



LONG-TERM COMMITMENT

Dean Barley was promoted to chief executive officer of Tadano America prior to the Conexpo exhibition in Las Vegas in March. Mark Darwin caught up with him and Toshiaki Ujiie, chief executive officer of Tadano Ltd during the show.

Following its acquisition of Demag in 2019, Tadano has been working on integrating the two quite different companies. Jens Ennen was appointed chief executive officer of the European business in the run up to the completion of the acquisition and for the next three years was responsible for bringing the two companies together. Ennen left the company at the end of 2022 to be replaced by Kenichi Sawada. This seemed like a conscious move by Tadano chief executive Toshiaki Ujiie to go back to an all Japanese senior management team. Until that is the appointment of Dean Barley.

When asked about these developments: "Is Dean not Japanese?" said Ujiie jokingly. "Seriously, no I don't have any plans to make Tadano a Japanese company, we are a global company. What we need is consistency - consistent quality, a consistent supply chain and on time delivery. With this in mind I am trying to assemble my best team. Although we have many new cranes including a new truck crane at the show, the most important news is the appointment of Dean as chief executive officer, as this shows our commitment to the market."

Are you happy with the progress made with the integration since the acquisition?

"There have been several major disruptions such as Covid and also the conflict in Ukraine and the progress has been slower than expected," says



Toshiaki Ujiie

Ujiie. "This year -2023 - is the last in our three year mid-term plan. Already we have announced this year's projection, but it hasn't hit the three year plan, it has been slower than expected for many reasons, but we are on the way."

"Despite this we have made a lot of progress in the business," adds Barley. "We have put a lot of new systems and technology in place and not as a result of remote working because of Covid, we were already on that journey. Part of my transition when I joined Tadano in August 2019 was to truly integrate the Demag business in Pan America Region into Tadano America Corporation and under the direction of Ujiie, create the Tadano feel for our customers. A lot of companies make acquisitions and just bolt the company on



Dean Barley

leaving everything like it is. We however did a full integration such as moving parts businesses and people, investing money on training and technology including building a call centre."

"Yes, we have had disruptions with Covid like everybody else, however the difference between Tadano and a lot of other companies is that we remained committed all the way through and we did not take our foot off the gas pedal. My responsibility was to ensure the company was set up correctly for future growth. When we integrated Demag into Tadano North America, the business grew substantially. Although we had systems in the business we had to apply technology to achieve sustainable growth."

"We have since taken a lot of the things and



lessons learned from North America and are sharing them not just with Germany but other parts of the group around the world. We have lots of processes and similarities in terms of accountability tools and metrics to drive the company in the right direction that we are consistent across various locations."

So, if there are two systems for the same thing, which is used - Tadano or Demag?

"One example is the differing shape of the Tadano and Demag crane boom," says Ujii. "Both engineers have their own reasons and belief in their shape and there are good reasons for both. However, if we look at the production efficiency of the boom one is much easier and quicker as it does not require a change of jig which adds to the production time and requires more electricity."

At the time of the acquisition, some questioned whether it was good 'deal' for Tadano.

"There was a true desire within Tadano to purchase the Demag business because it allowed for the acquisition of technology to help support the growth of the Tadano business long term," says Barley. "You have to ask the question - if we hadn't purchased Demag, how much would we have spent developing the technology we are using today? It was a huge opportunity for us."

Some of that technology was on the Conexpo stand in the shape of the 450 tonne AC 7.450-1 AT crane.

"This crane is the first true combined product by both engineering teams from Tadano and Demag," says Barley. "The crane actually runs the Demag IC-1 platform - IC-1 Plus control system and IC-1 Remote telematics - instead of the Tadano AML-C crane control and Hello-Net telematic management systems. Tadano would have had to

invest heavily in that technology in order to take the business forward in the long term. We actually bought the technology to develop in the long-term and that puts us on the road to become number one."

How important is it to become the number one crane producer?

"We are already number one in Rough Terrain cranes," says Ujii. "However, once you become number one staying there is challenging. Being number two or three you have clear goals to become the market leader, which are good for a company to grow. But when you are number one - what is your target? For example, we are placing a lot of emphasis on thinking environmentally and we need to spend time to develop that side of the company."

Have you lost ground because of the acquisition?

"We are losing market share in Europe and the biggest reason is because we have component supply chain issues and cannot fully complete the crane and therefore have issues delivering equipment. We need to change or improve and that is what Kenichi Sawada, our newly appointed chief executive officer in Europe, has been tasked with."

"We have very good supporting suppliers in Japan, so we need to utilise those companies more. Of course, in Europe due to the situation in Ukraine, many of our suppliers are affected and also because of the increasing cost of production, supply chains get longer. Last year we had to shut down a factory in Japan for two months because one of our Japanese suppliers - which had a factory in Shanghai, China - was in lockdown which stopped all exports out of the country. It was not a hi-tech product, but it was unexpected

that this could stop the factory for so long. We have learned from these issues."

The West's sanctions over the Ukraine conflict have closed the Russian market. How big an issue is this for Tadano?

"The biggest growing crane market in 2022 was Russia/CIS which had grown by 300 to 350 percent mainly due to the influx of Chinese truck cranes, available because of the shrinking Chinese home market," says Ujii. "I am not sure how long this will continue but luckily we shut down our Chinese factory about four/five years ago. We are not producing or selling any Chinese built cranes in China, the only sales are when they need Japanese or German made equipment."

"We stopped all exports to Russia soon after the situation started. Since then, we haven't restarted equipment or parts sales. We had an office in Russia, but it is temporally closed at this moment. We also have a dealer, but they cannot get equipment from us, however they have started to sell Chinese equipment. It is a difficult situation."

