

LIFTING INDIA



Oct 2014 Issue No 2

Afcons relies on Grove cranes at highway project in India

A team of 19 Grove rough-terrain cranes is at the heart of one of Asia's most ambitious road building projects. More than 8,000 workers are involved in the Jammu to Udhampur Highway project, where the Grove cranes are helping to build the 54 bridges, 16 viaducts, eight cross ducts and four tunnels needed for the project.

The Grove cranes, a mix of 60 t capacity RT765E-2 units and 30 t capacity RT530E-2 units, are all owned by main contractor Afcons Infrastructure. The company bought 26 Grove RTs in 2012, which brings its total fleet of Grove cranes to more than 30 units.

The Grove cranes at the Jammu to Udhampur Highway work along the length of the 235 km stretch of road – much of which is very narrow and bordered by sheer cliff edges. This, along with the rugged terrain and fluctuating climate, are the main challenges the Grove cranes must overcome on site, as Biplob Chakraborty, deputy general manager of equipment at Afcons, explains.

“Working on a narrow and treacherous road – in either extreme heat or torrential rain – is no easy task but the Grove cranes offer excellent maneuverability and are quick to set up, which means we’ve moved the project along smoothly,” he explains. “This is a big job, and we need machines that can work round the clock to keep up with our demanding schedule. We are really happy with



A Grove RT530E-2 at work at the Jammu to Udhampur Highway along the length of the 235 km stretch of road.

the cranes and their versatility means we’ve completed a large part of the work already.”

The Grove RT765E-2 and RT530E-2 cranes are used to widen the highway as well as to pour concrete, lift metal plates, and move steel and concrete girders. The cranes are so integral to the project that Manitowoc Crane Care appointed a service engineer to exclusively manage and maintain Afcons’s Grove fleet.

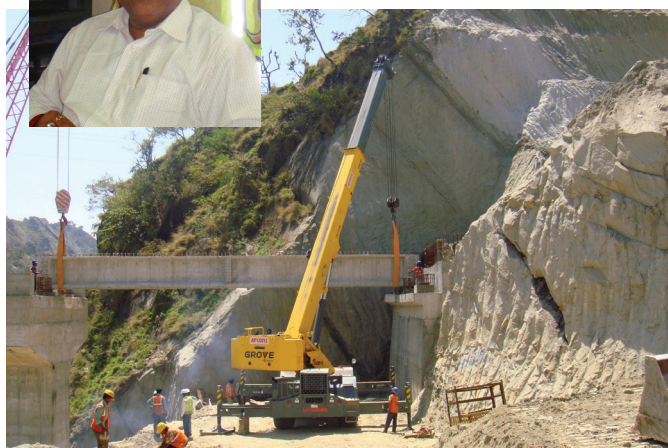
The Jammu to Udhampur project started in May 2011 and is expected to finish by September this year. Local residents eagerly await the road’s completion as it will reduce the time it takes to travel between the two cities, from ten to just five hours.

The Grove RT765E-2 features a 33.5 m long MEGAFORM boom, found on much larger Grove all-terrain cranes, and it is able to perform up to 60 t lifts. The Grove RT530E-2 offers a 29 m boom. Both cranes feature an extremely rugged design with deep box section frames, four-steering modes and excellent pick-and-carry capabilities.

Established in 1959, Afcons Infrastructure Limited is part of the Shapoorji Pallonji Group, the third largest construction group in India. Afcons is one of the top infrastructure development companies in India, having constructed over 3,000 km of road and more than 132 bridges. The company has a large range of crawler, rough- and all-terrain cranes, and is among the top hundred largest crane owning companies in the world.



Grove cranes offer excellent maneuverability and are quick to set up on narrow and treacherous roads, said Biplob Chakraborty, deputy general manager of equipment at Afcons.



Cranes on site

Potain cranes building world's tallest residential tower in India

Potain cranes are at the center of construction at the 442 m tall World One Tower in Mumbai, India – the tallest residential tower in the world and India's first "Mega Structure." The luffing jib cranes are contending with searing heat and high wind speeds to lift steel, glass and concrete to ensure the project is completed on time. The building currently stands more than 65-stories, approximately 227 m tall.

Arabian Construction Company and Simplex Infrastructures created a joint venture to complete the three-year project for Lodha Developers, India's leading real estate developer.

The three MR 160 C cranes were chosen for their efficient climbing ability, compact size and quick assembly process, as S. Ghosh Dastidar, technical director at Simplex Infrastructures, explains: "Potain is a very well trusted brand with a proven track record of efficient performance and high build quality. We have used the cranes at many of our projects," he says. "Recent examples include the Mall-Odisha in Godrej, Ahmedabad; the Golden Triangle in Bangalore; and Tata Housing in Gurgaon. No matter what the challenges are on site, we've completed the work on time and Potain cranes are to thank for that."

