

NEE 1924



A Message from the Executive Vice President



Bruce Truesdale

Never too busy for safety



Dear Valued Customer:

This time of year tends to be the busiest in the industry with lots of activity that involves manpower. It is easy to focus on the task at hand, but remember what's most important: your employees. I encourage you to review safety guidelines, from having the proper protection systems for your trenches to providing plenty of water and sunscreen to help your staff beat the heat.

To help get projects done on time, properly maintain your equipment. Fortunately, most new Komatsu machines come with complimentary Komatsu Care for the first three years or 2,000 hours. Our trained technicians perform the services at your convenience to help limit downtime — typically after normal work hours or when your equipment is not being used.

Komatsu Care also gives you certainty in your owning and operating costs. Learn about Komatsu's new program, Komatsu Care Plus Cost Per Hour, in this issue. We believe it's well worth the investment.

We hope you were able to attend CONEXPO-CON/AGG this past March, but if not, there's a recap of the event inside this issue that provides information about some of the machines that were on display, such as Komatsu's new PC210LCE electric excavator.

You can also read about the Komatsu PC78US-11 tight tail swing excavator that offers excellent production in confined spaces as well as open areas. The model's predecessor — the PC78US-10 — earned a Highest Retained Value Award from EquipmentWatch.

Plus, due to the growing demand for off-road trucks in construction, quarry and mining operations throughout North America, Komatsu is once again producing the popular HM400-5 articulated haul truck at its Chattanooga Manufacturing Operation in Tennessee. Check out the article for more information.

As always, if there is anything we can do for you, please feel free to contact us.

Sincerely,

Bruce Truesdale

Executive Vice President & COO

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Stricklin & Porter Construction LLC develops subdivisions in Louisiana, provides exceptional service to customers



Michael Stricklin Sr., Co-owner



Michael Stricklin Jr., Co-owner



Chris Porter, Co-owner

When Michael Stricklin Sr., his son Michael Jr., and Chris Porter teamed up to form Stricklin & Porter Construction LLC about three years ago, their initial idea was to construct a subdivision in their hometown of Zachary, La.

"We wanted to get into subdivision development and see where it went," said Stricklin Sr., noting that Stricklin & Porter Construction's earliest focus was work for another one of their entities, Stricklin & Porter Land. "Things grew rapidly, and now we're not only building our developments, but we are working for other developers constructing houses, putting individual lots to grade, and handling walk-in clients who have come to us on the recommendation of other customers."

Stricklin Jr. emphasized that those referrals are mainly due to the fact that Stricklin & Porter Construction handles nearly every aspect of a project.

"We are fully turnkey, taking care of everything from land acquisition to sitework to handing the keys over to the client," explained Stricklin Jr. "There is practically nothing we can't do, including electrical and insulation work. We are licensed arborists. We have our own cabinet shop and are now dealers for flooring and appliances. By handling everything in-house, we tighten up the timeline and can turn over a commercial building or single-family residence in months compared to a year or year and a half."

Stricklin & Porter Construction covers about a 60-mile radius around Zachary and has expertise in all facets of building customers' projects. Even though the company has only been around for about three years, the co-owners possess decades of experience in the construction industry.

Porter and Stricklin Jr. were involved in various separate businesses, but they worked together on some projects. According to Porter, the catalyst for them deciding to form Stricklin & Porter Construction came about a few years ago when Stricklin Jr. had a lawn service that he expanded into tree work, storm cleanup and eventually earthwork.

Stricklin Jr. explained, "One of the first big jobs I ever did was for Chris back in 2017. We actually partnered up on some storm projects doing cleanup. Around that time, there were several disasters that hit back to back, and we had guys spread out all over the country. We decided to start a land acquisition company, buying homes and remodeling them or smaller tracts of land and subdividing, and that was how Stricklin & Porter came to be. My dad retired from oilfield work and partnered with us."

Under construction

After looking at about 50 properties across three states, the co-owners settled on a site in Zachary to build their first subdivision because

Stricklin & Porter Construction Co-owner Michael Stricklin Jr. fine grades around a pond with a Komatsu D39PXi-24 Intelligent Machine Control (IMC) dozer.





it's the number one school district in the state. Known as Clairmont, the subdivision has been in the works since Stricklin & Porter Construction's inception and homes continue to be built.

More recently, Stricklin & Porter Construction began a second new community in Zachary that it named Munson Hills. The 106-acre location will have 59 homes, including 24 lakefront residences located on a 12-acre waterfront. Company crews will move more than 200,000 cubic yards of dirt and install more than 9,000 feet of utility as part of the site preparation and then construct the houses.

