

Beyond a niche?

It has been five years since Cranes & Access last looked at the 'SD' or semi self-propelled platform market, during which time it has remained a small but very stable part of the market. The concept has been around for more than 40 years - but just does not seem to develop beyond a niche.

The concept of a boom - usually from a trailer lift - mounted on a light self-propelled chassis that depends on outriggers for its working stability dates back to the mid 1970s when dumper mounted booms became quite common in the UK. Their popularity was probably due in part to being good value for money and ease of transport not to mention fantastic rough terrain capability - at a time when regular self-propelled booms lifts were mostly two wheel drive and dire on poor ground. They also had a good turn of speed compared to regular booms.

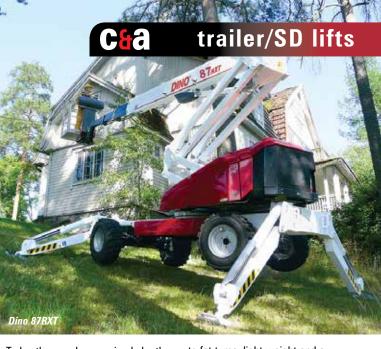
But the concept has never quite made it to the mainstream. Perhaps because of this lack of wider uptake, product development has been slow to non-existent and the model and manufacturer line-up is similar to that available half a decade ago.

Like several other types of equipment - trailer and spider lifts and mini cranes for example - their lack of popularity does not mean

they do not have some excellent features and be the perfect machine for some applications. There are only a handful of manufacturers -Niftylift, Dinolift, Bil-Jax being the principal producers - and sales in Europe are modest at best. However in certain regions such as North America acceptance seems to be better, although it may well be that the sheer size of the market makes it seem that way.

But what do we call it?

This question perhaps typifies the problem? After 40 or so years we still don't have a universally recognised name for this product segment. Niftylift - almost certainly the market leader - uses the term Self Drive or SD, probably due to the fact that it dates back to when the company only made trailer lifts and this one could drive itself rather than needing to be towed? Bil-Jax - owned since by Haulotte since 2008 - entered the market in February 2007 and has never had a product or family name. Its first unit was the SLT-3632T - Self-Propelled **Light Telescopic?**



Today they are known simply by the long-winded name of 'Lightweight Self Propelled Booms' with two models in the range - a 45 and 55ft. And finally Dino just uses the nomenclature RXT compared to XTS for the fully self-propelled model. None of them make reference to the product's main feature over a conventional boom - the outriggers - which as with a spider lift need to be utilised to stabilise and level the machine before the boom is raised.

The dumper chassis from the 1970s and 1980s have long gone, although they could be a handy product for some developing markets, and working heights now range up to 26.5 metres. Overall weight is not dissimilar to a spider lift of a similar height, but they can travel considerably faster. Some such as the Nifty SD210 is particularly quick with a simple form of suspension to make fast travel practical achieving around five miles an hour. These platforms also weigh around a third of a conventional fully self-propelled boom, making them exceptional performers on rough terrain, thanks

to fat tyres, light weight and a fantastic power to weight ratio. Once in position they have the ability to easily set-up and work on slopes thanks to their auto-levelling. fold-down outriggers, while easily spreading their load over a wide area with the use of mats under the outrigger pads.

Driving booms at height can be a risky venture on some ground

Existing users swear by them citing decent travel speeds and low ground pressure as their major advantages. Tracked machines have problems with weight, stability on steep ground, slow travel speed and surface damage so for numerous applications the semi selfpropelled is the best solution and is particularly popular in applications such as golf courses, tree care or for use on large estates. The benefits more than offset the disadvantages of not being able to drive at height - a risky venture on sloping or soft ground anyway - and having a slightly larger footprint.







A selection from our wide range of machines available for sale at Riwal.

In total, we currently have more than 500 used machines available for sale! All machines are in rental ready condition. straight from our well maintained rental fleet & we have the maintenance history available.

For any inquiries or questions regarding aerial work platforms, telehandiers and forklifts, please contact us:

