Rack and pinion can mean big savings – so long as you know your rules and regs. So when will the traditionalists catch on?

ast Climbing Work Platforms may soon change our cityscapes. Scaffolding has been a part of building since we advanced from huts to houses and, as such, is an ingrained and traditional part of our construction methods. But the MCWP can take on jobs where scaffold would usually be used - and do them better so will it take over? According to figures Mastclimbers, in Europe, MCWPs make up 20 percent of the scaffolding market already.

To a home owner, the first advantage is obvious. Scaffolding presents a security risk, giving builders and burglars alike access to your property, day and night. A MCWP is there for less time and only provides access to those with a key.

To a contractor, top priority is that a MCWP can be erected in a fraction of the time in which scaffolding goes up, meaning less man hours and less money. "Cost analysis shows that mast climbing work platforms can reduce access costs by as much as 40 percent over the lifetime of a project", says Roger Lindley of CML & Associates, marketing consultants for Intervect AB. "They are more economical to install and are a major contributor to increased productivity."

Oscar Quarterone of Euroscaf backs this up: "You make savings, not only when buying the machines, but also in time assembly, disassembly, manpower and hard work climbing and lifting materials. Also they are easy to stare an aesthetically better on buildings." Euroscaf is based in Treviso, Italy, and has produced more than 700 MCWPs since 1991.

To the industry, the first benefit must be extra safety. As Lindley notes, "OSHA





Mastclimbers' shelf bracket system

(the US Occupational Safety and Health Administration) statistics indicate that the number of (scaffolding related) injuries is declining. This may be more the result of innovations and new equipment rather than an increase in safety awareness with scaffolding."

One of the reasons a mast climber is safer than scaffold is that overload prevention systems are usually in-built. Where scaffold can be stacked up with materials to the point where the weight becomes excessive, the platform will not allow overloading, or uneven loading.

Italian manufacturer Maber was the first to be equipped with a mechanical overload control, according to Diego Benetton, who says that the MCWP's most interesting feature remains time reduction, "both in handling materials and in lifting personnel."

Another argument for MCWPs is that, on a traditional scaffolded site, the amount of debris and cables lying about can be a safety hazard. MCWPs, along with many other types of access platform, have on

board power supplies to prevent the need to dangle long cables.

And one of the most hazardous activities going on on a scaffolding rig is the transportation of materials and tools to the work site. Whether this happens manually or with the use of a crane, the chances of goods falling from height are increased. A MCWP is loaded with men and materials at the ground level.

All that said, news was released last month that Bow Scaffolding Group Ltd (the new name for the Mitie access scaffolding business) became the fourth UK scaffolding company to hold the

Gold Award from the Royal Society for the Prevention of Accidents. Great news for Bow, and perhaps this is a sign of things to come from other scaffolding companies. But there are many of them, and only four hold this award.

### Working together

In some jobs the use of scaffolding and MCWPs together can provide the solution, as in the case of Almada House. The forty year old, Grade-A listed admin headquarters for South Lanarkshire Council needed external refurbishment in 2001 - to clear out asbestos and replace the curtain

The two main facades are 60 metres long. Below them are a crop of out buildings with non load-bearing roofs, making access to the main elevations extremely restricted. Mastclimbers Ltd and SGB Contracts got together to design an innovative solution to the task of gaining access to the work area.

They came up with a system of formwork scaffold supports into a gantry, providing access to three twin MC100



## MCWPS & HOISTS

MCWPs above the weak roofs. This shelf bracket system provided a stable loadbearing base for the platforms, a work and storage area for materials. It was fed by a hoist from the ground.

Mastclimbers has already secured 'Phase two' of the operation, which is

valued at £170,000 and already underway.

Mastclimbers Ltd is the UK's market leader in MCWP hire, owning an estimated 80 percent of the MCWPs operating in the UK. A number of high



Hek in use at the SnowDome, Milton Keynes

profile jobs using Mastclimbers' equipment demonstrates that the message that scaffold is not the only consideration is filtering through to the construction industry, slowly but surely.

For example, points out marketing manager Cara

Baillie, when Sir Robert McAlpine decided to use MCWPs to overclad and curtain wall British Telecom's headquarters at Atlantic Quay in Glasgow, the company managed to halve the normal contract duration, cut its costs by 40 percent and use 30 percent less operatives. Bad news for the workers then, but for client and contractor an all-round hit.

