682
www.speedyhire.co.uk

System Training
Carlisle
01228 574000
www.system-group.com

Taylor Training Services (UK) Ltd
Manchester
0161 775 9840

Taylor Training Services (UK) Ltd
Wigan
0161 7759840

TrainingPlus.Com Ltd
Manchester
01294 485050
www.trainingplus.com

Trainrite Ltd
Workington
01900 68040
www.trainriteuk.co.uk

NORTHERN IRELAND

Balloo Hire Centres Ltd
Belfast
028 90 45 80 80
www.balloohire.com

Belfast Skills Development Ltd
Lisburn
028 92639459
www.bsdtraining.com

Height for Hire (Safety Training) Ltd
Newtownabbey
0845 600 1550
www.boomtraining.co.uk

Highway Plant Co Ltd
Belfast
02890 301133
www.highwayplant.com

HSS Hire Service Group Ltd, Training Department
Newtownabbey
0845 7667799
www.hsstraining.com

KDM Hire Ltd
Co. Tyrone BT80 9AD
02886766633
www.kdmhire.com

KDM Hire Ltd
Newtownabbey
028 86766633
www.kdmhire.com

PFI Training Ltd
Dungannon
02887752245
www.pfitraining.co.uk

SCOTLAND

Access Platforms Aberdeen Ltd, Back Office
Aberdeen
01224 899 0000
www.accessaberdeen.com

Active Access Ltd
Hamilton
01698 281190
www.activeaccess.co.uk

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Glasgow
0845 6008573
www.aplant.com

Award Training Services Ltd
Muir of Ord
01862 894729
www.awardtraining.co.uk

Award Training Services Ltd
Tain
01862 894729
www.awardtraining.co.uk

Brand Energy & Infrastructure Services UK Ltd T/A SGB
Glasgow
01827 266000
www.sgb.co.uk

Central Training Services Ltd
Bo'ness
01506 829 883
www.central-training.co.uk

Contour Training Ltd
Glasgow
01360 860088
www.contourtraining.com

Height for Hire (Safety Training) Ltd
North Lanarkshire
0845 600 1550
www.boomtraining.co.uk

FES Ltd
Stirling
01786 819600
www.fes.ltd.uk

Fife Council, Skills Development Centre
Fife
01592 583603
www.fifedirect.org.uk/hscourses

Generation (UK) Ltd
Rutherglen
01924 370640
www.generationhireandsale.co.uk

Hewden
Glasgow
0161 7722444
www.hewden.co.uk

Hewden
Dumfries
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Coatbridge
0845 7667799
www.hsstraining.com

Speedy Support Services Ltd
Glasgow
0845 6046682
www.speedyhire.co.uk

Industrial Access Systems Ltd
Glasgow
0141 774 9095
www.deskspan.co.uk

J & D Pierce (Contracts) Ltd
Glengarnock
01505 683724
www.jdpierce.co.uk

J G Martin Plant Hire Ltd
Motherwell
0844 472 9600
www.martinplanthire.co.uk

M B Plant
Peter Head
01779 475397
www.mbplant.co.uk

McLaren Access Plant Hire
Falkirk
01324716908
www.mclarenaccess.co.uk

MG Scotland Ltd
Glasgow
0141 771 0040
www.mgtrainingscotland.co.uk

Nationwide Platforms Ltd
Aberdeen
08456 011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Dundee
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Broxburn
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Motherwell
0845 6011032
www.nationwideplatforms.co.uk

Onestop Access (Scotland) Ltd
Hamilton
01698 423826
www.onestopaccessequipment.co.uk

Outreach Ltd
Falkirk
01324 889000
www.outreachltd.co.uk

Plantfinder (Scotland) Ltd
Kilmarnock
01563 850060
www.plantfinderlimited.co.uk

Ritchies HGV Training Centre Ltd
Glasgow
01415572212
www.ritchiestraining.co.uk

Scottish Access Services
Coatbridge
01236 435942
www.scotaccess.co.uk

Sibbald Ltd
Blackridge
01501 750900
www.sibbaldtraining.com

TrainingPlus.Com Ltd
Glasgow
01294 485050
www.trainingplus.com

TrainingPlus.Com Ltd
Kintore
01294 485050
www.trainingplus.com

TrainingPlus.Com Ltd
Stevenson
01294 485050
www.trainingplus.com

Turner Access Ltd
Glasgow
0141 309 5555
www.turner-access.co.uk

SOUTH EAST

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Brentwood
0845 6008573
www.aplant.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Fareham
0845 6008573
www.aplant.com

ALS Safety Limited
Wembley
0800 7999 257
www.alssafety.co.uk

ALS Safety Limited
Berkshire
0800 7999 257
www.alssafety.co.uk

Charles Wilson Engineers Ltd
Hayes
0208 756 6310
www.cwplant.co.uk

Facelift Access Hire
Hickstead
01444 881166
www.facelift.co.uk

Facelift Access Hire
Southampton
01444 881166
www.facelift.co.uk

Fenton Plant Hire
Reading
01189 303066
www.fentonplant.co.uk

Gamble Training Services Ltd
Worthing
07850 463222
www.gambletraining.co.uk

Gamble Training Services Ltd
Worthing
07850 463222
www.gambletraining.co.uk

Hewden
Dartford
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Manor Royall
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Calcot
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Crawley
0845 7667799
www.hsstraining.com

Kingfisher Access Limited
Hornchurch
0870 3503601
www.kingfisheraccess.com

Kentec Training Ltd
Tonbridge
0333 666 0555
www.kentectraining.co.uk

Kingfisher Access Limited
Rochester
0333 666 1881
www.kingfisheraccess.com

Mark One Hire Ltd
Southend
01702 561818
www.mark1training.co.uk

National Construction College, Study Centre C
Ilford
0300 4567958
www.nationalconstructioncollege.co.uk

Nationwide Platforms Ltd
Bishops Waltham
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Nr. Rochester
0845 6011032
www.nationwideplatforms.co.uk

Niftylift Ltd
Milton Keynes
01908 223456
www.niftylift.com

Operator Training Services Ltd
Ashford
0870 8503029
www.operatortrainingservices.co.uk

Operator Training Services Ltd
Godstone
0870 8503029
www.operatortrainingservices.co.uk

P Chalk Ltd
Erith
01322 348843

Placing Leaders Training Ltd
Buckingham
07768 427743
www.placingleaders.co.uk

Peter Hird & Sons Ltd
Redhill
01482 481965
www.hird.co.uk

Platform Sales & Hire Ltd
Milton Keynes
01908691159
www.platformsales.co.uk

Rapid Platforms Ltd
Bishop's Stortford
01279 501501
www.rapidplatforms.co.uk

Safe Training Services (Southern) Ltd
Fareham
08006226457
www.safetrainingservices.co.uk

Smart Platform Rental Ltd
Dartford
0333 900 9100
www.smartplatforms.co.uk

South East Powerline Services Ltd
Ringmer
01273 815151
www.seps.uk.com

Southern Cranes & Access Ltd
Pulborough
01798 875988
www.southerncranes.co.uk

TCA Lifting Limited
Alton
08456035360
www.tcalifting.com

SOUTH WEST

2 Cousins Access Ltd
Oxford
0800 434 6696
www.2cousins.co.uk

A1 Hire & Sales Ltd
Poole
01202 718777
www.a1hire.co.uk

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Avonmouth
0845 6008573
www.aplant.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Clyst St. Mary
0845 6008573
www.aplant.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Swindon
0845 6008573
www.aplant.com

