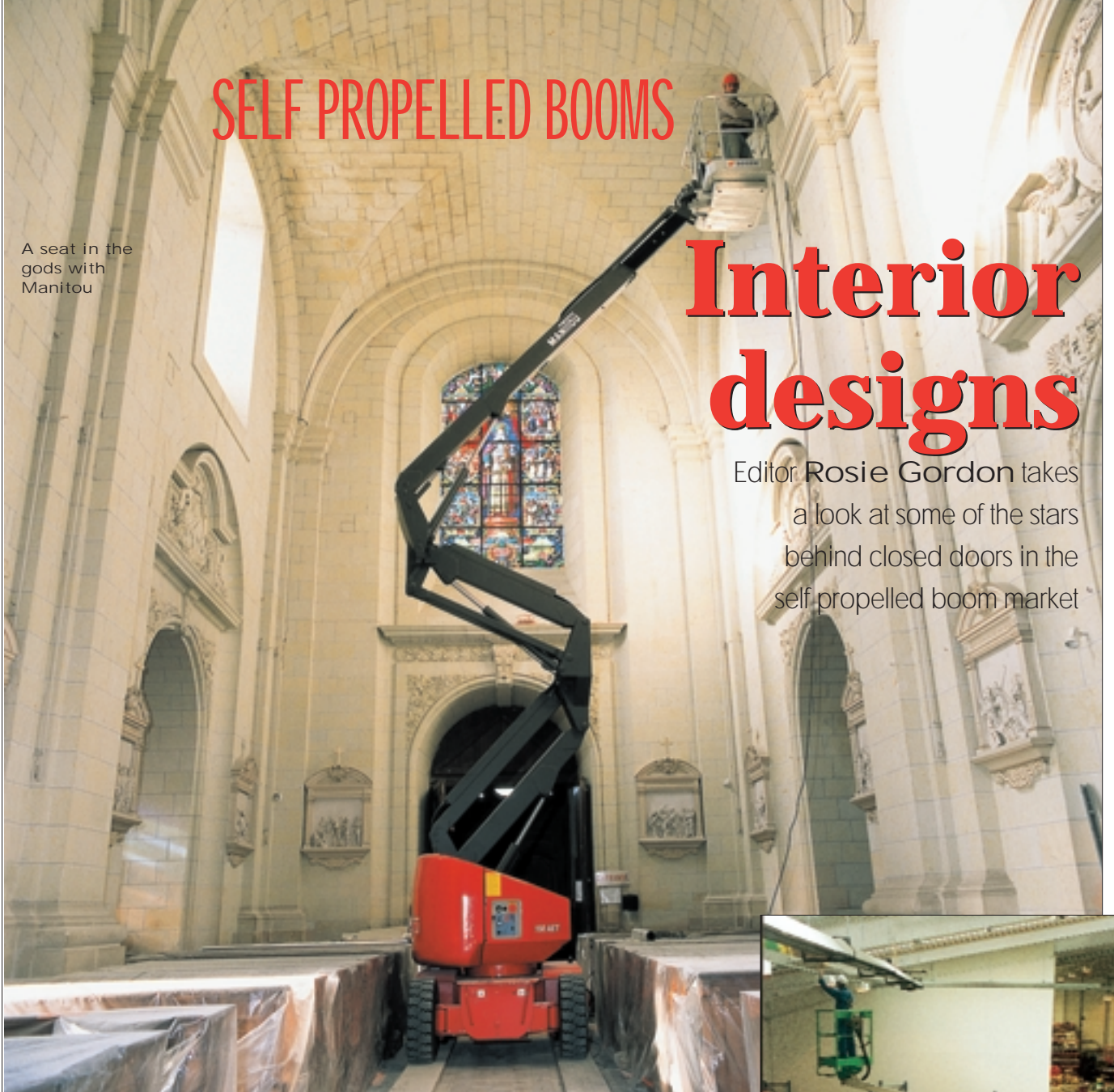


SELF PROPELLED BOOMS

A seat in the gods with Manitou

Interior designs

Editor Rosie Gordon takes a look at some of the stars behind closed doors in the self propelled boom market



Niftylift - "continually improving the range".