phone: +31 (0)88 - 618 18 11 - email: sales@riwal.com www.riwal.com





HAULOTTE-C10DX

Country: Great Britain 2007 - 10,2 m - 879 hrs Price € 9.250,-



JLG-860SJ

Country: Denmark 2006 - 28,00 m - 3194 hrs Price € 40.000,-



JLG-1230ES

Country: Spain 2008 - 5,6 m - 91 hrs Price € 4.250,-



JLG-2646ES

Country: Denmark 2006 - 9,8 m - 244 hrs Price € 5.250,-



JLG-2646ES

Country: Poland 2007 - 9,8 m - 485 hrs Price € 5.750,-



JLG-2030ES

Country: Denmark 2007 - 8,00 m - 133 hrs Price € 4.250,-



JLG-3394RT

Country: Denmark 2005 - 11,90 m - 1956 hrs Price € 11.000,-



JLG-460SJ

Country: The Netherlands 2007 - 15.80 m - 3106 hrs Price € 19.000,-



JLG-860SJ

Country: Denmark 2006 - 28.00 m - 3275 hrs Price € 40.000,-



JLG-460SJ

Country: The Netherlands 2007 - 15.80 m - 2303 hrs Price € 19.000,-



Country: Norway 2008 - 20,60 m - 5450 hrs Price € 69.500,-



MANITOU-2150MRT

Country: Norway 2008 - 20,60 m - 5250 hrs Price € 69.500,-



MANITOU-2150MRT

Country: Poland 2010 - 20,60 m Price € 84.500,-



MEC-1932ES

Country: Great Britain 2008 - 7,79 m - 167 hrs Price € 3,650,-



Country: The Netherlands 2008 - 15,00 m - 1051 hrs Price € 14.250,-



SKYJACK-9241

Country: The Netherlands 2009 - 15 m - 1280 hrs Price € 17.250,-



SKYJACK-9250

Country: Great Britain 2007 - 17,2 m - 1240 hrs Price € 13.650,-



Country: Great Britain 2007 - 11,8 m Price € 4.500,~



UPRIGHT-TM12

Country: Denmark 2007 - 5,83 m Price € 3.250,-



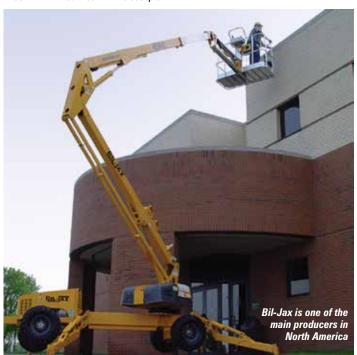
UPRIGHT-MX19

Country: Great Britain 2007 - 7,8 m Price € 3.500,-

trailer/SD lifts

	Work height metres	Max Outreach metres	Platform capacity	Jib/ articulation	Dimensions metres	Weight	Drive speed km/hr	Grade	Boom*
Bil-Jax 45XA	15.5	8.2	226kg	Yes/150 degrees	5.5x1.67x1.98	2,358kg	7.6	45%	Α
Bil-Jax 55XA	18.7	10.2	226kg	Yes/150 degrees	6.45x1.73x1.75	2,721kg	4.8	45%	Α
Dino 205RXT	20.5	12.6	215kg	No	5.85x2.11x2.41	4,200kg	4.7	35%	Α
Dino 240RXT	24.0	12.1	215kg	No	6.65x2.11x2.41	4,400kg	4.7	35%	Α
Dino 265RXT	26.5	11.7	215kg	No	7.17x2.11x2.41	4,500kg	4.7	35%	Α
Nifty SD120T	12.65	6.1	200kg	No	3.9x1.56x1.95	2,260kg	10.0	45%	Α
Nifty SD170 4x4	17.1	8.7	200kg	No	5.6x1.6x2.1	2,750kg	8.3	30%	Α
Nity SD210 4x4	21.3	12.8	225kg	Yes/150 degrees	6.15x2.05x2.25	3,950kg	7.5	45%	Α
Nostolift XS190	18.7	8.0	230kg	Yes	6.3x2.1x2.3	3,700kg	3.6	35%	T
Nostolift XS240	24.0	12.3	230kg	Yes	6.95x2.1x2.3	4,850kg	5.0	35%	T

*Boom A = articulated T = telescopic



Given the benefits you would have thought this type of platform would be a sure-fire winner selling in far greater volumes than they do. Even before you add in factors such as easier transportation, its ability to drive on delicate ground, including grass without damage and the ability to work on suspended slabs and other weight sensitive surfaces. What else does the 'spider lift on wheels' need to do to be the 'musthave' access platform?



A bit of History

For a full history on the development of this type of machine take a look at the October 2011 issue of Cranes & Access which we covered in great detail. As we have already said, it is one of the oldest types of self-propelled platforms with its roots going in the articulated booms on 4x4 site dumpers from the likes of Benford, Winget and Thwaites. Moving forward almost 50 years to today and most of the manufacturers have one major thing in common, they started out and still produce trailer lifts. The trailer lift's boom, whether articulated or telescopic, lends itself to mounting on a simple all terrain chassis making this type of lift relatively easy to design and produce, keeping weight and costs to a minimum. One company we have not mentioned is Finland-based manufacturer Nostolift, given that



its volumes are questionable and its sales network negligible. The company took over the business in 2006 from Kesla which abandoned the business through poor sales after volumes dipped as low as 50 units a year. The Kesla product was based on the earlier Scanlift which although designed and built in Europe, had sold very well for a while in North America principally to golf courses and theme parks etc....

Looking at the table above shows just how few products of this type are available which must also have an impact on the relatively low level of demand compared with other booms. There are just 10 models from four manufacturers and the smallest by a significant margin is the Nifty SD120T with a working

height of 12.65 metres. Next is the Bil-Jax 45XA with a 15.5 metre working height but the majority of products are between 18 and 24 metres with Dino's 26.5 metre 265RXT the largest. Three manufacturers are European with Bil-Jax producing in North America.

The outriggers naturally reduce the need for heavy counterweight giving the low overall weights, particularly true for the Bil-Jax models - the 55XA having a working height of 18.7 metres yet weighing just 2,721kg. Platform capacities are sufficient for two people, ranging from 200kg to 230kg but looking a little on the low side as boom lift capacities edge upwards in light of the latest standards.