C & G Services (Europe) Ltd
Stonehouse
01453 826781
www.gettrained.co.uk

IPAF Training Centres

Davis Access Ltd
Bristol
0117 9670811

Ermin Plant (Hire & Services) Ltd
Gloucester
01452 526616
www.ermin.co.uk

Global FLT Ltd
Gloucester
01452 548 848
www.globalflt.com

Hewden
Redruth
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Bristol
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Southampton
0845 7667799
www.hsstraining.com

LTC Training Services (A Div. Of LTC Group87 Ltd)
Plymouth
01752 485303
www.ltctrainingservices.co.uk

LTC Training Services, (A Div. Of LTC Group87 Ltd)
Redruth
01752 485303
www.ltctrainingservices.co.uk

Nationwide Platforms Ltd
Liskeard
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Taunton
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Bristol
0845 6011032
www.nationwideplatforms.co.uk

OTJ Training, Ladder And Fencing Industries (Newent) Ltd
Newent
08455432129
www.otjtraining.com

Prolift Access Ltd
01823 665902
www.proliftaccess.co.uk

Prolift Access Ltd
Wellington
01823 665902
www.proliftaccess.co.uk

WALES

AJ Access Platforms Ltd
Caldicot
01291 421155
www.accessplatforms.com

AJ Access Platforms Ltd
Fforest Fach
01291 421155
www.accessplatforms.com

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Bridend Mid Glamorgan
0845 6008573
www.aplant.com

Barry Training Services Ltd
Penarth
01446 743913
www.barrytrainingservices.co.uk

Hewden
Cardiff
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Cardiff
0845 7667799
www.hsstraining.com

Mid Glamorgan Fork Truck Training Services Ltd
Hengoed
01443 812999
www.midglam-forktruck-training.co.uk

Nationwide Platforms Ltd
Cardiff
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Swansea
0845 6011032
www.nationwideplatforms.co.uk

Speedy Support Services Ltd
Cardiff
0845 6046682
www.speedyhire.co.uk

Training-4-Safety
St Asaph
01745 730734
www.training-4-safety.co.uk

WEST MIDLANDS

Access Training Solutions
Wednesbury
07725 134284
www.accesstrainingsolutions.com

Adastra Access Ltd
Aldridge
01922 745125
www.adastra-access.co.uk

Ashtead Plant Hire Co Ltd, Customer & Technical Training
Birmingham
0845 6008573
www.aplant.com

Bella Access Ltd
Stone
08447709580
www.bellaaccess.com

Brand Energy & Infrastructure Services UK Ltd T/A SGB
Tamworth
01827 266000
www.sgb.co.uk

Height for Hire (Safety Training) Ltd
Warwickshire
0845 6001550
www.boomtraining.co.uk

Facelift Access Hire
West Bromwich
01444 881166
www.facelift.co.uk

Forcegroup Training Services Ltd
Stoke on Trent
01782 208723
www.forcegrouptraining.co.uk

Generation (UK) Ltd
Oldbury
08005875224
www.generationhireandsale.co.uk

GT Access Ltd
Bromsgrove
01527 871 123
www.gtaccess.co.uk

Hewden
Willenhall
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Telford
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Worcester
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Solihull
0845 7667799
www.hsstraining.com

Interserve Industrial Services Ltd, QSHE Department, Floor 7
West Bromwich
0121 524 7771
www.interserve.com

ISS Damage Control
Rugeley
01889570777
www.iss-damagecontrol.co.uk

Kimberly Rentals Group Ltd
Wigan
01257 428713
www.kimberlyaccess.co.uk

Kingscote Ltd t/a Webbs Training Services
Birmingham
01212135000
www.webbs-training.com

Kingfisher Access Limited
Telford
0870 350 3601
www.kingfisheraccess.com

National Construction College, Study Centre C
Birmingham
0121 4594262
www.nationalconstructioncollege.co.uk

Nationwide Platforms Ltd
Dudley
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
St Albans
0845 6011032
www.nationwideplatforms.co.uk

Nationwide Platforms Ltd
Lutterworth
08456 011032
www.nationwideplatforms.co.uk

Oakbarn Training
Coventry
01455 885616
www.poweredaccesstraining.co.uk

P B Training Services Ltd
Brierley Hill
01384826438
www.pbtrainingservices.co.uk

S.A.T. Services
Stourbridge
0777 3766539
www.satservices.org

Shropshire County Trainers Ltd
Telford
01952 605009
www.sctcentre.com

Smart Platform Rental Ltd
Minworth
0333 900 9100
www.smartplatforms.co.uk

Speedy Support Services Ltd
Wednesbury
0845 6046682
www.speedyhire.co.uk

YORKSHIRE

1 Up Access Ltd
Leeds
0114 2721595
www.1upaccess.co.uk

1 Up Access Ltd
SHEFFIELD
0114 2721595
www.1upaccess.co.uk

ALS Safety Limited
Hunslet
0800 7999 257
www.alssafety.co.uk

Boss Training Ltd
Halifax
01422358184
www.bosstraining.co.uk

Boss Training Ltd
Leeds
0845 6800495
www.bosstraining.co.uk

Eagle Platforms Ltd
Sheffield
0114 269 5909
www.eagleplatforms.com

Essential Training Services
Rotherham
01709208300

Gardner Denver Ltd
Tong
01274 683131
www.gdpoweredaccess.com

Generation (UK) Ltd
Wakefield
01924 370640
www.generationhireandsale.co.uk

Hewden
Castleford
0161 7722444
www.hewden.co.uk

Hewden
Immingham
0161 7722444
www.hewden.co.uk

HSS Hire Service Group Ltd, Training Department
Barnsley
0845 7667799
www.hsstraining.com

HSS Hire Service Group Ltd, Training Department
Leeds
0845 7667799
www.hsstraining.com

Horizon Platforms Ltd
Wakefield
01924 270383
www.ipaftrainingcourses.co.uk

Lifterz Ltd
Wakefield
01924 266662
www.lifterz.co.uk

Mechanical Industrial Truck Training Services Ltd
Hull
01482 323709
www.mitts-training.co.uk

MECsafe Ltd
Doncaster
01302 775900
www.mecsafe.co.uk

Nationwide Platforms Ltd
Normanton
0845 6011032
www.nationwideplatforms.co.uk

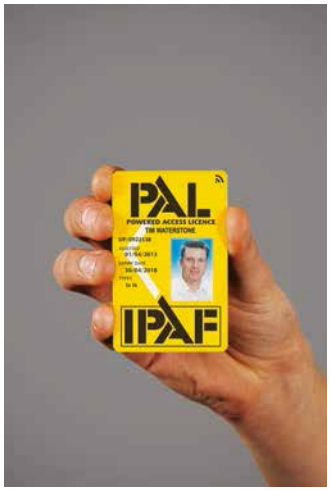
Nationwide Platforms Ltd
Leeds
0845 6011032
www.nationwideplatforms.co.uk

National Safety Training Services
Hull
01486 644855
www.nationalsafetytraining.co.uk

Peter Hird & Sons Ltd
Doncaster
01482 481965
www.hird.co.uk

Peter Hird & Sons Ltd
Hull
01482 227333
www.hird.co.uk

The Safety Maintenance Company Ltd
Leeds
0113 385 4498
www.safetymaintenancecompany.co.uk



Rest of the world

ARGENTINA

Haulotte Argentina
Buenos Aires
www.haulotte.com

AUSTRIA

BWK GmbH
Dornbirn
www.bwk.cc

Felbermayr Transport- und Hebetechnik GmbH & CoKG
Wels. Österreich
www.felbermayr.cc

