

A new force
Now available
in the UK



SANY

crawler cranes

In the UK contact

Watson & Hillhouse Ltd. Whitehouse Road,
Ipswich, Suffolk. IP1 5NT UK

Tel: +0044 (0) 1473 748 652.
Fax: +0044 (0) 1472 240 090.
www.w-h.co.uk



SANY

Heavy Industry Co. Ltd.

Tel: 0086 731 4031642

Fax: 0086 4031527

Cell No: 07942 071655

www.sany.com.cn

Spiders from Mars, Minis from Venus.

The general acceptance of the spider crane over the last few years has grown considerably - so much so that it now has its own definable sector. Cranes & Access looks at this increasingly useful lifting tool, written off by many traditional crane users as a 'toy' when it first appeared.

It is two year's since C&A last covered the mini crane market in any detail. At that time there was still some confusion as to how to define a mini crane and if fitted with spider-type outriggers, whether they should in fact be called spider cranes.

The continued impressive growth since then has certainly made it much easier to define the sector - spider and mini tracked cranes - to the point that this feature solely covers spider cranes rather than small tracked cranes from IHI and Hitachi or Maeda's largest the LC785C, small tracked compact cranes from Valla, or the wheeled pick and carry cranes from Valla and Galizia, available now from GGR-Unic.

It's all in the name - spider cranes must have outriggers - either spider-type or dropdown. However in an effort to try and define a mini crane exactly, we carried out a survey on the Vertikal.net website about a year ago. The results were not conclusive with just over half saying any crane under 10 tonnes and nearly a third saying any crane under five tonnes. Small tracked cranes with outriggers (spider cranes) polled about 20 percent of the votes.

Like most things compact, the spider crane originated in Japan, where the compact tracked chassis allowed cranes to be designed to cope with its congested construction sites and internal lifting applications. Unfairly dismissed as a toy/joke by many of the 'old school' crane hirers, the spider cranes brought in pioneering design, precision manufacturing and advanced materials technology resulting in a high performance, yet incredibly compact unit.



For their lifting capacities, spider cranes are incredibly compact.

The uses for these machines are endless and include new build and refurbishments, working between floors, below ground and roof-top



C&A

spider cranes

operation, monument lifting, landscaping, marine lifting, confined access, glass installation, machinery removals and installation, exhibition set-up and dismantling, tunnel operations, shopping mall and retail park installations, restoration projects and waterways maintenance to name but a few and new applications are being discovered every day.

machines are being discovered on a daily basis, the new industries taking on board the concept and using the products on the ground are finding time and cost savings which help the concept gather pace. The major successes have traditionally come from internal work and glass handling, paneling, steelwork and cladding industries but nowadays thanks partly to



Using Hiab cranes, Reibsamen plans to enter the UK/Ireland market later in the year.

Despite the growth in the sector, there are still just a handful of manufacturers offering spider cranes (see table page 36) primarily headed by Japanese manufacturers Maeda and Unic. The Italians come next followed by a couple of specialists - Reibsamen in Germany and Reedyk in Holland.

On a global scale Maeda claims market leadership with about 75 percent market share. In Europe it is far closer, with Unic probably a nose or two ahead of Maeda with the two companies sharing around 85 percent of the market between them. As we have already said the new uses for these versatile

the heightened awareness of the products and also the increased availability, it is not uncommon to find these cranes being used in nearly all sectors of work.

Maeda is distributed in Europe by Anglo/Swedish company Kranlyft since 2001 and claims to have the largest working population of spider cranes in Europe. Kranlyft has been busy recently boosting its distributor network appointing Hamamcioglu, the Bobcat dealer, as distributor for Turkey, UAB Agratekas as distributor in Lithuania and Latvia in January and more recently L-Tech as its distributor in Russia.

spider cranes C&A

Most other European countries are covered including Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Italy, Norway, The Netherlands, Ireland, Spain, Switzerland, Slovakia and Scotland from its main depots in England and Sweden. Talks are also currently underway with potential distributors in France and other remaining European territories.