With a staff of about 20, Stricklin & Porter Construction works on six to 10 jobs at any one time, mainly focusing on servicing East Baton Rouge, East Feliciana and West Feliciana parishes.

"From skyscrapers to a single-family home, we can build it," said Stricklin Jr. "We started the construction company to be able to save ourselves money, and we were just going to work for ourselves. Then we're like, well, there's a lot of money left on the table. We'll start doing jobs for other people. So, we're about to start some custom home jobs."

Precision and ease

For all of its projects, Stricklin & Porter Construction uses several pieces of Komatsu equipment, including some Intelligent Machine Control (IMC) models.

"Precision and ease of use are two attributes we look for in equipment, as well as if it fits a particular job," said Stricklin Sr. "For instance, our subdivision development requires moving large quantities of dirt quickly and efficiently across wide open spaces, while a single house lot site is tighter and requires a smaller machine. A bigger Komatsu dozer, such as the D61i, is perfect for subdivisions, and the D39i is just right for the lots, fine grading or doing ballfield work."

Stricklin & Porter Construction likes that the machines have integrated GPS, so the dozers always know where they are in relation to final grade and will automatically push the right amount of material with each pass. Stricklin Sr. noted that even operators with little to no experience can get to final grade faster, and the accuracy is always spot on, which helps the company save time and reduce material costs.



Discover more at WPIUpdate.com

Continued . . .

'The PC360 is our go-to machine'

... continued

Komatsu's slant-nose dozer design is an added advantage, according to Stricklin Sr.

"The slant-nose design helps me see the blade better so that when I'm pushing dirt and I get to a road edge or something, and I don't want to go past it, I can actually see that road edge a little better than if it was a higher nose design on a machine," commented Stricklin Sr.

Stricklin & Porter Construction also uses a variety of Komatsu excavators, including PC210LC-11, PC240LC-11 and PC360LC-11 models.

"They all take care of business because they are stout and have good power," stated Stricklin Sr. "When we get into heavier work such as bulk excavating, the PC360 is our go-to machine. The PC240 does medium work and the PC210

(L-R) Stricklin & Porter Construction Co-owners Michael Stricklin Jr. and Chris Porter talk with WPI Sales Representative Jeff Bonial on a job site. "Service is very important to us, and Jeff always delivers," said Stricklin Jr.

does lighter work, such as digging trenches for utilities. I've worked with a few of our operators since we started, and some of them had been working with other brands. They were a little hesitant about Komatsu at first, but once they got in the machines and got familiar with them, they grew to love them."

Stricklin & Porter Construction tracks fuel consumption, idle hours and other critical information with Komtrax through its My Komatsu account. Waukesha-Pearce Industries LLC (WPI) Sales Representative Jeff Bonial helped Stricklin & Porter Construction set up My Komatsu and assisted the co-owners with the Komatsu equipment acquisitions.

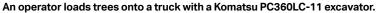
"Our relationship with Jeff goes back several years," said Stricklin Jr. "He sold me my first skid steer about six years ago, and we have been working with him ever since. He knows our business and how to match the equipment to our needs, and he's been there to back it up. Service is very important to us, and Jeff always delivers."

Full steam ahead

Stricklin & Porter Construction has work lined up for several years. For now, the company is mainly focused on continuing its subdivision developments, but the co-owners are looking to branch out.

"We're going to focus a lot on the multifamily and the commercial construction after these two subdivisions get done," said Stricklin Jr.

Porter added, "We'll be able to take orders for our other clients' construction needs." ■







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North American Construction Group supplies nearby plant with an abundance of lignite that is used to power South Texas



Tom Shaw, General Manager



John Trouart, Maintenance Manager

Power plants need a fuel source, and in South Texas, lignite has been a major one for decades.

"Lignite, which some people refer to as soft coal or brown coal, is plentiful in this area," stated Tom Shaw, General Manager of North American Construction Group (NACG), which is contracted to haul lignite from the San Miguel Lignite Mine to the nearby San Miguel Electric Cooperative, which owns the mine. "Generally speaking, it's a lower BTU (British thermal unit) per-pound value and softer than other types of coal, but it's still valuable in making electricity."

Located about an hour south of San Antonio, the mine has been a source of lignite for San Miguel Electric Cooperative since 1980. NACG took over mine operations in 2020 and delivered about 3 million tons of lignite to the 391-net-megawatt power plant last year. NACG expects to deliver a little more than 2 million tons this year because the plant is using some stockpiled material from the year prior and plans on ramping back up in 2024.