As technology moves on, generally it gets smaller and smaller. Self propelled booms are no exception as, although boom lengths are increasing, compact unit size and more domestic, rather than industrial, specifications are in demand.

Now that it has been universally recognised that booms can provide a flexible, quick, easy and safe access to areas which would previously have been dealt with by ladders or rigs, the race is on to produce not just the most manoeuvrable and compact units, but the cleanest, most fuel efficient and quiet ones as well.

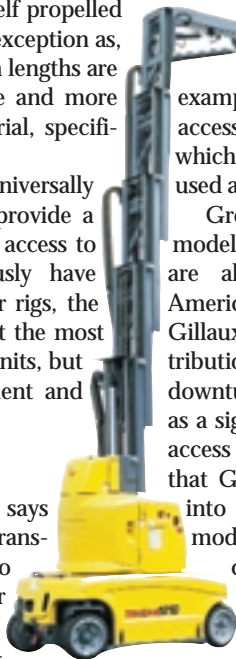
Safety is the driver "What drives the industry" says Paul Rogers, who recently transferred from Grove Manlift to Customer Support Director for Grove Europe, "is not technology. These are not hi-

The Toucan 1210 tec machines. from Delta.



The real driver is safety legislation. In Holland for example, you are required to use aerial access for any work over a storey high – which traditionally we would have just used a ladder for."

Grove Manlift now produces just six models, a much scaled down range. They are all produced at the company's American Shady Grove plant and Laurent Gillaux is in charge of their European distribution. Although some have taken the downturn in access platform production as a signal that Grove is likely to drop its access focus in the future, Gillaux insists that Grove has invested a lot of money into Shady Grove and that only the models that could not be produced at a competitive price have been dropped. Back in October, Grove announced that its European Manlift and Delta operations



would be consolidated within its Delta Manlift SAS operation, based in the south west of France at Tonneins.

Delta's new baby, the Toucan 1210, has recently been launched – the result of a year of redesign and stripping down of the nine-year-old 1200. Jean Claude Albert, head of the Grove Manlift design office, says of the new machine "All that is left of the (1200) is the motor-pump sup-

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◀ plying the hydraulic power.” The new model has a platform height of 12 metres and, up to 9.2 metres, offers a 5 metre horizontal outreach. It is the only vertical mast with a 12 metre reach that can pass through standard doorways and has been launched as a direct challenge to articulated models such as Pinguely-Haulotte’s HA 12 IP and the Genie Z-34. By the summer this year it is hoped that a version with bi-energy motorisation will have been produced – electrical for precision operations and thermal for linkage movements.



Skyjack has revamped the popular SJLB12.

“The industrial world is still largely untapped when it comes to self propelled booms”, says Gillaux. “It will absorb many machines before we see any sign of saturation. However, the rental market has a low cycle and we do not expect to see a great level of sales in 2002 in that sector.”



NiftyLift boasts a range of about 20 self propelled booms, the 12 metre being the most popular for indoor use. With the flick of a switch, you can transfer from fuel to battery power, which is clean, odourless and silent.

Although the Milton Keynes based manufacturer has been producing booms suitable for indoor use for about eight years, the real demand for them has been in the last five years. “Safety regulations demand that access platforms are utilised indoors and out nowadays”, says UK Sales Manager Tim Ward. “Also, modern building projects tend to use delicate flooring that demands the light chassis weight and white, non-marking tyres that we are able to offer.”

Niftylift apparently likes to think of itself as the Rolls Royce of manufacturers in this field – not producing as many units as most of it’s competitors but an ‘innovator’ in the market place. It will launch a new model to coincide with nearby SED in May and Ward hopes that the announcement will make quite a splash. Details of the new machine are strictly confidential as yet.

With it’s strong design team, Niftylift takes customer requests and comments straight to the drawing board and is confident that new designs will keep flowing and that the industry will not stagnate at the level of utility and technology it has now reached. “Modern steels and computer aided design mean that we can continually improve the range, making chassis lower and narrower and booms with greater height and outreach”, says Ward.

Genie’s 230/20N



The lightest model Niftylift offers at present is the HR10/SP26, at 2150 kilograms for the narrow (1.4 metre) model. It has a 10 metre working height, outreach of 4.50 metres and stowed height of 1.96 metres. The turning radius is 2.25 metres.