A comment from the chairman of the new Turkish distributor Münir Hamamcioglu sums up the effect spider cranes are having: "These small but magical machines have opened up new horizons to our business vision, in which we found unending opportunities for its uses in Turkey, especially in the restoration of historical buildings, archeological excavations and world heritage sites."

Turkey probably has many more archeological excavations than the UK but similar to spider access platforms covered in the last issue of C&A, these machines are moving from being used as a last resort when more traditional methods have



failed, to being a readily available and cost-effective option.

Specialist lifting and access company Tracked Access has seen an increasing demand for compact cranes and expects continued growth throughout 2008. According to Phil Lomax, its experience with spider access platforms has definitely helped with the cranes and they often find the spider booms working alongside its spider cranes. "There are a number of similarities including point load considerations, height/width/length restrictions and often difficult tasks that require time and thought!" he said. Exact UK sales figures for these machines are not readily available

but the two global leaders - Maeda and Unic currently dominate sales in this country taking well over 90 percent between them.

The Maeda spider crane range is currently four strong - it also has the larger LC785 mini crane - and spans maximum lifting capacities from 1 tonne to 4 tonnes. We are hearing that this is set to increase this year with a further three machines to be added to the range increasing the maximum capacities further still, however we are not sure at the moment whether they are to be spider or mini cranes.

The spider MC range are all dual-fuel ready, either a combination of petrol/LPG or diesel/electric giving the option for both indoor and outdoor use. Customers can also opt for a three phase electric option on the smallest

capacity MC104. The entire MC range can be operated by remote control, either hard wire or radio remote which has proved to be a useful feature for end users and helped in the rise of the concept as a whole. As has the two year Maeda warranty which gives increased confidence in the quality of the product.

The other major distributor of spider cranes is GGR-Unic, which was originally a user of Maeda cranes as glass contractor GGR Glass. It purchased several units for its own use and in between jobs, rented them out. Seeing a longer term potential for the product GGR approached Unic's parent, Furukawa in Japan, which was initially not interested in investing in Europe nor with the problems involved with obtaining CE approvals.



The Unic URW-706 is the largest spider crane from any manufacturer to date.



LIFT ANYWHERE YOU NEED!


• Glazing


• Steel erection


• Maintenance


• Timber roofs


• Industrial plants


• Artwork moving





CONEXPO 2008
meet us at booth
RL-41030



Imai srl Via Campadone, 7 Z.I. 31014 Colle Umberto (TV) Italy tel. +39 0438 430171 fax +39 0438 430115 www.jekko.it e-mail info@jekko.it



City Lifting
- Bauma 706

a network of authorised distributors in Europe, the Middle East and Africa and rivals Kranlyft for market leadership.

Unic currently offers a range of six cranes from the 995kg URW-094 to the world's largest spider crane the URW-706 which has a six tonne capacity at three metres and a hook height of 19.5 metres. The new machine is huge in spider crane terms yet measures just 1,600mm wide, still narrow enough to gain access through a standard double doorway. For added lifting flexibility, the 706 also features an optional 3.1 metre long stowable fly jib, together with an optional searcher hook. The progress that GGR-Unic has made was demonstrated by the fact that it sold and delivered the world's first unit of the 706, after City Lifting purchased it as an addition to its varied fleet of cranes.

Apart from this top end machine, the Unic and Maeda range is quite similar. In fact, Maeda has its 4.9 tonne capacity non spider LC785C mini crane which gets closer to the Unic 706 but still falls short on lift capacity, boom length and width. However the LC785 does have a 2,000kg pick and carry capability

GGR went ahead and purchased a few units, obtained CE certification and become the European master dealer, establishing Unic Cranes Europe as a division of GGR Glass. It now supplies, services and develops Unic mini cranes through

C&a

spider cranes



Despite very similar performance, the Maeda MC285 is significantly wider than the Unic 295.

(as does the Maeda MC405 with 500kg), but as it is a heavier tracked mini crane this is only to be expected. It will be interesting to see which way Maeda goes with its new models. Obviously to compete head to head with Unic it needs a larger (six tonne?) capacity machine, but will this be a spider or mini crane? And with an emphasis on accessibility and narrow width, its best selling MC285 has very similar performance to the Unic URW-295 but has a wider outrigger spread and is 750mm wide compared to an extra-narrow 600mm for the Unic.