Kögl GmbH
Eisenstadt
www.koegl.at

BELGIUM

Allift Michielsens NV
Deurne (Antwerp)
www.allift.com

DK Rental NV
Waregem
www.dkrental.be

BRAZIL

Aura Brasil Máquinas e Equipamentos Ltda
São Paulo SP
www.aurabrasil.com.br

Cunzolo Rental Ltda
Campinas, São Paulo
www.cunzolo.com.br

Eleva Brasil soluções em elevação S/A
Jardins - SP
www.elevabr.com.br

Fimatec - Comércio e Representações, Ltda
Ramos - Rio de Janeiro
www.fimatec-empilhadeiras.com.br

FJ Supply Corporation
São Leopoldo RS
www.fjsupply.com.br

Haulotte Do Brasil Ltda
Tamboré - Barueri - São Paulo
www.haulotte.com.br

JLG Latino Americana
S. Paulo
www.jlgbrasil.com.br

Locar Guindastes E Transp. Intermodais
Guarulhos S. Paulo
www.locar.com.br

MOTORMAC - Distribuidora Meridional de Motores Cummis, S/A
Porto Alegre - RS
www.motormac.com.br

MILLS Rental, Mills Estruturas e Serviços de Engenharia S.A
Osasco-SP
www.mills.com.br

Multiplataformas Ltda
Curitiba - PR
www.multiplataformas.com.br

RCB Locações de Equipamentos e Máquinas Ltda
Santana do Parnaiba - SP
www.rcbplataformas.com.br

RIWAL do Brasil Locações De Equipamentos Ltda
Parana

SK Rental Locação De Equipamentos Ltda
Curitiba PR
www.skcrental.com.br

Socage do Brasil Ltda
Indaiatuba - SP
www.socage.com.br

Skyjack Brasil
Indaiatuba - SP
www.skyjack.com

Solaris Equipamentos e Serviços Ltda
Osasco - SP
www.solarisbrasil.com.br

Terex Latin America
S. Paulo
www.terex.com.br

Trimak Engenharia E Comércio Ltda
Rio de Janeiro
www.trimak.com.br

W Rental Locadora de Equipamentos Ltda
Eldorado do sul - RS
www.wrental.com.br

CANADA

AGF Access Inc
London
www.groupeagf.com/en

Hydro Mobile Inc
QC Quebec
www.hydro-mobile.com

Palfinger North America
Niagara Falls
www.palfinger-northamerica.com

Skyjack Inc
Guelph
www.skyjack.com

CHILE

ALO Training Ltda, Alo Group
Santiago de Chile
www.alotraining.com

SKC Rental S.A.
Santiago
www.skcrental.cl

CHINA

Haulotte Trading (Shanghai) Co.
Shanghai
www.haulotte.com

Tianjin Prosperity Bai-Li Engineering & Machanical Co Ltd
Tianjin
www.zs-baili.com

COLOMBIA

Proing, Ltda
Bogotá DC
www.proingcol.net

Rolift
Cali
www.rolift.com.co

Torres Equipos S.A.S.
Cali (Valle del Cauca)
www.torresequipos.com.co

CZECH REPUBLIC

Rothlehner pracovní plošiny sro
Praha 9 - Horní Pocernice
www.rothlehner.cz

FINLAND

Bronto Skylift OY AB
Tampere
www.bronto.fi

Scanclimber Oy
Pirkkala
www.scanclimber.com

GERMANY

AFI GmbH Arbeitsbühnenvermietung
Hamburg
www.afirent.de

Allgaier Hebesysteme GmbH
Neu-Ulm
www.allgaier-gruppe.de

Alimak Hek GmbH
Eppingen
www.alimakhek.de

Arbeitsbühnenverleih Vogel
Ehrenfriedersdorf
www.vogel-arbeitsbuehnen.de

Arbeitsbühnen Buchtmann GmbH
Delmenhorst
www.buchtmann.de

Arbeitsbühnen Koch GmbH
Leipzig
www.arbeitsbuehnen-koch.de

Arbeitsbühnen-Vertriebs- Und Vermietungs GmbH
Schwäbisch Hall
www.avv-arbeitsbuehnen.de

ARMO GmbH
Lebach
www.armo-gmbh.de

AST GmbH Arbeitssicherheit & Technik
Blaustein
www.ast-gmbh.biz

Begemann's Mietlift GmbH
Leopoldshöhe
www.begemanns-mietlift.de

IPAF Training Centres

Beyer-Akademie Gesellschaft für betriebliche und berufliche Aus-und Weiterbildung GmbH
Etzbach
www.beyer-akademie.de

BHV-Arbeitsbühnenverleih
Bonn
www.bhv-arbeitsbuehnen.de

Bleser Mietstation GmbH
Neuwied
www.blesermietstation.de

Bronto Skylift Deutschland GmbH
Berghülen
www.bronto-skylift.de

Castell Arbeitsbühnen GmbH
Koblenz
www.castell-koblenz.de

Cramo AG
Feldkirchen
www.cramo.com

d bollmeyer GmbH Co & KG
Kirchlengern
www.bollmeyer.com

Easy-Lift GmbH
Berlin
www.easy-lift.de

Ernst Müller GmbH & Co KG
Nürnberg
www.ernstmueller.de

Flesch Arbeitsbühnen GmbH & Co KG
Tuttlingen
www.flesch-arbeitsbuehnen.de

Gardemann Arbeitsbühnen GmbH
Alpen
www.gardemann.de

Gerken GmbH
Düsseldorf
www.gerken-arbeitsbuehnen.de

Haulotte Hubarbeitsbühnen GmbH
Eschbach
www.haulotte.de

Heiko Zimmer
Bietigheim-Bissingen
www.stapler-rent.de

Hematec Arbeitsbühnen GmbH
Dresden
www.hematec-online.de

Hert Arbeitsbühnen Vermietung GmbH
Saarwellingen
www.hert-arbeitsbuehnen.de

Hytec Arbeitsbühnen Vermietung GmbH
Bremen
www.hytec-bremen.de

JLG Deutschland GmbH
Ritterhude-Ihlpohl
www.jlgeurope.com

Josef Siegl GmbH
Karlsfeld
www.siegl-gmbh.de

Kölbl Training & Consulting
Altomünster
www.koelbl-gruppe.de

Kuhnle GmbH
Fellbach
www.kuhnle.eu

Lehmann Zugangstechnik
Schwabstedt
lehmann.lifte.de

Lift-Manager GmbH, Jäkel & Rothlehner
Waldhufen-Jänkendorf
www.lift-manager.de

M & S Arbeitsbühnen GmbH
Paderborn
www.ms-arbeitsbuehnen.de

manroland web systems GmbH
Augsburg
www.manroland-web.com

Mayer Hubarbeitsbühnen GmbH
Aalen
http://mayer-arbeitsbuehnen.de/

Media City Atelier (MCA) GmbH
Leipzig
www.mca.de

Merlo Deutschland GmbH
Bremen
www.merlo.de

Mietpark Gushurst GmbH
Sinzheim
www.mietpark-gushurst.de

Minimax GmbH & Co KG, Region Süd, Büro München
Aschheim
www.minimax.de

MLB Industrial Services GmbH
Bobingen
www.abb.de

Möller Manlift GmbH & Co. KG
Würzburg
www.moeller-manlift.de

Minimax E.I.S. GmbH
Magdeburg
www.minimax.de

Nord-Lift GmbH
Langenhagen
www.nord-lift.de

NMV Neubrandenburger Maschinen Vertriebsgelsellschaft mbH
Neubrandenburg
www.nmv-neubrandenburg.de

