

Delivering Hitachi Construction Machinery Reliability in the Massive Americas Market

F or Hitachi Construction Machinery, establishing an independent operation in the Americas required at least four things immediately: selling new and used machinery to dealers, making parts and service available, getting the parts remanufacturing system operational, and providing financing. Hitachi Construction Machinery Americas management had less than a year to get ready after the termination of partnership with Deere was announced in August 2021.

A Game-Changer in the American Construction Machinery Market

In November 2021 the first excavators destined for sale in North America by Hitachi Construction Machinery Americas left the Tsuchiura Works, shipped as sea freight. After they crossed the Pacific they passed through the Panama Canal into the Atlantic to be offloaded at a port in Florida, then to eight dealers across North America. The orange excavators all sported the bold Hitachi logo.

Excavators are the origin of Hitachi Construction Machinery's business,

and are highly competitive even in the international market. The first hydraulic excavator made with Japanese technology was developed and shipped in 1949 by a department of Hitachi, Ltd., well before Hitachi Construction Machinery was split off as an independent subsidiary in 1964. The firm's product line-up grew to cover the complete range from compact to gigantic, delivering worldclass safety, durability, and reliability. Hitachi Construction Machinery developed the global market, not just in the Americas, adding products including environment-friendly machinery and its ConSite service solution.

Now Hitachi Construction Machinery is gearing up to offer its excavators, drivers of the firm's competitiveness, throughout all of the Americas, starting with the North American market.

"Hitachi Construction Machinery may well be a real game-changer for the Americas, because it could transform the conditions affecting competition in the market, and the whole situation. A lot of talented people recognize this and have come to Hitachi Construction



1.Large hydraulic excavator "ZX350" in action on construction site 2.Mini excavator "ZX35U". Demand for compact equipment is increasing in North America. 3.Wheel loader with a good reputation in the Americas



Rob Orlowski Director, Product Management & Engineering

Machinery Americas to help. Dealers and customers are really looking forward to it. After all, the whole brand is built on the highest technology and reliability. It's a very exciting time." These words were spoken by Rob Orlowski, Director of Product Management and Engineering at Hitachi Construction Machinery Americas, who joined the company in May 2022. A veteran of the construction machinery industry, he has held management positions at several global manufacturers. Even with his extensive background in the industry, Orlowski was astonished at the technologies that come standard in Hitachi Construction Machinery's excavators.

Emphasizing the Latest Technology and Standard Equipment

One of those is TRIAS III, an energysaving system for excavators that Hitachi Construction Machinery faces a massive job in building and operating a business covering both the North and South American continents. We spoke with Al Quinn, CEO of Hitachi Construction Machinery Americas and the man leading the effort, about evolving their business, and what challenges they see in the future.

he company is extremely busy this year, but it's worth the effort. Since Hitachi Construction Machinery Americas announced termination of the agreement with Deere in August 2021, we have completely rebuilt our organization. The sudden expansion of the product line-up has driven major growth in the dealer network, with both existing and new partners. In rental equipment we had to build new channels, while the parts business requires warehouses and distribution systems to handle the surging demand the expanded business will bring.

The types and sheer quantity of problems to be resolved are similar to those faced by a start-up, but we started with an enormous advantage: the strength of the Hitachi global brand in the Americas market.

The power of the Hitachi brand name has been invaluable in Hitachi Construction Machinery Americas' organizational revamping, too: the number of employees jumped from 40 last year to 140. Even discounting the people transferred from Hitachi Construction Machinery in Japan there were still 100 local hires, and we got more than 5000 applications when we posted the help wanted ads. The labor situation in the US

is extremely tight right now, making it difficult to attract quality people, and we were astonished to be swamped: everyone saw us committing to a massive expansion, and wanted to be part of it. The Hitachi Construction Machinery brand is clearly respected in the Americas market.