Maintenance Manager John Trouart, who has worked at the mine for about two decades, has seen quite a few changes over the years.

"The geology has differed depending on where we are mining," explained Trouart. "The coal seams are getting deeper, and the haul distance has increased. When I started here, we were hauling out of one area that was about 3 miles from the plant. Now, we have multiple locations we are mining that can be up to 8 or 9 miles."

Shaw emphasized that even at longer distances, harvesting lignite from the San Miguel Lignite Mine is still the best option for supplying the power plant.

"Having the mine close to the power plant is very economical because having to haul in lignite or another type of coal from hundreds or thousands of miles away is expensive and increases costs," said Shaw.

Komatsu equipment maximizes productivity

Due to the deeper coal seams that can range from 90 to 160 feet, NACG began using additional equipment to pre-bench and pre-strip instead of just using draglines.

"The draglines' booms are not long enough to open up a pit, and they are intended to pick up material once," explained Shaw.

An operator moves dirt with a Komatsu D475 dozer.





"It's expensive to have them move dirt multiple times in different locations. They are meant to be fixed-radius machines that sit in one spot for long periods of time. We started utilizing a Komatsu PC2000 excavator in 2007 to remove topsoil and subsoil and haul it back to previously excavated areas for fill and as part of the reclamation process."

NACG continues to run its original PC2000, which now has about 88,000 hours on it. The company has since added two more, including a new PC2000-11 with a 19-yard bucket and an operating weight that ranges from 445,179 pounds to 456,926 pounds.

"The quality of the PC2000 is excellent," said Trouart. "Nothing has been done to the original machine other than component changes. The availability has been above 85% on all of them. The hydraulics on the new PC2000-11 are even faster than the previous ones. It runs more like a smaller excavator than a mass excavator. The response and swing time are better, so it's more productive, which means we can move dirt faster, and that's our aim. We also like the extremely quiet cabs, which contribute to greater operator comfort and productivity."

Operator Tyler Lee noted that the PC2000-11 seemed to be built with the operator in mind and

appreciates the comfortable seat and roomier cab as well as several other new features.

"I really like the multiple cameras and the bird's eye view," said Lee. "I don't have to turn my head to see what's around me. I can look at the monitor and get a full view of the area. I feel like it increases safety because I'm more aware of what's around me at all times. I also like the hydraulic ladder that can be raised and lowered with the push of a button. It's wider and more like stairs than a ladder, which makes it easier to get up and down when carrying a bag or a cooler."

Currently, Lee uses the PC2000-11 to dig down 45 to 50 feet and load NACG's Komatsu HD785-7 off-highway trucks that have nominal payloads of 100 tons. NACG uses the trucks to haul dirt to reclamation sites, haul ash from the plant, and occasionally haul coal to the plant. Operators spread ash and earth with Komatsu D375 and D475 dozers.

"We moved to the bigger D475 dozers a few years ago because they allow us to move more dirt faster, so the productivity rate increased and our cost per hour to move dirt decreased," said Trouart. "We have done some component changes and undercarriage replacements, but those are a normal part of working in the conditions we do."



Continued . . .

'We get the service and parts that we need'

... continued

Another way NACG increases efficiency at the mine is by utilizing "coal trains," which are older Komatsu 330M trucks with 120-ton trailers. NACG runs the coal trains 24 hours a day to keep the power plant supplied with lignite.

"All four of those trucks have more than 110,000 hours on them, and we have never had to do anything to them other than component

WPI Product Support and Mining Sales Representative Mike Harris (center) meets with NACG's Tom Shaw (left) and John Trouart.

exchanges," said Trouart. "That longevity contributes to lower per-ton costs."

Excellent service

Trouart emphasized that a main reason for purchasing the Komatsu PC2000 excavators was dealer service. NACG works closely with Waukesha-Pearce Industries LLC (WPI) personnel, including Vice President of Major Accounts Frank Pagura and Product Support and Mining Sales Representative Mike Harris.

"I had some experience with another brand, and we looked at it and the Komatsu," recalled Trouart. "Our history with WPI was the determining factor. Our relationship has grown, especially in the last few years. Product support is very important to us, and we keep going back to WPI and Komatsu machines because we get the service and parts that we need. WPI also provides us with on-site techs five days a week."

Optimistic for the future

According to Shaw, there are a lot of factors to consider when thinking about what the future holds for the mine, but he and NACG are optimistic and hope to expand.