The height of competition
Meanwhile, JLG has provided the market with the first electric boom to reach 20 metres working height. The E600 is part of the

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'Generation E' range, developed for use both indoor and out. "One of the designer's major obstacles was to produce a machine that was ideal for indoor use but could provide the flexibility to be transported over rough ground outside and used as an outdoor machine", says Claire Pearson, marketing co-ordinator. "The E600 is the only 60 foot boom suitable for indoor use – it is also 300 kg lighter than a typical 60 foot boom."

The Generation E range is all aimed at indoor work, although Automatic Traction Control and Optional Oscillating Axles are features which allow slab work. Only the smallest of the range, the E300, does not come with these options.

JLG is looking to treble its sales in Europe over the next five years and will significantly extend its range of products. Just launching are the DVL and DVSP – driveable vertical lifts for one man – the DVSP with a stock picking platform. These are geared towards warehouse use, measuring only 75 cm in width and having a zero turning radius. The units weigh under 1000 kilograms.

Other launches are the 800S, a 24 metre telescopic boom which requires no extendible axles and a 41 metre boom which can be transported by road without the need for special permits.

The unit most popular for indoor work from Genie is the Z30/20N, which, according to Product Manager Thor Wickstrom 'demonstrates all that is good in an indoor boom'. He goes on to explain the demands that have led to this model's development. 'Zero tail swing is the biggest challenge for designers. It is virtually mandatory for indoor use booms to have zero tail swing, to reduce the possibility of collision damage to the boom and surroundings. Also, tight turning radius is important and challenging as are emissions, free power sources, maximum outreach and compact chassis and smooth controls.

Genie was the first manufacturer to produce a swing-out engine to aid service and repair. On its popular Z45-25 Bi energy this concept goes further with a 50 degree swing out engine tray. This boom has either DC or diesel power as well as an on board diesel generator which can recharge the unit's batteries within three hours as well as maintain battery charge during normal drive and lift operation.

Wickstrom believes that the market for these booms is far from overloaded. 'Only the larger companies are beginning to fully realise the benefits of compact indoor booms. Like all boom applications, as the market becomes more saturated, their products will become more specialised with material and tool attachments, increased safety and utilisation.

Revamping success
As it concentrates on scissor lifts, Skyjack now manufacturers only one self propelled boom, the SJLB-12T. Developed from the successful SJLB-12, the 10 metre (12 metre working height) boom is designed especially for 'heavy



Upright's AB38 was launched in September 2001

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users' – not fat blokes, but those companies who have regular use for the unit, such as rental yards. Rugged design and AC operation means that it has a low maintenance cost. The 1.2 metre fly jib offers 130 degree articulation and 5.7 metres of outreach. The real difference between this model and its predecessor is that it comes with a trailer frame allowing easy transportation.

Driveable at full height, the SJLB-12T offers a 227 kg capacity for the 1.2 metre x 0.8 metre platform, 30% gradeability and continuous 'Drive and Steer Directional Sensing'.

The SJLB12 was introduced at the end of 2000 to become the manufacturer's most popular model. It's true advantage, says marketing manager Anja van der Berg is the direct electric drive to the axle. "It consumes as much energy as it uses – therefore a long working cycle is possible before you have to recharge it. It also has three jibs – so that difficult accessibility to some areas can be overcome and the basket can be positioned exactly." Added to this, the LU range, which is now made in Skyjack's Hungarian factory, uses components made of a steel which does not rust, cutting down on maintenance time and cost.

Manitou's place in the scheme of things is yet to be established, but the company is determined that even if it cannot match the competition in terms of the quantity of units it turns out, it will be a forerunner in quality. "We are very conscious of how competitive the market place is and we have an awful lot to prove", says Nick Egan, UK product manager. "We will maintain safety and quality as our philosophy and it might take a year or two for us to be fully recognised as a top competitor to more established self propelled boom manufacturers. Our strategy will be to seek out the gaps in the market that demand a low volume production of a specialist machine – which is the type of opportunity bigger manufacturers may not be able to exploit."