The growing market and success of the Japanese manufactured machines has resulted in several European companies - primarily Italian such as Imai, Italmec, Kegiom and Palazzani - entering the market although on a much smaller scale.

Imai's initial models were all specials designed to meet the needs of Italian glass and curtain walling contractors working around the world, including a number of them which have been working on projects in London.

Increased production facilities has boosted production of Jekko machines to 15 cranes per month.



NH Introducing M.Y.2007 NH

The MAXILIFT range can work safely with 370° of rotation (for 200-230-260-300-350)

cobra

MAXISTAB

maxilift

Next Hydraulics

Via Mediterraneo n.6 - 42022 BORETTO (RE) - ITALY - tel. +39.0522.963008 fax. +39.0522.963039

www.maxiliftcrane.com - info@maxiliftcrane.com

spider cranes C&a



Jekko launched its updated SPD500C at the SAIE show last year

The company now offers a range of standard machines, which look increasingly sophisticated. As the market has grown IMAI has expanded this area of its business and has started selling its new series-production cranes under the Jekko brand and widened the range of models that it offers. The company, which has only been building spider cranes for about six years, is adding a new 400 sq metre assembly facility in Italy to boost production to 15 cranes per month. With the UK and Irish markets now the largest in Europe for this type of crane the company says that it needed a presence to help it to win a respectable market share and ensure aftersales support. It has established Jekko UK Ltd run by Steve Mayes. Also involved is Mck Clark of Clark Cranes who is building up a mini crane rental fleet and can already offer eight machines including the new SPD500.

Jekko's five model line-up includes the biggest crane the SPD500C. With a five-section main boom, the crane can lift a maximum load of 1.75 tonnes, 350kg at 10 metres or 650kg to a height of 10.7 metres. The boom can carry a four metre, triple extension jib to reach a tip height of 11.5 metres at about a

5.5 metres radius, at which it can lift 600kg.

Another Italian manufacturer is Kegiom Lifting which launched its latest machine, the 350 E4 Plus at its first Bauma last year. Its approach is different in that it uses a standard articulated truck loader crane with a narrow outrigger base - just 1.7 metres wide. The company claims that it can lift more than two tonnes - the best in its class - and also pick and carry up to 1.25 tonnes. Kegiom uses a Hinowa undercarriage and either Cormach or Maxlift cranes.

The Dutch-based Reedyk Compact crane C3405 follows a similar concept but uses swing-out outriggers which are a maximum

Dirk Reedyk showing off his new C3405.



of 2.9 metres long from the centre of the machine. Using a lightweight Amco Veba crane, it has a maximum capacity of 1.75 tonnes and can lift 290kg at 10.9 metres. Standard equipment includes a built-in generator, wireless remote control and GPS/GSM for remote trouble shooting and information access.

A third producer, Reibsamem from Germany also follows the truck

at Haydock in late June.

Big spider lift manufacturer, Palazzani, in addition to the 10 and 15 tonne pick and carry cranes in its portfolio, has a full range of spider access platforms/cranes. All Palazzani spiders have the option of a 200kg winch that is interchangeable with the basket. Two models - the XTJ30 & XTJ35 - have a 600kg winch option.



Maeda claims seventy five percent of global market share.

loader crane route, using Hiab cranes. The company, which like GGR got into the spider crane business through glass handling, has plans to enter the UK/Ireland market later in the year and has booked a stand at Vertikal Days

To fit the winch, the basket needs to be removed - in all this operation takes less than an hour to complete. The ability to lift 600kg, 30 metres high from a compact tracked chassis is one of the Palazzani spider cranes USP's.



Kegiom launched its 350 E4 Plus machine at Bauma

Experience the Progress.

The new range of LB-Series Drilling Rigs. Made of reliable Liebherr standard components. Massive design for long lifetime. Advanced Technologies are our Business.



Liebherr-Werk Nenzing GmbH
P.O. Box 10, A-6710 Nenzing
Tel.: +43 50809 41-473
Fax: +43 50809 41-499
www.liebherr.com

LIEBHERR

The Group

UNIC

CRANES EUROPE



Discover incredible power and reach in the most confined of working environments. With an overall width from 600mm, **UNIC** mini cranes are small enough to get in there, and big enough to get the job done.