Two of the MR 160 Cs were bought from Potain's dealer in Mumbai, Infinity Solutions, specifically for the project, while the third crane was shipped over from Dubai. The cranes are responsible for lifting 250,000 m³ of concrete, 35,000 t of steel rebar and 40,000 m² of glass that will make up the World One Tower. To meet the demanding workload, the cranes are working at their maximum capacity of 10 t.

The MR 160 Cs are positioned within the building's superstructure as internal climbing cranes. They are configured with 40 m jibs and will eventually reach heights of more than 460 m at the summit of the building. As the cranes climb, they are supported by beams and clamps to ensure maximum stability. Each crane covers a working radius of 40 m. Working at such heights in close proximity to one another requires precise load control.

With safety a major priority at the site, both the operation and accessibility of the cranes were carefully considered. The masts on the Potain luffing jib cranes have a platform every 6 m to allow the operators to rest properly during their climb to the cab.

Potain's reputation for quality was also a key factor in the cranes'

Potain MCi85A working for Tata housing in Gurgaon.



The MR 160 Cs are responsible for lifting 250,000 m³ of concrete, 35,000 t of steel rebar and 40,000 m² of glass for the project.

"Potain is a very well trusted brand with a proven track record of efficient performance and high build quality.... No matter what the challenges are on site, we've completed the work on time and Potain cranes are to thank for that."



S. Ghosh Dastidar, technical director, Simplex Infrastructures

selection, as Mr S N Bhattacharya, deputy general manager of Simplex Infrastructure explains.

"The World One Tower will be a new landmark, not just for Mumbai, but for India. No expense is being spared, and everything is sourced from industry-leading brands – even Giorgio Armani is personally involved in the interior design. Potain is known for its high-quality machines that keep working safely and efficiently. I am confident that they will help keep this project on schedule."

The Mumbai climate, with temperatures of up to 38°C and a lengthy rainy season, adds its own challenge to the project. So the cranes are fitted with Potain's Ultra View cab, which ensures operators are comfortable and have an uninterrupted view of the 17-acre site.

The MR 160 Cs arrived in February 2011, and will remain at the project until the building reaches its final height of 117 stories in 2016. The World One Tower will be an international symbol of India's economic growth. The mixed-use development will comprise 300 luxury homes, a high-end club house and spa, an office complex and a sports center. The tower is the first in India to be designed as a "Mega Structure", capable of withstanding stronger winds and seismic activity.



Voice of Customer

**Dinesh Raghuvanshi, owner****Spartan Builders Pvt. Ltd.**

We started out in 2012 and in just two years Spartan Builders has become a renowned construction company in Ahmedabad. We bought our first Potain tower crane in September 2013, an MCI 85 A which is currently working on a huge residential development made up of 13 towers in Malabar County. It is working on building four of the 12 storey towers. Once these four towers are complete in March next year, our tower crane will move to the next phase of the project. We always get positive feedback on our Potain crane and how smoothly it performs and

of their great reliability and excellent overall quality. Once new projects are announced, I am sure we will buy more Potain tower cranes.

**ARP Das, vice president****MS Khurana and Engineering Ltd.**

With more than 15 years of experience in the construction industry, MS Khurana and Engineering Ltd has always been involved in major building projects. We bought three Potain MCI85A cranes in September 2012 and have put them to work the Adani Township project in Ahmedabad, a project spanning over 650 acres. Currently our cranes are building 14 towers, each of which is 19 stories high. Once these towers are built, our Potain cranes will move on to construct the Stadium, which is in the planning phase. We are very happy with our Potain MCI 85 As – they are

quick to assemble, disassemble and maintain, so we get excellent efficiency and productivity from them.

**Mohammed Akhtar, director****Azadhind Construction Pvt. Ltd.**

Founded in 2008, Azadhind has become a well-known contractor working on many notable projects in Kolkata, West Bengal. We purchased an MCI 85 A from Potain in 2012, which has completed a luxury residential tower in Kolkata, consisting of three 17-story towers. After this project is complete, there will be more residential projects that we will be building where our cranes will be mobilised to. Potain cranes are known for their reliability, which is evident in their use all over the world. It is a pleasure to bring a first-class crane to building projects in Kolkata –

and is why we plan to invest in more Potain cranes in the near future.

**Prabhat Kumar Mohanty, senior executive****Orissa Stevedores Ltd.**

Orissa Stevedores handles over 35 million tonnes of cargo per year, which is why we bought the 120 t Grove RT9130E-2 rough-terrain crane, one of the most reliable and efficient cranes on the market. We've been very happy with the crane's performance as our cargo can weigh up to 70 t, thus it's important that we have a machine that we can rely on. We also have a Grove Yardboss crane that we rent out to major customers, who require a trustworthy crane to help complete their work on time. Manitowoc understands the importance of aftermarket care as well. Our

crane is performing extremely well so far, however whenever there is a problem, Manitowoc Crane Care is always there to help us find a quick solution.