P & B Hundrup GmbH & Co KG
Waltrop
www.hundrup.de

Palfinger Platforms GmbH
Krefeld
www.palfinger-platforms.com

Partnerlift GmbH
Osterholz-Scharmbeck
www.partnerlift.com

Peter Cramer GmbH & Co KG
Hagen
www.cramer-arbeitsbuehnen.de

Pradel Arbeitsbühnen GmbH
Cottbus-Gallinchen
www.pradel-lift.de

Riwal Deutschland GmbH
Bingen
www.riwal.com

Roggermaier GmbH
Kirchheim
www.roggermaier.de

Roggenland Arbeitsbühnen und Staplervermietung GmbH
Everswinkel
www.roggenland-arbeitsbuehnen.de

Rohrmoser e.K. Arbeitsbühnenvermietung
Gräfeling
www.rohrmoser-arbeitsbuehnen.de

Rothlehner Konrad Liftverleih
Winhöring
www.rothlehner-k.de

Ruthmann GmbH & Co KG
Gescher-Hochmoor
www.ruthmann.de

Salgert GmbH
Lohmar
www.salgert.eu

Schirmer GmbH & Co. KG, Hub-Arbeits-Bühnen-Vermietung
Ulm
www.schirmer-hub.de

Schmidt GmbH & Co. KG
Neu-Isenburg
www.schmidt-info.de

Schwenk Arbeitsbühnen GmbH
Schramberg
www.schwenk-arbeitsbuehnen.de

Starlift GmbH
Oststeinbek
www.starlift.de

Terex Genie Germany GmbH & Co KG
Delmenhorst
www.genieindustries.com

Wagert Arbeitsbühnen-Vermietung
Bayreuth
www.wagert.de

Weidler Arbeitsbühnenvermietung GmbH
Heddesheim
www.weidler-arbeitsbuehnen.de

Wiesecker Werkzeugvermietung e.K.
Alten Buseck
www.wiesecker.de

WEMO-tec GmbH
Eichenzell
www.wemo-tec.com

Werner Middeke Arbeitsbühnen
Erwitte
www.wm-rent.com

Zeppelin Streif Baulogistik GmbH
Berlin
www.zeppelin-streif-baulogistik.com

HONG KONG

Modern (International) Access & Scaffolding Ltd
Kowloon
www.modern-access.com

ITALY

Alimak Hek Srl
COLLE DI VAL D'ELSA (SI)
www.alimakhek.com

Airo by Tigieffe Srl
LUZZARA (RE)
www.airo.com

ASIMOV SRL, Attività Scolastica Ispezione Macchine Operatrici Verifiche
SAN MAURO (TO)
www.asimovsrl.it

BERTI Piattaforme Aeree Srl
CONCOREZZO (MI)
www.piattaformeberti.com

Bigman Srl
VARNA (BZ)
www.bigman.it

Centro Edile Srl
SAN DONNINO (FI)
www.centroedilefirenze.it

Ciemme Srl
SEREGNO (MB)
www.ciemme-noleggio.it

Centro Formazione e Ricerca Merlo Srl
CUNEO (CN)
www.cfrm.it

CO.ME.T. OFFICINE Srl, Piattaforme Aeree
SAN GIOVANNI IN PERSICETO (BO)
www.officinecomet.com

CTE SpA
ROVERETO (TN)
www.ctelift.com

Elevateur Srl
NOLA (NA)
www.elevateur.it

ELEVO Srl, Noleggio e Vendita macchine elevatrici
LALLIO (BG)
www.elevo.it

FPM System SAS di Palmieri Francesco & C
RIMINI (RN)
www.fpmsystem.it

Gianfranco Savani Srl
LAVARIANO (UD)
www.savani.it

GM Srl, Centro Di Formazione
GENOVA (GE)
www.gmnoleggio.it

Haulotte Italia Srl, Headquarter
SAN GIULIANO MILANESE (MI)
www.haulotte.it

Hinowa SpA
NOGARA (VR)
www.hinowa.com

ICE Istituto Certificazione Europea SpA
ANZOLA DELL'EMILIA (BO)
www.ice.bo.it

IMER International SPA, IMER Access
PEGOGNAGA (MN)
www.imergroup.com

JLG Industries Italia Srl
PREGNANA MILANESE (MI)
www.jlg.com

Mollo Srl
ALBA (CN)
www.mollofratelli.com

Nacanco SpA
MONTICHIARI (BS)
www.nacanco.it

Nolo Rico Srl
GATTEO MARE (FC)
www.nolorico.it

Oil & Steel SpA
S. CESARIO SUL PANARO (MO)
www.oilsteel.it

O.MEC Srl
ANCONA (AN)
www.omec.it

Parmiani noleggi Srl
MONTAGNA IN VALTELLINA (SO)
www.parmianinoleggi.it

Piattaforme Aeree Formazione SRL
ALBA (CN)
www.paftraining.com

Savis Service Srl, Di Avitabile Antonio & C.,
SAN MAURO TORINESE (TO)
www.savisservice.com