The product line-up is also highly competitive, and prospective buyers are especially interested in Hitachi Construction Machinery brand excavators technologies that were not available through Deere. The dealers selling our construction machinery also handle products from other manufacturers, and have considerable knowledge and experience in the industry, but one major dealer phoned me one day, and said they had never seen such a reliable machine with just the right mix of technology before, and wanted to place an order. It's just more proof of our ability to provide the market the best machine possible.

Upgrading the Parts Distribution, Maintenance Support Systems

One major challenge we're dealing with right now is the parts business. When Hitachi Construction Machinery Americas launched independent operation in March 2022, with the introduction of mining equipment and excavators, our parts volume increased more than ten-fold. We have one parts warehouse in Jackson, Georgia, but we need another one, so we're urgently building a system for parts storage and distribution together with Vantec Hitachi Transport System (USA), Inc., an American subsidiary of Hitachi Group member Vantec HTS







Forwarding, Ltd.

We need a bigger, better system because demand for construction machinery in the US is surging. Inventory levels at construction machinery dealers and rental businesses are very low, and everyone is hunting for a way to get more machines. The same situation exists in Latin America, where demand is growing fast for large construction machinery, especially in mining. Global supply can't keep up with demand.

The business environment is changing with incredible speed. If we can successfully capture this demand, our operation will triple in the next three years. We have to get a lot of things done for that to happen, though: expand our dealer network, upgrade our technical and maintenance support stance, boost the quantity of products and parts we ship, and get our whole supply chain in order.

Lucky for us, dealers and customers are eager to work with us. They welcome the Hitachi Construction Machinery commitment to the Americas market, and want to grow with it. I'm going to do everything in my power to make the most of this phenomenal opportunity.

> Rapid Growth for a Rapidly Changing Environment: Business Scale to Triple in Three Years

Al Quinn CEO Hitachi Construction Machinery Americas



"Aerial Angle" allows operator to check the bird's-eye view image centered on the machine on the monitor in the cab. It improves driving safety and contributes to reducing contact accidents

optimizes hydraulic fluid distribution in arms, booms, and slew ring platform as needed, helping large excavators save fuel while operating at peak efficiency.

"It uses three pumps and three actuators to deliver incredible power while using less energy," says Orlowski. "I watched it grab a stump in the bucket teeth and tug it without any trouble at all. Customers call it a 'beast' and a 'monster' when they see it in action."

The firm has also released an evolved version of the ConSite service solution, dubbed ConSite Oil. Almost all construction machinery, not just excavators, is equipped with hydraulic pumps, and the condition of the hydraulic oil directly affects machine performance. Prolonged use of degraded oil can lead to breakdowns and other machine trouble.

ConSite Oil uses artificial intelligence to constantly monitor oil condition with sensors. If oil deterioration or other



Babliton Cardoso Sr. Director, Mining Equipment

abnormalities are detected, the data is shared with the machine owner. the dealer, and Hitachi Construction Machinery itself, helping prevent major issues and increasing availability to reduce life-cycle cost.

Safer than Ever with "Aerial Angle"

To further heighten on-site safety, all machines now come equipped with the Aerial Angle function as standard equipment. The operator can see what the area around the construction equipment looks like as if viewed from above, directly from the operator's seat (photo).

Usually the operator's seat is on the left side of the excavator, with the arm on the right. As a result, the arm blocks the operator's view of the right side of the machine, which can result in injury to someone approaching in the blind spot. Many cars now offer the same sort of aerial view to heighten safety when backing up or

parking, offering a view of the entire periphery. Aerial Angle applies the same technology in construction machinery.

Focusing on Mining Machinery in Latin America

Not only North America, the Hitachi Construction Machinery Americas business also includes Latin America. While the major markets in North America are construction projects and civil engineering, onsite mining machinery, including mine development, accounts for the majority in Latin America.

"In Latin America we have dealers in Brazil, Chile, Peru, Columbia. Suriname. and Mexico, plus one in the Dominican Republic, and another one in the Caribbean. Our goal for the time being is to

boost our name recognition in those nations,"explains Babliton Cardoso, Senior Director of Mining Equipment Sales. Brazil-born Cardoso, who joined Hitachi Construction Machinery Americas in January 2022, has an extensive career in the mining and construction machinery industry including the European market and managing South American

subsidiaries.