"We're going through the permitting process to open another area," said Shaw. "The current mine plan runs through 2037, but environmental rules and regulations may have an effect." ■

NACG uses Komatsu HD785-7 off-highway trucks to haul materials throughout the mine.



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CONEXPO-CON/AGG 2023 attendees see the future of construction as manufacturers highlight electric equipment



Electric! That describes both the atmosphere and an abundance of new machines at CONEXPO-CON/AGG 2023, which was held March 14-18 in Las Vegas. With an eye toward sustainability, a host of manufacturers across multiple industries debuted electric and autonomous equipment designed to reduce fuel usage and carbon footprints.

A record crowd of more than 139,000 people attended North America's largest equipment show, which was co-located with the International Fluid Power Exposition (IFPE) at the Las Vegas Convention Center. More than

2,400 exhibitors from 36 countries were spread out across approximately 3 million square feet of exhibit space, which was about 10% larger than the previous show in 2020.

"The innovations in the construction industry unveiled this week will play a role in helping construction professionals drive meaningful and sustainable economic growth," said CONEXPO-CON/AGG Chair Phil Kelliher. "Live events in the construction industry are very important, because you can see, touch and experience the products. That value was reaffirmed this past week across the show floor."

Sustainable focus

Komatsu introduced innovative electric products such as the 20-ton PC210LCE electric excavator that features Proterra's lithium-ion battery technology. It has 451 kilowatt hours (kWh) of battery capacity that offer up to 8 hours of operating time, depending on workload conditions and application.

Suitable for a diverse range of workplaces, including indoors, the Komatsu PC30E electric mini excavator with a 35-kWH battery and a 17.4-kilowatt electric motor was on display. The PC30E is designed to be fast-charged, and it offers quiet and simple operation with zero emissions and no vibrations.

Attendees had the opportunity to see Komatsu's smallest electric excavator — the PC01E electric micro excavator. Developed jointly with Honda, it is powered by portable and swappable mobile batteries. The new machine is designed for confined spaces in landscaping, agriculture and construction.

Komatsu's vision for the swappable battery system is to scale up the technology for use in larger micro excavator models. The PC210LCE, PC30E and PC01E will be available in select markets later this year.

Komatsu also showcased three types of charging infrastructure, as well as its WA electric wheel loader prototype with a chassis based on the WA70. The wheel loader prototype utilizes an "intelligent electrification system" that features an electric traction motor, lift, tilt and steering cylinders, power electronics, a system control computer, a battery, and a battery management system.



Manufacturer representatives were on hand to answer attendees' questions about equipment and technology. "CONEXPO gives us the opportunity to show attendees how Komatsu can be an end-to-end solutions provider with equipment and digital tools that can help increase efficiency and reduce costs," said Komatsu's Brandon Rakers, Senior Product Manager for Technology Business Solutions (pictured above, right).

At CONEXPO-CON/AGG 2023, Komatsu introduced innovative new electric products such as the 20-ton PC210LCE electric excavator that features Proterra's lithium-ion battery technology.





In addition to electric equipment, Komatsu showcased its new PC900LC-11 excavator, which was paired with a Komatsu HM400-5 articulated truck.

In addition to electric equipment, Komatsu highlighted its HB365LC-3 hybrid excavator designed for high production and efficiency with low fuel consumption. Its hybrid system can provide an additional 70 horsepower on demand and allows operators to be up to 15% more productive in Power mode. The hybrid's environmentally friendly operation offers up to 20% more fuel efficiency and 20% less carbon dioxide emissions compared to the standard PC360LC-11.

Also on display was Komatsu's suite of Smart Construction solutions — Dashboard, Design, Drone, Field, Fleet, Office, Remote and Retrofit — designed to optimize the job site, as well as its new Smart Quarry solutions that help increase efficiency, improve production, and maintain a high level of performance, such as Smart Quarry Site and Smart Quarry Study.

Lastly, Komatsu featured its Intelligent Machine Control (IMC) 2.0 dozers and excavators, along with the new PC900LC-11 excavator, and other construction and forestry machines.

"We had a lot of great conversations at the show and really wanted customers to take away that we are committed to working with them to create value together," said Komatsu's Brandon Rakers, Senior Product Manager for Technology Business Solutions. "CONEXPO gives us the opportunity to show attendees how Komatsu can be an end-to-end solutions provider with equipment and digital tools that can help increase efficiency and reduce costs."

Electric experience at CONEXPO



"This is our first CONEXPO experience. It's mind-boggling how large it is, but that's why we came. We wanted to know what's coming, so we can gear our business around where the industry is going."