SA.MA Srl
SAN SPERATE (CA)
www.samagroupe.it

Tecnoalt Srl
ROMA (RM)
www.tecnoalt.it

Tecman Srl
MISSAGLIA (LC)
www.tecman.it

S.A.S. Group SpA
NOVI LIGURE (AL)
www.sasautogru.it

SE.I. Servizi industriali Srl
BOLZANO (BZ)
www.seiservizindustriali.it

SETIF, Centro di Formazione IPAF
MALO (VI)
www.setif.it

TECNOCAR Srl, Noleggio
NIZZA MONFERRATO (AT)
www.tecnocarsrl.it

Venpa Sud Srl
MARTINA FRANCA (TA)
www.venpasud.it

LIECHTENSTEIN

Mietlift AG
SCHAAN
www.mietlift-ag.com

MALAYSIA

Aerial Global Sdn Bhd
Cheras, Selangor Darul Ehsan
www.aerialglobal.com.my

PMB Quick Access Sdn Bhd
Selangor
www.qaccess-scaffolds.com

MEXICO

AMMEC Comercial S.A. de C.V.
Mexico DF
www.ammec.com.mx

Haulotte Mexico S.A. de C.V.
Morelos
www.haulotte.com.mx

Promotora De Maquinaria De Altamira S.A., PMA
Tamaulipas
www.pmaltamira.mx

MOROCCO

Adam Industries
CASABLANCA

NETHERLANDS

Access Equipment BV
Raamsdonksveer
www.accessequipment.nl

Alimak Hek BV
Tilburg

Blom Opleidingen BV
Hengelo
www.blomopleidingen.nl

Boels Verhuur BV
Sittard
www.boelstraining.com

BT-Opleidingen
Bunschoten
www.bt-opleidingen.eu

Collé Safety & Training
Sittard
www.colle.eu

Doornbos Equipment B.V
EA Rotterdam
www.doornbosequipment.com

Eijgenraam Hoogwerkers BV
Rotterdam
www.eijgenraam.nl

Eurosupply Hoogwerk Systemen BV
Moerdijk
www.eurosupply.net

Gerken Hoogwerker Verhuur BV
Elsloo
www.gerken.nl

Gunco BV
Rotterdam
www.gunco.nl

HEAMS Rental & Sales BV
Rotterdam
www.heams.nl

Hinowa Nederland BV
Leimuiden
www.hinowa.nl

Hoogwerkservice BV
Buren
www.hoogwerkservice.nl

Hoogwerker Centrum Nederland BV
Groot-Ammers
www.hoogwerkercentrum.nl

HWS Verhuur BV
Noordwijk
www.hws.nl

Kamphuis Hoogwerkers BV
Zutphen
www.hoogwerken.nl

KWAK Hoogwerker Centrum BV
EL-Huizen
www.kwak.nl

Loxam BV
Ridderkerk
www.loxam.nl

Omnitalent Benelux BV
Maastricht
www.omnitalent.info

Peinemann Hoogwerk Systemen BV
Hoogvliet Rotterdam
www.peinemann.nl

PJH Verhuur BV
Wateringen
www.pjhverhuur.nl

Riwal
Dordrecht
www.riwal.com

Siesling Hoogwerker Verhuur BV
Eelde
www.siesling.nl

SVS B.V.
Capelle aan den Ijssel
www.svs-opleidingen.nl

TÜV Nederland QA BV
PH Best
www.tuv.nl

Van Asten Rescue Trainingen
VM - Roermond
www.vanasten-trainingen.nl

V-Tas BV
Bladel
www.v-tas.nl

Van Appeldoorn Technical Support BV
Hoogvliet
www.vanappeldoorn-ts.nl

PERU

Alo Group Perú
Lima
www.alogroup.pe

SKC RENTAL S.A.C.
Villa EL Salvador
www.skcrental.com

PORTUGAL

Jorge Lozano - Trabalhos Em Altura - Form/ Serv Unipessoal, Lda
QUELUZ
www.jorgelozano.pt

Machrent SA
CABANAS- PALMELA
www.machrent.pt

Transgrua – Transportes, Representações e Aluguer de Equipamentos, S.A.
ALCOCHETE
www.transgrua.pt

QATAR

Harsco Al-Darwish W.L.L.
Doha

Qatar Welding and Fabrication Supplies WLL (Q-Fab)
DOHA
www.qfab.com.qa

SAUDI ARABIA

Rapid Saudi Arabia Co Ltd
Dammam
www.rapidaccess-gulf.com

SINGAPORE

Aerial Access Academy Pte Ltd
Singapore
Absolute Kinetics Consultancy Pte Ltd

BS Technology Pte Ltd
Singapore
www.bsgroup.com.sg

Flexi Industrial Safety Training
Singapore

Galmon (S) Pte Ltd
Singapore
www.galmon.com

IPAF Training Centres

Global Training Services Pte Ltd
Singapore
www.globalts.com.sg

JH Equipment & Services Pte Ltd
Singapore
www.jianhuang.com.sg

JP Nelson Equipment Pte Ltd
Singapore
www.jpnelson.com.sg

Manitou Asia Pte Ltd
Singapore
www.manitou-group.com

Modern (Singapore) Access & Equipment Pte. Ltd
Singapore
www.modernsg.com.sg

ST Aerospace Ltd
Singapore
www.staero.aero

Singapore
www.sg-akc.com

SOUTH AFRICA

Goscor Access Equipment T/A Goscor Hi-Reach
East Rand
www.goscorhireach.co.za

Johnson Access (PTY) Ltd, T/A Eazi Training Solutions
Midrand

SPAIN

Alberto Piñeiro Lift, SL
Caldas de Reis
www.aplift.com

Alquiler Y Plataformas, SL
Manresa
www.alkyplat.com

Alsetrans 2000 SL
Ontinyent
www.alsetrans.com

AP Aerial Platforms SA
San Fernando de Henares
www.apaerial.com

Asociación Fundación Universitaria Isidoriana De La RSE
Cartagena
www.fuisicar.org

CTC De Maquinaria SA
La Puebla de Alfinden
www.ctcmaquinaria.com

D.F. OPERACIONES Y MONTAJES, S.A.
Gijón (Asturias)
www.durofelguera.com

DISPLACAR SL (Grupo Cruz Araba)
Vitoria-Gasteiz
http://www.cruzaraba.es

FEMPA
Alicante
www.fempa.es

Genie Industries Ibérica SL
Montcada I Reixac
www.genieindustries.com

Gruas Roxu SA (PLAAS)
Siero (Asturias)
www.gruasroxu.com

Haulotte Ibérica SL
Alcalá de Henares
www.haulotte.es

Ingematis SL
LANGREO
www.ingematis.com

Maquinaria Industrial Santander SL
Heras
www.mainsapoligruas.com

Maquinarias Paco SL
AGÜIMES
www.maquinariaspaco.com

Oil & Steel Ibérica SL
Riba Roja del Turia
www.oilsteel.com

Plataformas Daryat S.L.
Etxebarri
www.niftylift.es

Plataformas Lozano S.L.
Sevilla
www.gruaslozano.com

Portalada 2006 SL (Jisuma)
Logroño
www.jisuma.com

Rent Wheeler SL (Alpesur)
Alcala de Guadaira
www.alpesur.com

Riwal Plataformas Aereas Slu
Cheste Valencía
www.clem.es

SOCAGE IBERICA S.L.
Riba Roja
www.socage.it

Talleres Velilla SA (Movex)
Canovelles
www.talleresvelilla.com

Williams Powered Access Soluciónes SLL
Utebo
www.williamspas.com

YXCON Ideas y proyectos, SL
Almassora
www.yxconproyectos.com

SWITZERLAND

Accès & Elévatique SA
CRISSIER
www.elevatique.ch

Avesco Rent AG
PUIDOUX
www.catrental.ch

AzAs GmbH
RÜTHI (SG)
www.azas.ch

BOAL AG
Kölliken
www.safetyworks.ch

Blu Wash Service SAGL, Impresa Pulizie
MENDRISIO
www.bluwash.ch

Bronto Skylift AG
RÜMLANG
www.bronto.ch

Camillo Vismara SA
CADRO
www.vismara.ch

Chevalier Pierre
TROISTORRENTS
www.chevalierp.ch

Kompetenzzentrum für Arbeitssicherheit AG
Pratteln
http://www.komp-zentrum.ch/

Maltech.ch AG
RÜMLANG
www.maltech.ch

ME Machines Elévatrices SA
www.memachines.ch

Neuwerth Logistics SA
Ardon
www.neuwerth.ch

rent-it ag
GOLDACH
www.rentitag.ch

Regiomech
ZUCHWIL
www.regiomech.ch

Schweizerisches Kompetenzzentrum hfs GmbH
REIDEN
www.skz-hfs.ch

SkyAccess AG
Oensingen
www.skyaccess.ch

Skycraft AG
Amriswil
www.skycraft.ch

SVBL, Schweizerische Vereinigung Für Die Berufsbildung In Der Logistik
Rupperswil
www.svbl.ch

Swiss Logistics Academy AG, Ausbildungszentrum für Logistik
OTELFINGEN
www.sulsergroup.ch

Swiss LT GmbH, Logistik & Lifter Trainingscenter
Muhen
www.swissLT.ch

TCFT Trainingscenter Fördertechnik GmbH
WETTINGEN
www.tcft.ch

UP AG
Affoltern a.A
www.upag.ch

Würth Innovation AG
Muolen
http://www.wuerth-innovation.ch/

Zwei GmbH
Kerzers
www.2training.ch

TURKEY

ACR Rent & Rise Platform ve Makine Kiralama Hizmetleri Tic.A.S.
Istanbul
www.rentandrise.com

