

# HEAVYWEIGHT CHAMPIONS

Kobelco's huge new cranes reach farther and lift loads of 300 tonnes or more. Scania engines provide these massive machines with the power they need.

text YURIY HUMBER photos MARC-ANTOINE ASTIER

## KOBELCO

KOBE CITY, JAPAN

**Our world is growing** ever larger. Taller buildings, wider bridges, more colossal goods. To handle them we need bigger and bigger equipment.

For Kobelco Construction Machinery Co., the size revolution has led to its own challenge. After years of dominance in the market for small-to-mid-sized cranes with lifting capacity under 250 tonnes, Japan's leading crane manufacturer is now staking a claim among the heavyweights.

In January, the company shipped its largest-ever multi-purpose crane, a giant crawler with a maximum lifting capacity of 300 tonnes as standard (350 tonnes in the super heavy lift, SHL, specification). That's a load moment, or point of overturning, that is 40–60 percent higher than that of a 250-tonne crane. It is also enough to rival machines from the 400 to 500-tonne class, thanks in part to the torque and power efficiency of Scania's 13-litre, six-cylinder, 450 hp engine.

"Almost 90 percent of mobile cranes sold worldwide are in the 250-tonne class and under, where we've been very strong, but the last 10 percent brings in almost as much revenue," says Koichi Shimomura, senior manager in the crane engineering department of Kobelco Construction Machinery. "That top 10 percent requires lots of customisation," something that results in higher prices and sales.

Having spent years perfecting hydraulics, cabins and lifting technologies in its smaller devices, Kobelco felt it was time to apply them to the upper echelons of the crane world. The company decided to focus its new model, designed from scratch, overseas – on the North American market, as well

as on South-East Asia and Europe. Japan, which accounts for 40 percent of Kobelco's crane sales, will have to wait awhile for the new offering.

"We are strong in Japan, which also has quite different needs," says Shimomura. Now, the firm wants to make a bigger impact globally.

Making the jump in weight is by no means easy. A team of 10 requires two weeks to assemble the new CK3300G model, which boasts a boom length of 90 metres (295 feet).

The crane has to be delivered to clients in more than 25 pieces, none of which must exceed a width of three metres (10 feet) for the sake of easy transportation.

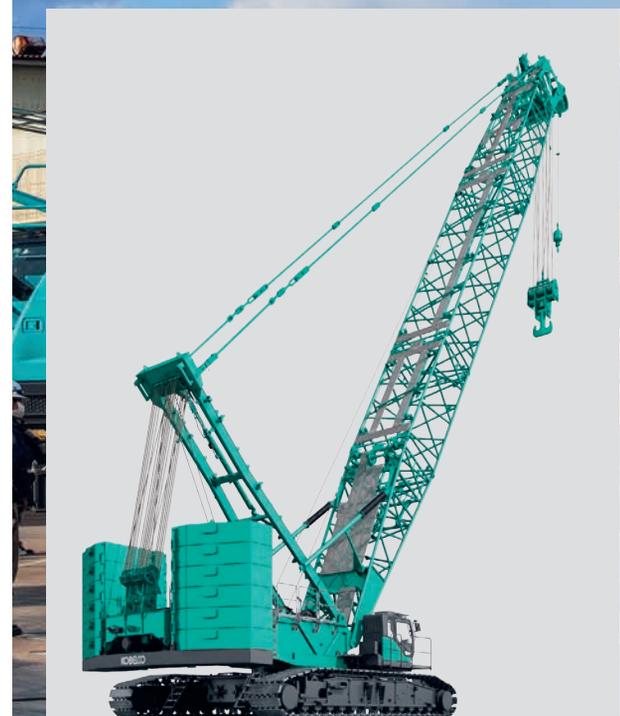
What's more, all work has to be done by hand, without recourse to an assembly line or the specialist welding robots that Kobelco employs for smaller devices.

"The size of it... it just wouldn't fit on an assembly line right now," Shimomura says as we tour a Kobelco Construction Machinery factory to the west of Kobe City.

The cavernous facility, which employs 500 factory staff, reverberates with a cacophony of thuds, grinds and drilling. We walk past a safety centre outfitted with its own maneki-neko figurine, a golden lucky cat associated with fortune. In the separate area for large-crane assembly, men in brown aprons fix pipes inside a lattice tower, ready for welding. Rows of wrenches and spanners hang neatly at designated desks.

So far, Kobelco has shipped two of its new cranes to a rental firm and a dealership in Texas. A further two will be delivered to Indonesia during the first half of this year.

It is the first time that Kobelco has used Scania's engines, and the company hopes that with Scania's help the new crane will become the ultimate all-rounder in its category, used as much for the building of bridges and the hammering of pylons into →



Kobelco's new Scania-powered crane (model for the European market pictured above) has a lifting capacity of 300 tonnes.

# KOBELCO

[www.kobelcocm-global.com](http://www.kobelcocm-global.com)



---

**The company:** Kobelco is a global company manufacturing excavators and cranes.

---

Kobelco's characteristic turquoise machines are lined up at the factory facility outside Kobe City.





Koichi Shimomura says that all the work on the two new Kobelco cranes had to be done by hand, without the specialist welding robots that Kobelco employs for smaller devices.



Haruyuki "Cookie-san" Mayama, Engine Sales Manager for Scania Engines, Japan.



Koichi Shimomura, senior manager in the crane engineering department of Kobelco Construction Machinery.

→ the ground, as for the moving of materials around construction sites.

Scania is confident that it can help Kobelco meet its needs.

"Working with a crane demands a lot of precision and a lot of power, so good driveability and good response are vital, as are smooth and consistent power and torque," explains Haruyuki "Cookie-san" Mayama, Engine Sales Manager for Scania Engines, Japan.

"Reliability is also key, because in the construction industry cranes are very often used in very expensive, one-time contract jobs that have a very tight time schedule; in essence, time is money. However, we believe that Scania's 13-litre, six-cylinder, 450 hp engine can certainly provide what's required."

So far, Koichi Shimomura and Kobelco agree.

"We have faith in this device... and we are not done with the 300-tonne class. We see that Scania has the vision to go higher in weight capabilities," says Shimomura.

Both Kobelco and Scania are known for reliability, which will be key in the follow-up after sales. Given Scania's responsiveness so far and the ability of the two to communicate easily, Shimomura says he feels this is the start of a great partnership.

"It's our first time working with Scania. But, I already feel we can be partners, and we need to move together to make this a success." ●



## EQUIPMENT

Scania's 13-litre, six-cylinder, 450 hp engine is powering the new CK3300G model crane, which boasts a boom length of 90 metres (295 feet).

"The engine has good and smooth power and torque. An excellent driveability and response is needed for accurate, precise crane work. The reliability is crucial since construction jobs are on very tight schedules," says Haruyuki "Cookie-san" Mayama.