- Sy Kirby, Sy-Con Excavation & Utilities

"It's a chance to see what's new in equipment and how it could possibly help our business. I ran a simulator that was just like actually operating a real truck. It would be great for teaching new drivers." – Jesse Cummings, Scott Schofield Construction Inc.





"We see CONEXPO as an opportunity to experience a little more outside of what we do every day. It's been a great time." – Jon Martzall, Iron Eagle Excavating

CONEXPO-CON/AGG is scheduled to return to the Las Vegas Convention Center March 3-7, 2026. ■

Learn more about Komatsu at CONEXPO: https://www.komatsu.com/events/conexpo/?utm_source=Komatsu&utm_medium=PressRelease&utm_campaign=ConExpo2023&utm_content=pc900



Learn more

Construction equipment electrification: a glimpse into the future of the electric job site



Andrew Earing, Director of Tracked Products and Service, Komatsu

From electric vehicles (EVs) to mining equipment, the shift toward an electric-powered world to reduce carbon emissions — including construction equipment electrification — has already begun.

The Bipartisan Infrastructure Law, which President Joe Biden signed in November of 2021, includes an investment of up to \$7.5 billion for EV charging stations to help build out a national network of 500,000 EV chargers.

Additionally, the Bipartisan Infrastructure Law created a joint office between the Departments of Energy and Transportation to collaborate with local communities and provide technical assistance to support the creation and development of EV charging infrastructure.

Actions are being taken at the state level as well. The California Air Resources Board announced the Advanced Clean Cars II rule in August of 2022 that codified Governor Gavin Newsom's climate goals for the state. The rule established that all new cars and light trucks sold in California must be zero-emission vehicles by 2035.

"While electrification is at the forefront of everyone's mind due to automotive, our equipment on the construction site is often creating that infrastructure for electric automobiles," remarked Andrew Earing, Director of Tracked Products and Service at Komatsu.

An operator places a battery in an electric Komatsu machine. "While electrification is at the forefront of everyone's mind due to automotive, our equipment on the construction site is often creating that infrastructure for electric automobiles," remarked Andrew Earing, Director of Tracked Products and Service at Komatsu.

"There are challenges, and we have solutions to those challenges that we are exploring, but it's not going to be a one-size-fits-all solution for the various applications and the various sizes of the products that we provide."

The electric advantage

Komatsu recently showcased a PC210LCE electric excavator and a fully electric compact wheel loader prototype at Bauma 2022, an international trade fair that was held in Munich, Germany, as well as CONEXPO-CON/AGG 2023 in Las Vegas.

In a press release, Seiichi Fuchita, Chief Technology Officer and President of the Development Division at Komatsu, noted that for Komatsu to reach its target of reducing the CO2 emissions of products in use by 50% by 2030 (from 2010 levels), and "to achieve carbon neutrality by the end of 2050, we are looking for promising technologies from suppliers to accelerate our electric machine development."

"Industries including construction are trending in the direction of carbon neutrality," added Earing. "We want to be a leader. We are a technology leader when it comes to construction and mining equipment. We feel that electrification is one viable option in the construction space."

With the PC210LCE, Komatsu created an electric excavator from a popular size class.

"We wanted to introduce the 20-ton size class, because it opens us up to a lot of different operating applications and environments," explained Earing. "They're going to be used indoors and outdoors. It's a very diverse size class, and we wanted to get a much better understanding of all those applications and how they work with electrification."

In 2023, the PC210LCE will begin to see real work on the job site.

"In North America, we are going to conduct a pilot program where we will work with many of our customers to jointly test not only this machine, but the solutions for our customers' applications to better understand the benefits to them, and how we can help meet their needs," said Earing.

Meanwhile, a Komatsu electric wheel loader prototype, created in collaboration with Moog, is currently undergoing further tests to enhance and showcase the advantages of a fully electric



Komatsu's PC210LCE electric excavator provides immediate advantages over a combustion machine, such as better air quality and reduced noise. "It can operate in areas where it may not have been able to operate before, and for longer durations," said Andrew Earing, Director of Tracked Products and Service at Komatsu.

machine, such as increasing its operating cycle, adding assist functions, and creating a comfortable environment for the operator. The wheel loader also has sensors to add automation capabilities.

Compared to its combustion predecessors, electric machinery provides two immediate advantages: better air quality and noise reduction.

"With a zero-emissions machine, it allows the flexibility for that piece of equipment to operate indoors without harming the air quality around it," said Earing. "It can now operate in areas where it may not have been able to before and for longer durations. When you have a traditional emissions vehicle operating indoors, air quality has to be monitored, and sometimes the machine must be shut down for extended periods of time to let emissions dissipate."