URW-094 0.995t x 1.5m (boom length 5.49m) **URW-095** 0.995t x 3.5m (boom length 8.65m) **URW-295** 2.9t x 1.4m (boom length 8.65m) **URW-376** 2.9t x 2.5m (boom length 14.61m) **URW-506** 3.0t x 3.4m (boom length 15.71m) **URW-706** 6.0t x 3.0m (boom length 19.2m)

For more information about UNIC, please phone 01844 202 071, visit the UNIC Cranes website www.unic-cranes.co.uk or alternatively, email the UNIC Cranes sales office: sales@unic-cranes.co.uk

www.unic-cranes.co.uk



The Palazzani XTJ30 (above) and the XTJ35 have 600kg winch options and can lift to 30 metres.

Benelli Gru and Italmec are two other Italian manufacturers that dabble in this market but are not particularly active outside of Italy and have very little, if any, crane presence in the UK.

are undecided as to whether to buy, while their fleets (almost 80 units in GGR-Unic's case) can also support those rental companies that do decide to dip their toes into this market. It is interesting to note that powered access rental companies have embraced and done better in this market than traditional mobile crane hirers. An added benefit of having their own fleets is that it creates a steady stream of good, used models for those wishing to buy but with a smaller budget.

After all, the key to wider acceptance and usage of these machines is availability, the easier it is to rent them the more companies do.



C&a spider cranes



Benelli has very little presence in the UK.

The two major players in the UK market - Maeda and Unic - both offer sales and rental of machines. Kranlyft entered the rental market in mid 2006 after limiting its activities to sales only for many years. Unic did it the other way round. In theory both run the risk of competing with potential customers however their rental fleets allow them to rent to customers who like the concept but



A Unic machine transported on a barge in Venice

mini cranes and a couple of Valla pick and carry models. Until now it has mainly concentrated its efforts on the Irish market, although it plans to eventually add them to its UK operations.

Hi-Lift of Swindon also found that spider cranes mixed well with its aerial lift rental fleet when it formed its Eco-Lift division with the purchase of 10 Maeda cranes around 18 months ago. It ordered them with a number of environmentally friendly options to add to their appeal for internal lifting applications. "We don't do things by halves" said Hi-Lift's managing director Paul Richards, "we hit the ground running with 10 fully operational Maeda's and a team of fully trained staff, capable of providing effective technical advice for our customers."

Tracked Access currently has a fleet of 10 Maeda spider cranes including an MC405 with fly jib, MC305's and MC285's. The majority of work is with glazing/cladding companies where the machines are working from a concrete slab.



Easi-Up Lifts (Height for Hire in Ireland) was one of the first access companies to build a significant spider lift fleet. It now runs around 30 units along with a number of



Full safe load indicator on a Unic 376 and 506.



A small Maeda working in an Italian chapel.

"The low point-loads and compact dimensions combined with excellent lifting capacities are the most important features of these machines," said Lomax.

“Other applications include the construction of timber framed buildings, lifting trees into position, lifting steel plates etc.”

Several mobile crane hire companies have recently added spider cranes including Emerson Crane Hire of Dagenham, Essex. The company says that it has been testing the market for a while on a rehire basis and decided to add its first two units, a Unic 295 and Unic 396 to its fleet to further test the market and to provide an additional service to its clients.

If all goes as expected Emerson will build a small fleet of mini cranes and hopes to have six units within 18 months or so. Having looked at the options on the market, Emerson chose Unic due as much to its distributor. The fact that Unic has a large rental fleet that it could pull on was significant in its decision, as was the service the company offers.

“At the end of the day the pricing and specification between the final

models we looked at was similar, but Unic was able to work with our last minute demands - forced on us by our customers. They provided the crane and the training when we wanted them and were very easy to deal with,” said Steve Kirby of Emerson.

The first crane has gone out on a six month rental contract, working inside an 18 storey apartment block which is undergoing refurbishment. The crane is erecting internal steel work and concrete panels and for general material handling.