"In mining machinery it is crucial to maintain close relations with the customer. Dealers also have to offer a strong sales and service system, and we work with them to suggest new solutions to customers," continues Cardoso. Mining machinery is not only huge, it has to be able to operate for long periods of time under severe conditions. Mines in Latin America are often located far from urban areas, making it difficult to secure workers, and in most cases mining machinery



The company is strengthening sales and services of mining products such as ultra-large hydraulic excavators and dump trucks for Latin America

runs on a 24/7 schedule, 365 days a vear.

"A single piece of mining machinery is expected to run 6,000 - 8,000 hours a year (250 - 330 24-hour days), for ten years," Cardoso explains. "On average there are six to eight rigid trucks to one mining excavator in a mine site, which means we have a chance to sell them as well. Today's industry demands a whole range of systems and technologies to keep machinery working non-stop, so we have to work as a team with dealers to earn and keep customer trust."

In recognition of the situation, Hitachi Construction Machinery will soon offer autonomous dump trucks to the Latin American mining industry, capable of driving themselves without human operators. "Safety is at the heart of all our technology," says Cardoso. "Our mine operation management system helps prevent trucks from colliding with each other, while Aerial Angle and other onboard functions provide dump trucks with peripheral vision, just like our excavators. There are also functions to sense danger in the immediate vicinity when parking, and to brake to prevent collisions when traveling. Advanced stability control minimizes body slip, delivering stable performance even on South American mining roads in winter snow. These technologies are invaluable in selling our products to the mining industry." The sales strategy in the region is

going to be built around excavators for mining. The high-performance, robust oil pump technology is crucial for giant excavators in the mining field.

Cardoso has confidence in Hitachi Construction Machinery: "We're very strong in the field, because we can offer both excavators and dump trucks, backed up by the Hitachi Construction Machinery brand name and proven reliability. We're further improving our rep in the mining markets we serve now, and are developing dealers in surrounding nations to offer mining machinery as well as unmatched dealer support. That's basically the Hitachi Construction Machinery strategy for Latin America."

his is the biggest challenge we face in setting up an independent operation for the Americas," says CEO Quinn of the effort to get the parts business up and running well. Moving heavy loads of sand and concrete at construction sites, or rocks and ore at mines, causes severe wear on excavator undercarriages and bucket parts such as teeth.

Boosting Parts Supply

Until now, though, Hitachi Hitachi Construction Machinery

There is considerable activity in parts such as these because they are consumables. Hitachi Construction Machinery data for the term ended March 2022 shows parts sales for construction machinery accounted for 10% of consolidated sales, and parts sales for mining machinery another 10%: parts make a major contribution to corporate performance, representing 20% of annual sales. **Construction Machinery Americas** relied on Deere to handle parts supply, and as a result never built it own parts supply system in the Americas. "We supplied authentic Hitachi Construction Machinery parts to Deere, but only in limited quantities. We had to build our own system from pretty close to scratch, and like Quinn says, it's our biggest challenge," explains Hiroyoshi 'Dai' Tanaka, Vice President, Customer Care at Hitachi Construction Machinery Americas. Americas opened its parts distribution center in Jackson, Georgia, completing construction in only a little more than five months, between the August 2021



Stronger Partnerships for Wider Sales Network, **Expansion in Parts and Rentals**



Simon Wilson Vice President Sales



Hiroyoshi (Dai) Tanaka Vice President, Customer Care

and the official launch of independent operation on March 1, 2022.

"The term 'fill rate' refers to how much product we need to keep on hand to ensure we can fulfill a customer order," says Tanaka. "We began supplying parts ourselves in March 2022, and while there are still a few problems, the fill rates are finally reaching reasonable levels."

He's confident the firm can significantly improve customer support once they get a better understanding of the local situation: "Our on-site tech support is very, very good, because we're the company that designed and manufactured these machines. Our goal now is to thoroughly grasp the needs of each customer, and build a system to supply them with the parts