Metropolitan and urban worksites are often accompanied with restrictions for when a contractor can work — in part to reduce noise pollution for the populace.

"That's why urban environments are another application for electric machines," Earing continued. "It's not only due to exhaust emissions, but also because of sound emissions. Going with an electrified machine, which has near zero sound emissions, allows

for an extended operating window for our contractors and customers."

Bridging the gap to construction equipment electrification

While combustion engines will remain crucial to the development of electric infrastructure, there is currently hybrid machinery available to help the transition between 100% combustion and 100% construction equipment electrification.

Komatsu released its first hybrid excavator in 2008, and its most recent model, the HB365LC-3, entered the market in 2017.

"The HB365LC-3 offers increased fuel efficiency without sacrificing power. A topper on the cake is the added benefit of reduced emissions that lowers your carbon footprint and promotes sustainability," said Kurt Moncini, Senior Product Manager at Komatsu. "Based on the Environmental Protection Agency's CO2 formula, the hybrid potentially offers up to a 20% reduction in CO2 emissions compared to the standard PC360LC-11."

The force behind the excavator's fuel savings is its electric swing motor, which offers a glimpse into the capabilities of future electric excavators. The electric swing motor captures and regenerates energy as the upper structure slows down and converts it to electric energy.



Kurt Moncini, Senior Product Manager, Komatsu

Continued . . .

'Swing is fully electric'

... continued

Moncini explained, "It's using energy that would normally be wasted and makes it available to do work, contributing to increased efficiency and decreased diesel usage."

The energy captured during each swing braking cycle is stored in the HB365LC-3's ultracapacitor. Each time the excavator swings, the capacitor discharges electric power to the electric swing motor.

"A traditional battery requires time for the chemical process that releases electricity to occur," stated Moncini. "The heavy work nature of construction equipment places a much faster demand on power transfer. The ultracapacitor's ability to store and discharge energy quickly makes it ideal."

He added, "Since swing is fully electric, all available engine power can go to the boom, arm and bucket when bringing a loaded bucket out of the ground and over a truck, spoil pile or hopper. This creates a faster cycle time and a very quick, responsive swing."

In addition to powering the swing motor, the ultracapacitor sends electric energy to the engine via the motor-generator. This energy is used to accelerate the engine from an ultra-low idle speed of 700 revolutions per minute (rpm) and improve hydraulic response.

It is this technology that can likely be applied to future electric excavator models to extend battery life and increase power.

"Komatsu has the technology to not only capture but also supply energy into an electric swing motor, which gives the HB365LC-3 up to an additional 70 horsepower that it can use for efficiency needs or even use for additional performance needs depending on the customer's application," said Earing.

Steps toward carbon neutrality

Complete construction equipment electrification and hybrids are at the forefront of construction's push toward carbon neutrality, but electrification is just a part of what the industry sees as a solution to meeting carbon goals.

"We're not just exploring electrification — we're also exploring other technologies that are out there such as hydrogen fuel cells and clean fuels," said Earing. "We're looking at all of these options because we're making sure that we have the right solution for the right job site and customer application."

Earing concluded, "In the future, I would say that the trends that we see in carbon neutral machines will depend on the machine application, plus size and weight. With different sizes, there are going to be different technologies that suit those machines."

Hybrid equipment, such as the Komatsu HB365LC-3 excavator, bridges the gap between combustion and electric machinery. "The HB365LC-3 offers increased fuel efficiency without sacrificing power. A topper on the cake is the added benefit of reduced emissions that lowers your carbon footprint and promotes sustainability," said Kurt Moncini, Senior Product Manager at Komatsu.







WPI opens new full-service branch in Lufkin, Texas

Equipment users in the Lufkin, Texas, area now have a full-service location to meet their machinery and service needs with the opening of Waukesha-Pearce Industries LLC's (WPI) newest branch. It offers parts and service capabilities as well as an extensive product lineup of Komatsu, BOMAG and more.

"We felt like customers in this area were a little underserved, and this location offers the complete package to meet their needs," said Branch Manager Carole Smith, who has been in the equipment industry for more than 17 years and leads a staff of 11 at Lufkin. "Whether they are in construction, forestry or other industries, we can take care of them."

In addition to equipment, the new Lufkin store carries a large inventory of replacement parts and off-the-shelf items such as fluids, batteries, tracks, and electrical items such as switches.