**Sunand Ranjan Rakshit, senior deputy general manager****Jindal Steel Power Ltd.**

We are familiar with almost the entire range of Manitowoc cranes and are always impressed with their world-class quality and capabilities. We have rented Manitowoc crawler cranes and bought two Potain tower cranes to work at its coal-based sponge iron plant at Raigarh in Chhattisgarh. We also bought a Grove Yardboss 4409 after scouring the market for the best machine. In the end, it was clear that the Yardboss was the best machine for the job. It now works on loading, unloading and shifting materials in our Coal Gasification plant. We have always been very happy

with the quality of Manitowoc's machines – they are durable, reliable, and complete our work efficiently.



Cranes on site

India's first Potain MCi 48 C gets to work for Divakar Constructions



Potain MCi 48 C tower crane is a 2.5 t crane, aimed at mid-level construction job sites.

Divakar Construction & Builders has taken delivery of India's first Potain MCi 48 C tower crane. The 2.5 t crane, which is aimed at mid-level construction job sites, is already at work, building a convention centre for a renowned hospital in the heart of Mangalore. As a result of its performance, Divakar Constructions & Builders has plans to buy one more Potain MCi 85 A crane.

Before buying the crane, Divakar Constructions & Builders had rented a Potain MCi 85 A and was impressed with its quality and performance. This is why they decided to invest in a Potain crane, explains Mr Divakar, owner of the company.

"The crane we rented was the perfect

example of what Potain cranes are about: high quality design mixed, maximum job site efficiency and unbeatable return on investment," he says. "The next logical step after renting was to buy one of our own. As one of the top civil contractors in this region, it is important that we use industry-leading equipment that can perform on a huge variety of job sites. I am delighted that we are the first to welcome this innovative, new crane to India."

Divakar Constructions & Builders is using MCi 48 C for a renowned hospital in Mangalore, on the west coast of India. The crane is placing steel bars and pouring concrete, and is used on the hospital job site to move a combination of steel, cement, rock and concrete. The Potain MCi 48 C can lift up to 1 t loads at its maximum jib end of 36m.

There is a plan to use the same crane for building residential apartments, commercial buildings, educational institutes and other hospitals soon after the hospital work is completed.

The advantage of the Potain MCi 48 C is undoubtedly its size; transportation is a hassle-free process as the crane can work comfortably even on congested city job sites. The MCi 48 C's compact size also means that it consumes less electricity and can be installed easily, without compromising on performance.

With a new government recently formed in India, things are looking up for the country's construction industry, adds Mr Divakar managing director of Divakar



From Left Suman Das, Vikas Chugh, Divakar from Divakar Constructions, Rajith Murali and Thanu Mallayan

Constructions & Builder.

"We're confident that this political change will have a positive impact on the market," he says. "With a new government in place, we're hoping that regeneration and development of urban areas will mean more building projects for companies like us."

With a busy development program expected for India's second and third-tier cities, Divakar Construction and Builders are using this forecast as a sign to grow their Potain fleet further. With several upcoming projects already in place, their next investment will be a Potain MCi 85 A.

The Potain MCi 48 C can lift up to 1 t loads at its maximum jib end of 36m.



Manitowoc Crane Care's comprehensive support network



Manitowoc Cranes - Regional Offices in India

Ahmedabad Tel 91 9974085907 • Bengaluru Tel 91 998 0179977 • Chennai Tel 044 42831171 • Delhi Tel 0124 4780100
Hyderabad Tel 040 40114034 • Kolkata Tel 91 9007909027 • Mumbai Tel 91 738 7272981 • Pune Tel 020 66445500

Manitowoc Cranes Dealers

Potain (India)

Faridabad • Time Autotech Pvt Ltd • Tel 09873838862
Mumbai • Infinity Solution • Tel 09881252948
Ahmedabad • West India Equipments • Tel 079-26891074
Pune • Tech Know Earthmoving Services • Tel 09370145680
Rajasthan • Shree Balaji Infraequipment Pvt. Ltd. • 09829277019
Guwahati • Pragiyotish Earthmovers • 09435019310
Cochin • Gee Tee Trading Company • 09846332748

Grove, Manitowoc (India)

TIL Limited • Kolkata, India • Tel 033 66334000

Potain (Bangladesh, Bhutan, Sri Lanka & Nepal)

Bangladesh • Milontika Engineering Services
• Tel +880 2 8812976
Bhutan • DZ Trading Enterprise • Tel +975 2 323541
Sri Lanka • Diesel and Motor Engineering Plc
• Tel +94 11 2449797
Nepal • Auto-Electro-Mech Pvt. Ltd • Tel +977 1 5006073

www.manitowoccranes.com/India

Lifting India is a publication of Manitowoc Cranes and copies are available free of charge to crane customers, dealers, end users and enthusiasts. Material published in Lifting India remains the intellectual property of Manitowoc Cranes and may not be reproduced without prior written approval. The editorial team is unable to accept any liability for errors or omissions that may occur, although every effort has been taken to ensure that all information is correct at the time of going to press. To contact the editorial team for contributions or subscriptions, please write to:

ravneet.kaur@manitowoc.com or punitha.govindasamy@manitowoc.com or call 91 20 66445500