The 35-model range will be updated this year – by the end of the month there are likely to be 40 models to choose from and this year will see the official launch of the wheeled versions the 20 and 23 metre booms – at the moment the customer has only tracked units to choose from. These will be in evidence at SED and Egan promises that Manitou's stand at APEX will be worth visiting too.

"The biggest challenge for boom designers is to predict what architects will

get up to next", he continues. "For example, in shopping malls and large office buildings where booms are going to be a manoeuvrable and considerate form of access, the floors are often made of fairly thin marble. Our response to the requirements of indoor users in particular is the launch of an adapted version of the 105VJR."

Manitou's current 105VJR



The E600 from JLG is the first indoor boom to reach 20 metres working height

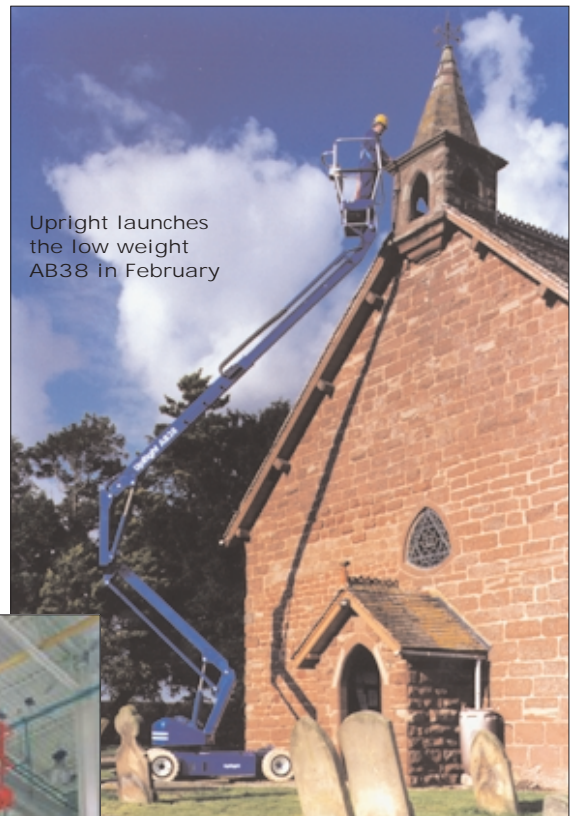
has a 10.5 metre working height, a maximum outreach of 3.2 metres and works on a 24V/270 AH battery. It's capacity is 250 kilograms including two people.

Slimming down

Pinguely Haulotte is the European leading manufacturer of aerial work platforms and ranks third worldwide, with a turnover of 183.5 million in 2000. There are about 45 models in its range, from 7 metres working height to 26 metres and load capacities from 200 kilograms to 900 kilograms..

The company aims to launch several new platforms every year from its thirty strong engineering team. In November 2001, the HA121P was launched specifically to tackle the requirements of indoor work.

With a working height of 12 metres, this all electric boom has a compact height of 1.99 metres when stowed and a width of 1.35m. It can pass through stan-



Upright launches the low weight AB38 in February

dard double doors and provides a manoeuvrable and user friendly solution to working in areas which might be busy or congested. The positive/negative fly jib provides 70 degrees of movement in either direction. Again, long work cycles without the need to recharge are an important selling point.

From Upright is the AB38, a very compact boom, which first emerged on 6 September 2001 from the new Upright plant in Park West, Dublin. New this year is the low gross vehicle weight version, which will offer the same working height of 13.5 metres and platform capacity of 200 kilograms, but manages to weigh in at 2950 kilograms, 17% lighter than the original AB38.

The new model will allow work on upper building levels and sensitive floors and has the extra advantage that it will be acceptable in freight elevators. The turning radius is 0.4 metres and the gradeability 36%. It is wider than the AB38N (Narrow) but will still pass through double doorways.

Upright is optimistic that this new slimline model will be a challenge to 14 metre working height booms as it has a similar outreach of 6.1 metres, yet is cheaper and half the weight, offering a better return on investment. The launch will take place at ARA 2002.

It looks like we will see plenty of development in compact, clean and light booms for indoor use this year, with several 'top secret' products to be launched in the first six months. Keep abreast of new design concepts at events such as ARA, Samoter and SED. ■