"We have a large inventory on hand of parts for all types of equipment WPI carries, so common items are readily available," said District Parts Manager Dale Nordloh, who was the parts manager for a heavy machinery company related to the poultry industry prior to joining WPI. "In most cases, if we don't have something in stock, we usually can get it within a day by working with another branch or going through the manufacturer."

Complete service

As well as with customers, Nordloh works closely with Lufkin Service Manager Michael Scott to ensure the service department has what it needs to service and repair machines. The branch has six bays to service machines on-site, and it also offers field service to customers in the Lufkin area.

"We have an excellent group of technicians," said Scott, who joined WPI with nearly 30 years of experience in the equipment industry. "We're committed to providing outstanding service to customers. Our capabilities include everything from routine maintenance to complete rebuilds. In addition to the brands we carry, we also work on competitive machines. We have two shop technicians and one in the field, and we are looking to add on."



(L-R) Staff members of WPI's new Lufkin, Texas, branch include Branch Manager Carole Smith, Parts Sales Representative Gordon Pyle, Service Manager Michael Scott, Service Administrator Christopher Reynolds, Shop Technician Dan Michaud, District Parts Manager Dale Nordloh, Sales Representative Clint Woodcock, and Parts Sales Representative Keith Brashear, as well as (not pictured) Field Technician Wesley Moreland, Field Technician Preston Butler, and Product Support Sales Representative Brian Vardeman.





WPI's new full-service Lufkin, Texas, branch carries equipment, has a large parts inventory in stock, and offers shop and field service. It is conveniently located on the northwest side of the city at 4006 Ellen Trout Drive.

Scott added that he's seen a positive response to the new Lufkin branch.

"I can go to a local restaurant with my WPI shirt on, and people will come up to me to say that they are glad we are here," said Scott. "I think part of that is they see the commitment to bringing service closer to home. They don't have to take their equipment a couple hours away or wait so long to have a field tech get to them. I didn't realize there were so many WPI customers in this area."

Serving all markets

The number of customers around the Lufkin market has grown considerably during the past five years, which is due in part to the efforts of Sales Representative Clint Woodcock.

"Our customer base in this area has grown to the point that this branch was needed," said Woodcock. "Honestly, there was a gap between the Kilgore, Houston and Beaumont areas, and Lufkin fills it. There are several site contractors here as well as oil and gas — and a growing number of forestry-related businesses. This full-service location can take care of their needs as well as others."

The branch's walk-in traffic and customer calls continue to increase, according to Smith.



Shop Technician Dan Michaud diagnoses a machine in Lufkin's six-bay shop. The location offers everything from routine scheduled maintenance to complete repairs and rebuilds.

"They recognize that we are here and making a commitment to providing them better service than ever before," said Smith. "We look forward to meeting and servicing many, and we have plans to expand in the future. We're excited about being in Lufkin."



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Komatsu's new C144 harvester head, grapple line improve performance with increased reliability for great productivity

For success on forestry projects, your equipment needs to be highly productive and reliable. Komatsu's upgraded C144 harvester head and new grapple range can help deliver both.

The C144 features a new valve bank with a longer service life than its predecessor (verified through testing). Its resilience against wear boosts the reliability of the harvester head and contributes to more uptime and reduced repair costs. To save fuel, the new valve bank lowers energy losses due to decreased hydraulic resistance in the valve block.

An increased feed rate on the smaller feed roller motor from approximately 16 feet per second to 21 feet per second helps deliver greater production and profitability. The design of the saw box has been improved to simplify maintenance and increase reliability.

Better stem holding performance during felling is another improvement. It comes from inverting the direction of the oil flow in the feed system. Test operators who tried the new C144 said that they got more response from the head and described it as "distinct."

Longer service life

To help save time, Komatsu's new grapple range encompasses 10 completely redesigned models with larger openings that offer better wood pile penetration and make it easier for the logs to roll into the grapple. They have also been refined for gathering and straightening timber.

In addition to new features, the grapples retain the key advantages of the previous models such as a robust, durable design. Several improvements on the new grapples contribute to a longer service life, ensuring durability in demanding forest environments.

New models range from the G82, which holds 0.85 square feet, to the G87H, which holds 1.64 square feet. The range is divided into standard, bioenergy (brushwood) and heavy-duty applications. All are compatible with the most common forwarders, as well as most types of truck cranes and other vehicles that handle timber. ■



C144



Grapples

Komatsu's upgraded C144 harvester head



Smart Construction solutions, IMC help Castle's Renewable Energy Division move earth faster with decreased costs



Chris Scheve, Vice President, Renewable Energy



Joel Brewton, Vice President of Asset Management & Centralized Services

The company known today simply as Castle was originally founded as Progressive Pipeline in 1999 by Mike Castle Sr. His business focused on providing service to the oil and gas industry with jobs done with integrity, on time and on budget. That strategy proved highly successful, and within three years, the company landed its first multimillion-dollar contract, which led to the creation of more divisions within the firm.