NostoLift

While some think the machines originated in the UK, the modern All-Terrain chassis was probably first found in Finland in the early 1990s when forestry equipment manufacturer Kesla introduced an 18/18.5 metre working height telescopic boom lift on a 4x4 all



trailer/SD lifts

terrain chassis called the Scanlift SL180/185. After chasing overseas sales its deal with a major access equipment distributor failed and it took back control and rebranded them as Kesla XS models. The platforms are still built in Finland by Nostolift Access Platform with two models - the 19 metre Nostolift XS190 and the 24 metre XS240 both of which have four wheel drive and four wheel steer.

Niftylift

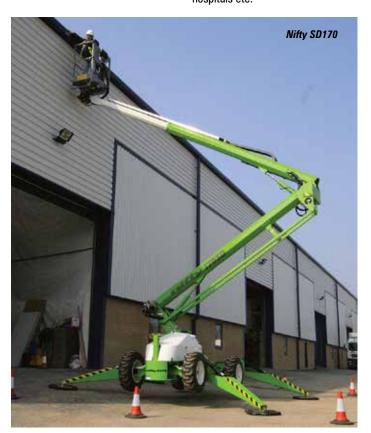
In the mid 1990s UK-based Niftylift entered the market after being approached to produce a machine for work on the new Schiphol airport in the Netherlands. The contractor was looking for a self-propelled, 17 metre working height platform that was lightweight and could meet low floor loadings. Using its Nifty 170 trailer superstructure it produced a special unit that developed into the SD170 and subsequently the three model range of today that includes the SD120 and SD210.

The smallest, the SD120T uses the articulated lift mechanism - single riser and telescopic upper boom from the popular HR12 and T120T compact trailer lift. It has a 12.65 metre working height and 6.1metres of outreach yet weighs just 2,260kg. The larger 17.1 metre working height SD170 has the same working height and outreach as the Nifty 170

trailer lift but has the driveable 4x4 chassis. At 2,750kg it is two tonnes lighter than Niftylift's HR17 Hybrid fully self-propelled boom lift and a third of the weight of some 50ft boom lifts on the market.

The largest model in the range - the SD210 4x4x4 - is a totally different beast and according to Nifty, the 'ultimate' Self-Drive machine featuring fully independent suspension with four wheel drive and four wheel steer. When fitted with turf tyres the unit can easily travel over sensitive ground without damage thanks to its larger tyres, suspension and low gross vehicle weight of just 3,950kg almost half that of any articulated self-propelled boom on the market. Yet it can comfortably travel at speeds of up to 7.5kph and climb slopes of up to 45 percent. It offers 21.3 metres of working height (64ft platform height) with 12.6 metres of outreach, 7.5 metres of up-andover reach and the versatility of a 150 degree articulating jib, not to mention standard platform rotation.

The two smaller Niftylift SD machines have full hydraulic controls, levelling outriggers and are available with petrol, diesel, battery and Bi-Energy power, making them ideal indoor/outdoor machines as well as for working in sensitive areas such as private homes or hospitals etc.





Bil-Jax

The last entrant into this market is North American-based Bil-Jax when it joined early in 2007. While it started with a three model line-up it has ceased making the straight telescopic 36XT and now just has two articulated boom lifts with jibs - the 15.5 metre working height 45XA and the 18.7 metre 55XA. The Bil-Jax units are particularly light weight, simple and rugged machines with a good specification.

Dinolift

Dinolift and Niftylift are the only European companies with any serious volume. Dinolift's RXT models all have working heights or more than 20 metres. Smallest is the Dino 205RXT which offers a 61ft platform height or a working height of 20.5 metres the 240RXT has 72ft platform - 24 metres working height and the largest and most recently introduced is the 265RXT with an 81ft platform height - 26.5 metres working. All use a heavyduty articulated dual pantograph type riser and a four section telescopic upper boom. Outreach varies depending on capacity but ranges from 12.6 metres on the 205RXT to 11.7 metres on the 260RXT. All three models have a high specification with 360 degree continuous slew, 180 degrees of

platform rotation, four wheel three mode steering and high lift auto levelling outriggers.

As you might expect from such large machines, gross vehicle weights are higher, ranging from 4,200 to 4,500kg, but still come in at less than 30 percent of the weight of most fully self-propelled boom lifts, which are typically in the 15,000 to 16,000 kg range. Gradeability is 35 percent and speed is similar to typical self-propelled lift levels of just under 5kph.

A spider lift on wheels?

Despite the lack of choice, users and rental companies are surely overlooking one of the most versatile and cost effective platforms available on the market today. Spider lifts are now becoming increasingly popular but are slower, undoubtedly more expensive to purchase, yet offer very little more than what is essentially wheeled version of the spider lift, although to be fair they do not share the ultra-compact dimensions of the spider lift. For tree work though this is hardly an issue! While the selfdrive platform may not be as sexy as the spider lift perhaps looking rather basic, its simplicity and some excellent features makes it well worth a second look?