HMF Makina ve Servis San. Ve Tic. A.S.
Istanbul
www.hmf.com.tr

Mak-Ser Makina Ltd. Äti.
Istanbul
www.makserplatform.com

UNITED ARAB EMIRATES

Access Rental Gulf LLC
Dubai
www.accessrental-gulf.com

Al Laith Scaffolding LLC
Dubai
www.alllaith.com

Globalplus Machinery Trading (GMT)
Dubai
www.globalplus.ae

Instant Access For Sales and Rental of Construction Equipment LLC
Abu Dhabi
www.instantaccess-co.com

Johnson Arabia LLC
Dubai

Manlift Middle East LLC
Dubai
www.manliftgroup.com

Rapid Access LLC
DUBAI
www.rapidaccess-gulf.com

Safe Lift LLC
Abu Dhabi
www.safelift.gulf.com

Titan Equipment Rental LLC
Dubai

UNITED STATES

Absolute E-Z Up
Charleston
www.absolutee-zup.com

Alpha Platforms, (SSP Group Inc)
Brooklyn
www.alphaplatforms.com

Area Work Platform Inspection, Inc.
Covington

BAE Systems, U.S.Combat System
York
www.baesystems.com

Blazing Technologies Inc
Rouzerville
www.blazingtech.net

Butler County Area Vocational-Technical School
Butler
www.bcvt.tec.pa.us/

Construction Safety Council
Hillside
www.buildsafe.org

Eckstine & Associates, Inc
Waynesboro PA

Haulotte US
Frederick
www.haulotte-usa.com

Hoj Engineering & Sales Co
Salt Lake City
www.hoj.net

Institute For Aerial Lift Safety
Philadelphia
www.aerialliftsafety.org

JLG Industries, Inc
McConnellsburg
www.jlg.com

Local 150 Apprenticeship
Wilimington
www.asiplocal150.org

Mastclimbers LLC
Grayson
www.mastclimbers.com

NES Rentals Holdings, Inc
Chicago
www.nesrentals.com

Niftylift Inc
Greer
www.niftylift.com/usa

Operating Engineers Local 324 SEEC
Detroit
www.iuoe324.org

Safety on Site, LLC
Minneapolis
www.safetyonsite.us

Scaffold and Access Industry Association
Kansas City
www.scaffold.org

Sunstate Equipment Co LLC
Phoenix
www.sunstateequip.com

Sheet Metal Workers Local 73 Chicago
Belwood
www.jatc73.org

Sheet Metal Workers Local 137 JATC, Signage
Long Island City
http://info@local137.com

Sheet Metal Workers #33 Cleveland JATC
Parma

Sheet Metal Workers Union Local 33 - Toledo area
Rossford
www.smwlu33.org

Stevenson Crane Service Inc
South Holland
www.stevensonsales.com

Teupen USA Inc
Pineville
www.teupen.com/usa

US Safety Depot
Greenwood
www.ussafetydepot.com

Valcourt Exterior Building Services of NJ, LLC
Millstone
www.valcourt.net

URUGUAY

Elevaciones, S.A.
Montevideo
www.elevaciones.com.uy

TecnoAndamio - Nizepel SA
Montevideo
www.tecnoandamio.com

IPAF Manufacturers

All IPAF member manufacturers, distributors, hirers, contractors and instructors undertake to abide by and observe the IPAF Code of Conduct. The Code of Conduct states, among others, that a company shall not knowingly misrepresent facts, or mislead any customer or supplier, concerning any aspects of the goods and services it provides. It shall market only products and services that conform to specific industry standards relevant to its business.

Members who wilfully breach the Code of Conduct may be expelled from IPAF. If your business partner is an IPAF member, you can be sure that they work to high standards of safety, quality and service.

Aerospace New Long March Electric Vehicle Technology
Beijing, China
+86 10 69279590
www.lansel.cn

Airo*
Luzzara (RE), Italy
+39 0522977365
www.airo.com

Alimak Hek*
Tilburg, Netherlands
+31 13 514 8653
www.alimakhek.com

ATN
Tonneins, France
+33 553798320
www.atnplatforms.com

Barin
Cittadella (PD), Italy
+39 0495971300
www.barin.it

Beijing Jingcheng Heavy Industry
Beijing, China
+86 10 61539210
http://en.jchic.com/

Bluelift
Montescudo (RN), Italy
+39 0541 756872
www.bluelift.it

Böcker
Werne, Germany
+49 23897989-0
www.boecker-group.com

Braviisol
Castelfidardo (AN), Italy
+39 071 7819090
www.braviisol.com

Bronto Skylift
Tampere, Finland
+358 20 7927 319
www.bronto.fi

CELA
Corte Franca (BS), Italy
+39 030 9884084
www.cela.it

Changsha Skyboom Heavy Industry
Hunan, China
+86 731 86171759
www.skyboom.cn

** This company also has group membership in other countries.*

CO.ME.T.
San Giovanni in Persiceto (BO), Italy
+39 051 6878721
www.officinecomet.com

CTE*
Rovereto (TN), Italy
+39 3472366911
www.ctelift.com

Custom Equipment
Richfield, WI, United States
+1 262-644-1300
www.hybridlifts.com

Dinolift
Loimaa , Finland
+358 201772400
www.dinolift.com

Electroelsa
Poggibonsi (SI), Italy
+39 0577 913401
www.electroelsa.com

Faraone
Tortoreto (TE), Italy
+39 0861 772235
www.faraone.com

Fraco
Quebec, Canada
+1 450 658 0094
www.fraco.com

France Elevateur
Flavigny sur Moselle, France
+33 383233132
www.fe-group.industries

GEDA-Dechentreiter
Asbach-Bäumenheim, Germany
+49 906 9809 0
www.geda.de

Genie*
Grantham, Lincolnshire, United Kingdom
+44 1476 5834328
www.genielift.co.uk

GS Ind. e Com Equipamentos Hidráulicos
Piracicaba, São Paulo, Brazil
+55 19 78214930
www.guitonsocage.com.br

GSR
Rimini (RN), Italy
+39 0541397811
www.gsrspa.it

Haessler
Guelph, ON, Canada
+1 519-837-9178
www.wolflift.ca

Haulotte*
L'Horme, France
+33 4 77 29 21 58
www.haulotte.com

Henan Jianghe Crane
Henan, China
+86 373 8869900
www.jhqz.com

Hinowa
Nogara (VR), Italy
+39 0442539100
www.hinowa.com

Holland Lift
Hoorn, Netherlands
+31 229285555
www.hollandlift.com

Hunan Runshare Heavy Industry
Hunan, China
+86 731 84083599
www.runshare.com.cn

Hunan Sinoboom
Hunan, China
+86 731 87116500
www.sinoboom.com

Hydro Mobile
Quebec, Canada
+1 450 589 8100
www.hydro-mobile.com

IHIMER
San Gimignano (SI), Italy
+39 057795121
www.ihimer.com

IMER
Pegognaga (MN), Italy
+39 335 216444
www.imergroup.com

JCB
Rocester, Staffordshire, United Kingdom
+44 1889 590312
www.jcb.com

JLG*
Hoofddorp, Netherlands
+31 23 569 8791
www.jlgeurope.com

King Highway Products
Market Harborough, Leicestershire, United Kingdom
+44 1858 467 361
www.skyking.co.uk