What technology do you have coming to make it easier to operate your cranes given the shortage of skilled labour?

"Training is important - you will always need well trained operators familiar with the crane and its functions and be able to use it as intended," says Barley. "However, we have spent a lot of time and effort on safety features such as counterweight detection systems, and there are a lot of safety features built into our computer systems, but you still need skilled operators. You can make it easier and more intuitive - IC-1 platform is a very intuitive system, and those cranes fitted with IC-1 have given a lot of great feedback."



Tadano e-Pack



Tadano GR-1000XLL Evolt



"Safety is one of our core values so any time we have the opportunity to take a possible error away from the operator that is what we focus on. We can preach and talk safety, but people can still get it wrong - our job is to limit this happening."

What's your view on major crane companies pulling out of exhibitions such as this?

"All the major manufacturers are struggling to keep up with demand at the moment and we are all in a similar situation. However, it is also important to show your customers your appreciation and share the new technologies that you have to launch," says Barley.

"Would it have been less expensive to stay away from Conexpo? Of course, it would have. Did we exhibit at Conexpo to keep the order book strong? Probably not, but we believe in satisfying our customer's needs, and there is no better way to do that than when you have all your cranes in the same location. It is also great to educate your distributors - they get to see the products that are coming out and glimpse the future. It all helps to build a business for the long term. If we were just thinking short term - about this year and next - would Conexpo have made sense? Probably not, but for the long term attending was the best decision."

"Regarding the lack of the larger aerial work platform manufacturers at the show - the industry should consider short term versus long term strategy. There were lots of decisions taken by businesses thinking short term about attending from a monetary perspective. Putting a big display

on takes a lot of commitment. You have to think long term and not 'we have a solid order book so what is it going to do for us'. This is the main reason why Tadano does so well and one of the main reasons that I joined the company. We believe in the long term - we are here to stay and will continue to grow and the only way to do that is to commit no matter what the market conditions are. It can be painful at times, but it is the right thing to do."

What is the biggest issue facing the construction sector?

"The biggest issue for construction related industries is attracting young people," says Ujiie. "Numbers - particularly in Japan - are decreasing as we lose these people to sectors such as the computer industry. We are trying to introduce AI controlled machines to make us ready for fewer skilled people in the industry. But interestingly in order for us to complete this project we posted an open innovation asking, 'can you come up with a better way to control this equipment?' In three months, we had 1,000 applicants and they included 13 better ways of controlling the machine. I asked the creators of the three best solutions to come and see the cranes and they were very happy to work on them rather than computers. We need to attract people to join industry even if the equipment needs less people."

"We are very focused at the moment on service technicians bringing in apprentice level technicians - it is not a formal programme but for example we partner a junior welder with a senior welder to develop the talent," adds Barley.



GR-1300XL

"The equipment is also changing - I can remember pulling levers and clutches which were heavy and hard, and then after a few years it moved to hydraulics, and you could feel everything in the joystick. Then to pilot controls when the joysticks became lighter and more user friendly and then the joysticks went electric and now we are talking about a completely electric crane. So, think about how the industry has moved on - we are starting to have the conversation now about do we hire a trained technician, or do we take on someone and teach them about cranes? It is tough to get good people, and this is one of our major challenges." ■



GROUND CONTROL CABIN

UK tower crane specialist Radius Group has become the first lifting contractor in the UK to offer Skyline Cockpit - a tower crane teleoperation system conceived by a company in Israel, that allows the crane to be operated live and remotely from a ground control system, along with a number of additional benefits.

Rather than taking time and effort climbing up to the crane cab, the operator sits in a spacious, 'smart' computerised cabin at ground level and uses an advanced camera systems to operate the one, or several cranes if required. The 'Cockpit' includes a kitchen, and air conditioning or heating - a far cry from the traditional tower crane cab. The ground level locations also enables operators with a fear of heights or mobility issues to take the job.

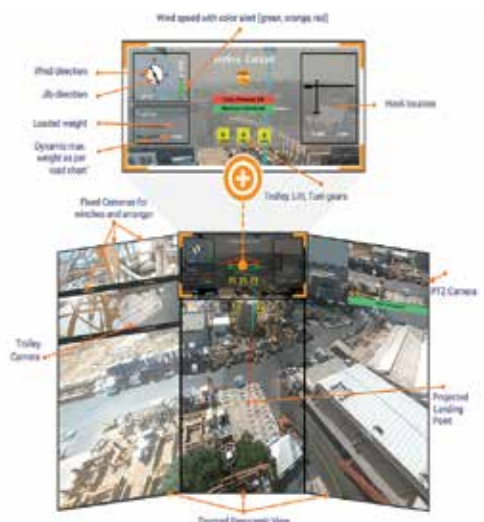
The operator has a peripheral wide-screen display in the cabin that replicates the panoramic view from the cab. It is even possible to operate the crane in the dark using a system based on advanced technological developments, Artificial Intelligence and Augmented Reality.

The operator can precisely identify where the crane hook is positioned having visual readouts on the screens covering the height, load weight,



wind speed and direction and work speed. Radius also claims that the Skyline Cockpit can detect any tower crane problems and immediately address them through preventive maintenance.

Radius managing director Michael Fryer said: "The Group has never been afraid to do things differently and we pride ourselves on being at the forefront of lifting technology. I am confident that when they see it our customers will have the



same excitement that I have had, since taking delivery of this ground-breaking tower crane teleoperation and control system. Being the first to do something new is always daunting, but somebody must take the lead and I feel the time is right for Radius to lead the way."

The Skyline Cockpit has been created by Skyline Cranes and Technologies which owns the largest fleet of tower cranes in Israel.