### On the slide

Another unusual contract for Sir Robert McAlpine was the building of the SnowDome in Milton Keynes. The building's facade is glass clad, with a 9.5 degree incline. Originally, the area was due to be scaffolded, but the time restraints of the job (it had to be completed within one year) meant that other options were considered. The contractor knew that mast climbers would be able to deal with vertical access. but was not sure about the angle. A-Plant was able to convince McAlpine that its equipment would be up to the job. A special ground frame was made to set the first mast section at a 9 degree angle and, after that, extra sections were added in the normal way. Two single mast MSHF Hek platforms were used, with the masts anchored at 6-8 metre intervals and work platforms of 1.5 metres width and 10.3 metres length. "It could have been done with scaffold", recalls Keith Hancock who was with A-Plant at the time and is now Haki's technical sales manager. "But the scaffold would have had to be constantly changed to put in the panels. We saved the client £100,000 on access costs alone." And when companies such as Sir Robert McAlpine start using MCWPs, you can guarantee others are not far behind, despite the traditionalists.

### The leader

Andrew Reid is more familiar than most with the difficulty of persuading the world to look at something new. Reid set up Mastclimbers Ltd in 1996 and has managed to lead it from zero turnover to a pro-

## **Transport hoists**

Geda, Intervect and many of their competitors now offer hoists for personnel and goods which fit between the mast climbing and hoist codes. This is not only confusing, but has caused some upset within the industry.

Gordon Gedling of Hoist It Services has been 'in the business' for about 25 years, and is very active in CHIG, the Construction Hoist Industry Group, which he helped set up within the CPA. "About four years ago, at SAIE in Bologna, I came across what is known as a transport platform on the Geda stand" he says. "It was a hoist being used to carry people, certified by a body in Germany. We looked at it in CHIG and decided that, as it was, we were not comfortable with this type of machine coming into the UK.

"In the past 25 years, we have been trying to stop people riding on goods hoists." This transport platform came along, which looked exactly like a goods hoist, but stood half a metre away from the wall to prevent people getting trapped and went slower. My point is that one day, a site worker could be using a passenger hoist like that. The next he could be on a site where the hoist is actually meant for goods. To the guy on the site it all looks the same. He could decide to use it, getting someone to operate the controls from below. The goods hoist travels much faster and much closer to the wall. Quite honestly I think that there will be a fatality one day."

Due to CHIG's work with the HSE, new guidelines were introduced in May. Transport Platforms - the Installation, Use, Maintenance, Inspection, Examination and Testing' is a CPA best practice guide which has now been sanctioned by Kevin Myers, chief of construction at the HSE. The HSE has issued Information Document 408/4, 'Safeguards Required on Transport Platforms Used for Carrying Passengers'.

Hoists carrying personnel now have to have roofs in the UK. They must only run at 12 metres per minute, compared to 30 metres per minute for goods hoists. They must stand half a metre from the wall to prevent people getting trapped.

Gedling is happy with the guidelines and accepts that, like it or not, market forces are going to push Hoist It towards offering the small transport platforms as part of its fleet. "Some of the big ones are OK – like the 1.5 tonne twin masts. It's the smaller ones that look like goods only hoists I object to."

Certainly, there is a positive side to transport platforms, as Hancock of Haki explains. He was the first person to bring a transport hoist into the UK, for A-Plant Access. "They are usually very wide, about 5.3 metres, which means easy movement of large bundles. Before, packs had to be broken open to put goods on the hoist, risking damage during handling and transport. Now you can forklift them on with much less handling, which means less costs."

If you are confused, the CPA's July 2002 Bulletin should help. It gives details about transport platforms and the new Code of Practice for hoists. You can contact the CPA on 020 7630 6868.



The Geda MCP 750

jected £10 million per annum by 2003. During this time, the company has also secured the BS EN ISO 9000 Quality Registration and dual Accreditation of Investor in People status for its workforce development. The company is constantly pushing for the recognition of the benefits of MCWPs instead of scaffolding from councils and contractors.

