

on the new model, while a hill hold feature assists with hill starts.

The LTM 1230-5.1 has one engine to power both the crane and the carrier. This involves a mechanical shaft powering the superstructure. A drive shaft runs from the engine in the carrier, via bevel gears, up through the centre of the slewing ring to the pump distributor gear in the superstructure. An add-on programme in the drive concept aids with fuel-efficiency, says Liebherr. This means that the complete pump drive can be disconnected automatically when the engine is idling and then quickly reconnected by the intelligent controller when required.

two front axles and one rear axle, while the undercarriage and superstructure are driven by an engine installed on the superstructure. This setup, Tadano says, distributes the main boom's weight more efficiently on the axles and shifts weight to the rear.

The ATF 60G-3 has a 20 tonne hook block in its 10 tonne axle load configuration, which enables it to lift up to 17.1 tonnes. In addition, the three-axle crane has been optimised for axle loads of 12 tonnes, 13 tonnes and 16.5 tonnes, says Tadano.

The engine is at the rear which means the cab is quiet, Tadano explains. Also, because the engine and exhaust system are mounted behind the superstructure cab, and always pivot along with it, the operator is not exposed to exhaust fumes, it adds.

The crane's boom extends from 9.5 to 48 m, with a boom extension of between 1.7 m and 7.4 m. The maximum sheave height is 58.4 m and the ATF 60G-3 has a maximum radius of 44 m. The 260 kW (354 hp) engine on the superstructure is from Mercedes Benz and is Euromot IV - EPA Tier 4f compliant.

The crane's dimensions (11.18 m long, 2.66 m wide and 3.68 m high) mean it is suitable for jobs with limited ceiling height, such as in halls or refineries says Tadano.

New Grove AT

Wisconsin, USA-headquartered crane manufacturer Manitowoc has unveiled its

The GMK4090 from

Manitowoc

new all terrain crane, the Grove GMK4090, at its Crane Days event at its Shady Grove headquarters, Pennsylvania, USA, in June.

The crane, which will be available globally, has a 51 m, six-section Megaform boom that utilises Grove's Twin-Lock pinning system. A 15 m bi-fold swing-away jib can be extended with a 6 metre boom extension for a total jib length of 21 m.

The GMK4090 can travel with up to 18.3 tonnes (20.2 US tons) of counterweight and transport up to 9.1 metric tons (10 tons) whilst remaining within the limit of 12 tonnes (13 tons) per axle without requiring an additional transport truck. The distance between the front and rear axle groups was extended beyond the 2.4 m minimum requirement for bridge laws in the USA.

The crane has a width of 2.55 m and a minimum tail swing of only 3.5 m, so it stays within its maximum outrigger width. Manitowoc's Maxbase variable outrigger setting is available as an option.

The GMK4090 has Manitowoc's Crane Control System (CCS), that has been standardised across the company's crane offerings and is featured on every new model.

The crane was introduced to customers and dealers at the company's Crane Days event at its Shady Grove headquarters, Pennsylvania, USA in June.

City style

Towards the end of 2017 crane manufacturer Terex Cranes launched the three-axle Demag AC 45 City to succeed the AC 40 City in the 45 tonne lifting capacity class.

> The crane is compact and has a short base boom of 7.8 m. This, combined with options like the boom head traverse for increased lifting heights, means the AC 45 City can work in buildings with a relatively low clearance while still keeping its boom at a steep angle, enabling it to lift heavy

loads indoors, Terex says.

"The Demag AC 45 City is easy to operate," elaborates Michael Klein, manager product marketing for all terrain cranes.

"An integrated lifting capacity radar calculates the working range within an

> angle of +/-30° and shows it on the IC-1 Plus control system's monitor. It also has an automatic counterweight detection function that the crane operator needs to confirm.

"The IC-1 Plus control system also means the new Demag crane is able to work

Now available

Two years after its launch at Bauma 2016, the ATF 60G-3 from manufacturer Tadano is now available for sale. According to Tadano, the 60 tonne capacity ATF 60G-3 has a drive concept designed to optimise weight distribution, resulting in a 10 tonne axle load configuration. To achieve this required a redesign of the axle layout and placement of the engine, says Tadano. This means the ATF 60G-3 has

SARENS GOES SHOPPING

Heavy lift and transport specialist Sarens has bought 44 new Demag all terrain cranes from Terex Cranes which will be used to boost the company's presence in London and Paris and to help the company renew its European fleet. The cranes will be built and delivered throughout

2018 and 2019. The order includes: 12 Demag AC 100-4Ls; ten Demag AC 130-5s; seven Demag AC 60-3s; seven Demag AC 220-5s; six Demag AC 55-3s; and two Demag AC 160-5s. This order follows one for 15 Demag AC 130-5s, placed earlier in the year.

From left to right: Jan Sarens, Thomas Schramm, Marc Sarens, Ludo Sarens, and Steve Filipov