Leguan Lifts
Ylöjärvi, Finland
+358 3 347 6464
www.leguanlifts.com

Maber
Bressanvido (VI), Italy
+39 0444660871
www.maber.eu

Manitou*
Ancenis Cédex, France
+33 2 40 09 22 99
www.manitou.com

Mantall
Nantong City, Jiangsu Province, China
+86 513 83696888
www.mantall.com

MEC - Aerial Work Platforms
Kerman, CA, United States
15598421500
www.mecAWP.com

Merlo*
Ringwood, Hampshire, United Kingdom
+44 1425 480806
www.merlo.co.uk

Multitel Pagliero
Manta (CN), Italy
+39 0175255211
www.multitelgroup.com

Nagano Industry
Nagano, Japan
+81 26 273 1332
www.nagano-i.jp

Niftylift
Milton Keynes, Buckinghamshire, United Kingdom
+44 1908857888
www.niftylift.com

Oil & Steel
S. Cesario sul Panaro (MO), Italy
+39 348 7828910
www.oilsteel.it

Omme Lift
Sdr Omme, Denmark
+45 075 34 13 00
www.ommelift.dk

Outreach
Falkirk, Stirlingshire, United Kingdom
+44 1324 889000
www.outreachltd.co.uk

Palazzani
Paderno Franciacorta (BS), Italy
+39 0306857073
www.palazzani.it

Palfinger*
Krefeld, Germany
+49 2151 4792 266
www.palfinger-platforms.com

PB Lifttechnik
Oberbechingen, Germany
+49 9077 9500 0
www.pbgmbh.de

Plataformas Elevadoras JLG
Castellbisbal, Barcelona, Spain
+34 937724700
www.jlg.com

Platform Basket
Poviglio (RE), Italy
+39 0522967666
www.platformbasket.com

Pop-Up
Deeside, United Kingdom
+44 1244 833 111
www.popupproducts.co.uk

Power Towers*
Wigston, Leics, United Kingdom
+44 116 2001757
www.powertowers.co.uk

Ruthmann
Gescher-Hochmoor, Germany
+49 2863204-0
www.ruthmann.de

Scanclimber
Pirkkala , Finland
+358 10680 7000
www.scanclimber.com

Shenzhen Gaoli Aerial Work Equipment
Guangming, Shenzhen, China
+86 755 2712 6711
www.gaolimc.com

Skyjack*
Guelph, ON, Canada
+1 519 341-5908
www.skyjack.com

Snorkel*
Washington, Tyne & Wear, United Kingdom
+44 191 461 6875
www.snorkellifts.com

Socage*
Sorbara di Bomporto (MO), Italy
+39 059 9121211
www.socage.it

Talleres Velilla
Canovelles, Barcelona, Spain
+34 938493777
www.talleresvelilla.com

TCA Lift
Odense C, Denmark
+45 661 31100
www.tcalift.com

Teupen*
Gronau, Germany
+49 256281610
www.teupen.com

Time International
Farsoe, Denmark
+45 99 66 16 07
www.timeintl.dk

Xuzhou Handler Special Vehicle
Jiangsu, China
+86 51668782715
www.xzhlz.com

Xuzhou Heavy Machinery
Jiangsu, China
www.xzzx.com.cn

Youngman
Maldon, Essex, United Kingdom
+44 1621 745900
www.youngmangroup.com

Zhejiang Dingli Machinery
Deqing Zhejiang, China
+86 572 868 1688
www.chinadinli.com

Zhejiang Noblelift Equipment
Zhejiang, China
+86 133 3685 3196
www.noblelift.com

IPAF Rental+

Companies that carry the IPAF Rental+ quality mark have been independently audited as meeting defined standards in customer service, safety, staff training, contract terms and machine inspection. Companies get a return visit from the auditors every year.
Visit www.ipaf.org for the current list of IPAF Rental+ companies.

1 Up Access Ltd
Sheffield, Yorkshire, United Kingdom
+44 114 2721595
www.1upaccess.co.uk

2 Cousins Access Ltd
Oxford, Oxfordshire, United Kingdom
+44 1865 779778
www.2cousins.co.uk

Advanced Access Platforms Ltd
Sutton, Surrey United Kingdom
+44 2086417050
www.accessplatformsuk.com

Aerial Platforms Ltd
Leigh, Lancashire, United Kingdom
+44 1942601752
www.apltraining.co.uk

AFI-Uplift Ltd
Castle Donington, Derbyshire, United Kingdom
+44 1332 855350
www.afi-uplift.co.uk

Astley Hire Ltd
Leigh, Lancashire, United Kingdom
+44 1942 608822
www.astleyhiretraining.co.uk

Balloo Hire Centres Ltd
Belfast, United Kingdom
+44 28 90 45 80 80
www.balloohire.com

Camillo Vismara SA
Cadro, Switzerland
0041 91 9417559
www.vismara.ch

Eagle Platforms Ltd
Sheffield, S Yorkshire, United Kingdom
+44 114 269 5909
www.eagleplatforms.com

Elavation Ltd
Milton Keynes, United Kingdom
+44 1908 317602
www.elavation.net

Facelift Access Hire
Hickstead, Sussex, United Kingdom
+44 1444 881166
www.facelift.co.uk

GB Access Platforms Ltd
Wellingborough, Northants, United Kingdom
+44 1933270011
www.gbaccessplatforms.co.uk

Higher Access
Burnley, Lancashire, United Kingdom
+44 8456044054
www.higheraccess.co.uk

Highway Plant Co Ltd
Belfast, Co. Antrim, United Kingdom
+44 2890 301133
www.highwayplant.com

Horizon Platforms Ltd
Wakefield, West Yorkshire, United Kingdom
+44 1924 270383
www.ipaftrainingcourses.co.uk

JPS Tool & Access Hire Ltd
Waltham Abbey, Essex, United Kingdom
+44 845 6017738
www.jpstoolandaccess.co.uk

Kimberly Rentals Group Ltd
Wigan, United Kingdom
+44 1257 428713
www.kimberlyaccess.co.uk

Lifterz Ltd
Wakefield, West Yorkshire, United Kingdom
+44 1924 266662
www.lifterz.co.uk

Mainline (1982) Ltd
Swadlincote, Derbyshire, United Kingdom
+44 1283 222 044
www.mainline-hire.co.uk

MBS Access Ltd
Witham, Essex, United Kingdom
+44 1376 583 967
www.mbsaccess.co.uk

Midland Access Platforms Ltd
Croft, Leicestershire, United Kingdom
+44 1455 556699
www.midlandaccessplatforms.co.uk

Nationwide Platforms Ltd
Lutterworth, Leicestershire, United Kingdom
+44 8456 011032
www.nationwideplatforms.co.uk

Peter Hird & Sons Ltd
Hull, East Yorkshire, United Kingdom
+44 1482 227333
www.hird.co.uk

Plantfinder (Scotland) Ltd
Kilmarnock, Ayrshire, United Kingdom
+44 1563 850060
www.plantfinderlimited.co.uk

Prolift Access Ltd
Wellington, Somerset, United Kingdom
+44 1823 665902
www.proliftaccess.co.uk

Riwal UK Ltd
Chelveston, Northamptonshire, United Kingdom
+44 844 335 2993
www.riwal.co.uk

Smart Platform Rental Ltd
Trafford Park, Manchester, United Kingdom
+44 333 900 9100
www.smartplatforms.co.uk

What is IPAF?