Reid was very active in the production of BS 7981, the Code of Practice for the installation, maintenance, thorough examination and safe use of MCWPs. This was made available in December 2001, and updated in May 2002, following close work between Reid, the HSE and British Standards Institute. According to Reid, "It clarifies the criteria of training, methods and procedures within our industry. It clarifies the distinct health and safety related criteria for the installation of the product. This industry standard should eliminate the 'cowboy' mentality and, at the same time, drastically reduce paperwork throughout the tender stage."

Mastclimbers, based in Glasgow, now has a fleet of 650 platforms, from manufacturers Intervect, Safi, Malmqvist and Satellite. They have no allegiance to any supplier and no contractual ties.

### **Mergers and mayhem**

Amid mergers-a-plenty, we are starting to find that all sorts of access equipment is being offered by single companies. For example, Haki is more traditionally associated with scaffolding - it is the third largest system scaffold manufacturer in the world - however, led by its UK branch, the company has created 'Haki Machine', which offers more access solutions including MCWPs, hoists and cradles. Most of these extra products are made by Geda - it is the

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official UK and Ireland distributor for Geda – although Haki recently bought out Malmqvist, so is now actually manufacturing those products in Sweden.

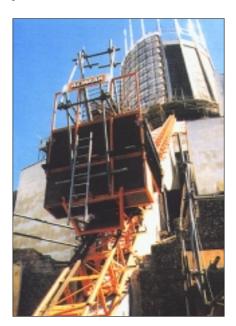
Hek and Alimak merged earlier this year under the umbrella of Intervect. This has been very confusing for many, so to clarify, Hek and Alimak have been kept as brand names because they are recognised and respected, but the holding company, and the company UK customers will be dealing with, is Intervect.

Alimak has assumed full responsibility for hoists and permanent lifts, while HEK makes mast climbing platforms - including work platforms, transport platforms and hoists up to 1 tonne capacity.

Intervect AB is owned by UK private equity corporation 3i, and Swedish investment company Ratos.

No longer on the scene are Access Solutions Ltd, which has gone into liquidation, or Satellite Mast Climbers, which has moved out of the UK.

Hoist It acquired the SGB hoist fleet in June 2001 when Mastclimbers and SGB



Hoist-it's Alimak goods hoist at Liverpool's Catholic Cathedral

merged. In March last year, Hoist It bought out the PTP fleet, with its engineers. It has managed to update its fleet, sometimes with brand new machines and now has 180 hoists, from scaffold-attached swinging arm units to the Alimak 20-37 passenger hoist.

To keep up to date with news about mergers, launches and all else relevant to MCWPs, bookmark www .mastclimbers.com - Mike Pitt of Mastclimbers keeps up to date on industry

news and knows the mast climber industry inside out.

### **Training**

Hoist It offers on site product familiarisation on each hand over, and the company promotes erector and service engineer training within the CITB (Construction Industry Training Board). According to Gedling, people are hiring rather than buying at the moment, so wary are they of the Health & Safety at Work act and the Corporate Manslaughter legislation. "People want to hire expertise and modern, reliable equipment", he says. But, a word of caution. "There are lots of people out there offering training and they quite often don't know what they're doing." So be careful and make sure that, if you are using hoists for goods, passengers or both, you really know how the equipment works.

Your best bet for IPAF training is either Mastclimbers or Intervect UK. The latter began training as Alimak, offering IPAF certficated courses for more than ten years now. As Intervect, the training has been going on since inception early this year, but even now that demand for MCWPs is starting to pick up, Russell Bates of Intervect has found that very few people have been through training in the last 12 months. "It is recently building up, slowly, and to give you an example, our part time trainer has recently gone full time to deal with demand for the courses. They are generally for hoist operation rather than platform operation though."

Usually, as long as a potential operator has some experience of safety measures and hoists or platforms, the training at Intervect will last one day. It is free to Intervect customers, but you can go on a course without buying the equipment for a fee. At the end you will get an IPAF certificate, and the training will translate to most brands.

It is obvious that there is plenty of equipment out there being used without training and this is something that you must be aware of on site.

### New on the market

So long as you understand new legislation and keep yourself up to date, there is no reason to be wary of a new purchase or two. If you are interested in knowing what's new in Mast Climbing Work Platforms and hoists, you should book your flights to Maastricht, for Apex on September 12. Head over to Maber on Stand No 2050 and Safi on 1460, and keep your eyes peeled for other launches!