From feedback we received, it feels as if the spider crawler crane is finally coming of age and moving into the main stream lifting market. It has been on the cards for a long time but with more and more hirers and end-users recognising the potential, these machines will become a regular sight wherever heavy items have to be lifted in tight areas.



Emerson has added a Unic 295 and 396 to its fleet to test the market

Make	Model	Max capacity @ radius	Weight	Max lift ht	width	max outrigger spread l x w	Max working radius	Power	Pick and carry
Heila	HRC 999	999kg	1800kg	8.5m	790mm	3000 x 2710	7.4m	Petrol/diesel	No
Jekko	SPD 160C	800 @ 2.0m	1000kg	5.5m	780mm	2300 x 2300	4.2m	Petrol	No
Jekko	SPD 265C	1200 @ 2.0m	1700kg	7.0m	800mm	2750 x 3650	5.9m	Diesel/electric	No
Jekko	SPD 360C	1800 @ 2.0m	2200kg	9.3m	800mm	4000 x 4000	7.6m	Diesel/electric	No
Jekko	SPD 500C	1750 @ 2.4m	2800kg	10.3m	1100mm	4300 x 4300	9.3m	Diesel	No
Jekko	SLM 1000	2000 @ 4.4m	4700kg	12.8m	1400mm	4000 x 4000	13.0m	Diesel	No
Kegiom	350 E4	2050 @ 1.6m	1700kg	8.2m	750mm	4500 x 4500	6.8m	Petrol	No
Kegiom	350 E4 Plus	2050 @ 1.6m	2400kg		1020mm	1700 x 1700	6.8m	Petrol	Yes - 1250kg
Kegiom	8700 E	2880 @ 2.5m	3520kg	11.5m	1300mm	5300 x 5300	13.71m	Diesel	No
Maeda	MC104CR	995 @ 1.1m	1050kg	5.5m	600mm	3400 x 3300	5.10m	Petrol	No
Maeda	MC285CRM	2820 @ 1.4m	1720kg	8.7m	750mm	4580 x 4530	8.21m	Diesel	No
Maeda	MC305	2980 @ 2.5m	3900kg	12.52m	1280mm	4888 x 4396	12.16m	Diesel	No
Maeda	MC405CRM	3830 @ 2.7m	5600kg	16.8m	1380mm	5786 x 5118	16.0m	Diesel	Yes - 500kg
Palazanni	Ragno XTJ30/C	600kg	6200kg	21.0m	1950mm			Diesel/electric	No
Palazanni	Ragno XTJ535/C	600kg	7800kg	26.0m	1500mm			Diesel/electric	No
Reedyk	C3405	1750 @ 2.2m	2850kg	12.8m	780mm	5800 x 5800	10.9m	Diesel	No
Reedyk	C3410	3840 @ 2.2m	5500kg	16.5m	980mm	5800 x 5800	13.5m	Diesel	No
Riebsamen	Euro Multi Crane	1820 @ 1.4m	1300kg	6.0m	600mm			Petrol/electric	
Riebsamen	Power Multi Crane	2310 @ 1.5m	1600kg	8.0m	650mm			Diesel/electric	
Riebsamen	Maxi Multi Crane			10.0m	650mm			Diesel/electric	
Unic	URW-094	995 @ 1.5m	1000kg	5.6m	595mm	3340 x 3210	5.17m	Petrol/LPG	No
Unic	URW-095	995 @ 3.5m	1850kg	8.8m	600mm	3885 x 3935	8.14m	Petrol/LPG elec./diesel	No
Unic	URW-295	2900 @ 1.4m	1850kg	8.8m	600mm	3885 x 3935	8.41m	Petrol/LPG elec./diesel	No
Unic	URW-376	2900 @ 2.5m	3850kg	14.9m	1300mm	4565 x 4440	14.45m	Diesel/electric	No
Unic	URW-506	3000 @ 3.4m	4840kg	16.0m	1400mm	5900 x 5940	15.52m	Diesel/electric	No
Unic	URW-706	6000 @ 3.0m	7920kg	19.5m (22.7m with jib)	1600mm	5900 x 5950	18.6m	Diesel/electric	No