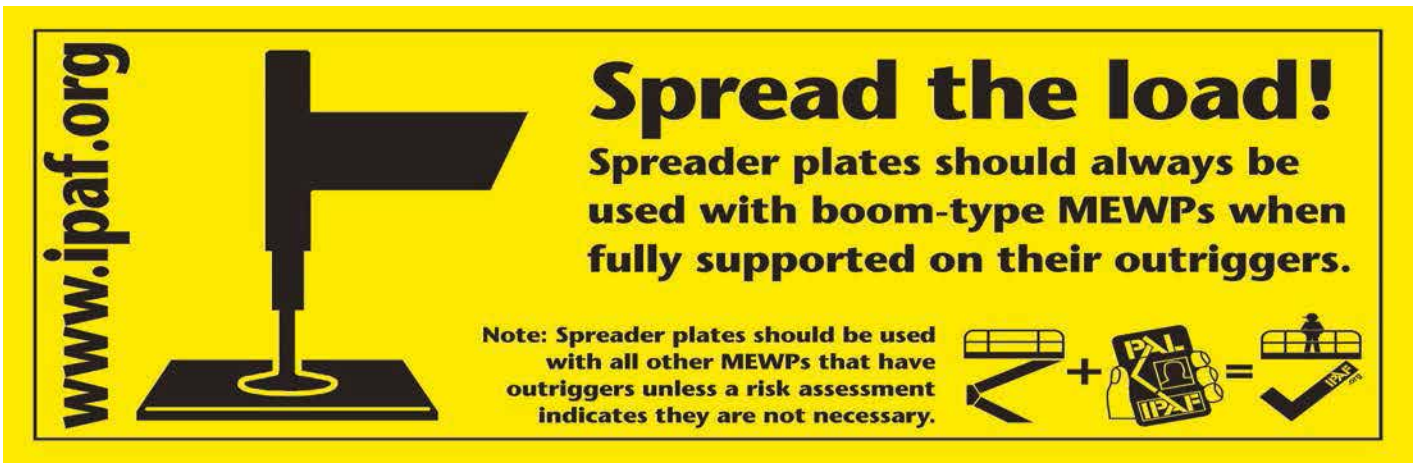
The International Powered Access Federation (IPAF) promotes the safe and effective use of powered access equipment worldwide. It provides technical advice and information, influences and interprets legislation and standards, and runs safety initiatives and training programmes.

It is a not-for-profit organisation owned by its members, who include manufacturers, rental companies, distributors, contractors and users. Members operate about 90 per cent of the MEWP rental fleet in the UK and manufacture about 85 per cent of platforms on the market.

IPAF's training programme for platform operators is certified by the international certification organisation TÜV as conforming to ISO 18878. More than 100,000 operators are trained each year through a worldwide network of over 600 IPAF-approved training centres. Successful trainees gain the PAL Card (Powered Access Licence), the most widely held and recognised proof of training for platform operators.

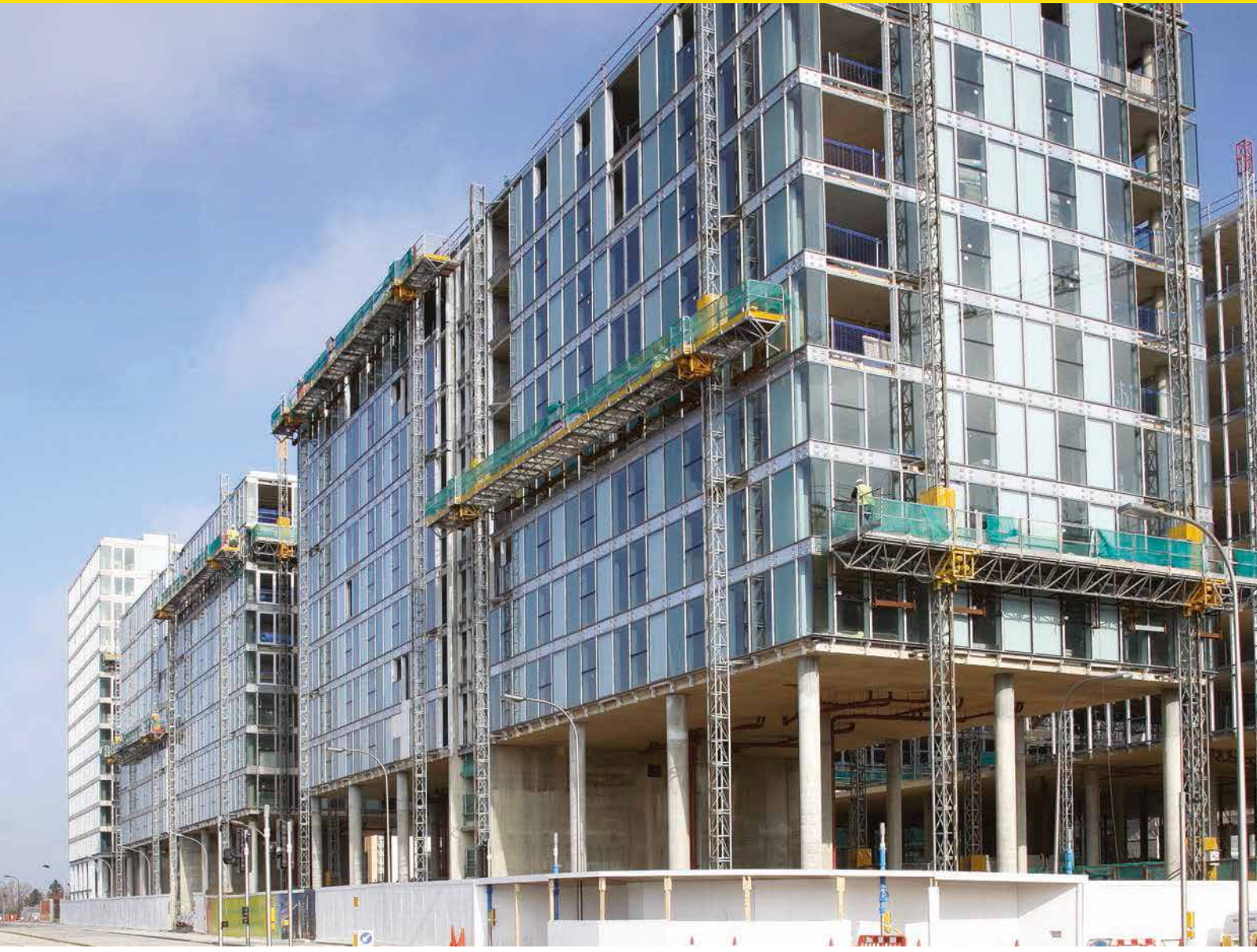
IPAF membership is open to users of platforms, manufacturers, distributors, rental and training companies. Members can access practical information and a growing portfolio of member services.

T +44 (0)1539 566 700
F +44 (0)1539 566 084
info@ipaf.org
www.ipaf.org



Scaffolding & Mastclimbers | Roofing, Shelters & Site Safety | Training & Support

SGB. More than you think



As a provider of unparalleled knowledge and unlimited capability within the UK access market, you could say that when it comes to access, SGB are the trusted standard. Though there is more to SGB than access alone ... from contract scaffolding or mechanical access to temporary roofing, training, site safety, or even bespoke approaches and advice. We will work with you to develop an efficient and safe solution to your temporary works requirement. Talk to us on 0844 335 8860 and find out how working in partnership with SGB means we can deliver a lot more than you think. SGB - contracting, hire, sales or training.

Find out how we can help you by visiting: www.sgb.co.uk

SGB

A BRAND COMPANY

IPAF.org

The world authority in powered access

If you use one of these,

you need one of these.

IPAF Approved Training Centres train more than 100,000 operators every year in the safe and effective use of powered access platforms.

The IPAF PAL Card is recognised worldwide across industries as proof that your operators have been trained to the highest safety standards and meet all legal requirements.

Find an IPAF approved training centre at www.ipaf.org

The IPAF operator training programme is certified by TÜV as conforming to ISO 18878.