In addition to Pipeline, Castle's divisions now include an Integrity Group, a Facility Group, Directional Drilling, Environmental Reclamation, and its latest undertaking: Renewable Energy, which focuses on sitework and other services for wind and solar projects.

"Castle saw the transition to renewables and wanted to be a part of that," said Vice President Chris Scheve, who joined the company about a year ago and has helped spearhead the formation and expansion of the Renewable Energy Division. "With our skilled workforce and our equipment, it's a nice fit to move over and do the renewables effort."

Joel Brewton, Vice President of Asset Management & Centralized Services, added, "Outstanding service is our hallmark, and that's really built around doing things safely and efficiently. We believe that goes hand in hand with delivering solid production. We are always seeking ways to improve our practices. Technology — such as the Komatsu Smart Construction machinery and solutions we now use — is playing an increasingly bigger role for us because we see the benefits it is delivering in terms of cost and time savings."

Brewton and Scheve emphasized that the two large solar projects that Castle's Renewable Energy Division recently took on in Wisconsin are prime examples. About a year ago, Castle began site preparation, including putting the sites to grade, building basins, and handling erosion control. Between the two, Castle team members moved about 700,000 yards of dirt.

"Our Onion River project, which is the bigger of the two, involved about 18 different sites, so it was pretty spread out," explained Superintendent Rocky Hartwick. "We started in July and had the mass grading done by the end of the year. Our Crawfish River project began earlier, and the grading was basically done within a relatively short timeframe."

Hartwick continued, "These projects were our first ones using Komatsu's IMC machines, and we were very impressed with the ability to use the integrated GPS from grass to grade. Using traditional methods, we cut approximately two acres to grade each day. Komatsu's IMC machines allowed us to do 10 to 12 acres





Komatsu's Jason Anetsberger (left) uploads data from the Smart Construction Drone flights to Smart Construction Dashboard. Castle's Joel Brewton (right) uses Komatsu's Smart Construction Dashboard in his office in Meridian, Miss., to check the progress of Castle's job sites in Wisconsin.



without the need for a grade checker because the machines always know where they are in relation to final grade. The accuracy and efficiency are spot on."

Using Smart Construction solutions

Throughout the projects, Castle has used Komatsu Intelligent Machine Control (IMC) dozers and excavators, as well as Smart Construction Drone, Smart Construction Dashboard and Smart Construction Remote. Castle also purchased its own drone, and staff members received training from Komatsu, so they could conduct flights independently.

"Komatsu corporate has been a big part of helping us learn the IMC system as well as incorporating drone flights to verify that what the machines are seeing is exactly what we're seeing," Scheve explained. "We've made drone flights a standard, so before we ever move a speck of dirt, we do an initial flight of the sites to make sure we have accurate models to work from. CAD (computer-aided design) files are developed from those, and those models are uploaded to the IMC machines. We do subsequent flights about a month apart to check progress and verify how much dirt was moved, and that gets uploaded to Dashboard. That information helps us put together as-built models we can show to the customer and keep accurate records."

Brewton said that level of accuracy has been impressive to Castle and its customers.

"We are a very schedule-driven contractor," Brewton stated. "When we make a schedule, we want to stay on it. Drone flights let you verify a site within a matter of hours rather than days with the old methods of walking the site and staking it. Instead of taking maybe 20 shots with a rover and a stick within a 10-foot section, the drone is shooting thousands of points in that same area, so it's delivering a more accurate picture. Billing is another advantage we see. We don't want to overcharge our customer or be underpaid. With the drone, you can verify exact quantities, and you get paid for exactly the work you've done, and that's what we want."

Additional adoption

Increased productivity and efficiency with Komatsu IMC machines and Smart Construction solutions on the Renewable Energy Division's Wisconsin projects have encouraged the Castle team to expand their usage of technology.

"Recent legislation is only going to put additional significant dollars into renewables, and we have customers asking us for commitments for several years out; making the investment makes sense," said Scheve. "We see the applications for the machines and solutions in our other divisions too, such as Pipeline, so we are looking into how to adopt it for those going forward."



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^{*}The opinions expressed here are from the end users who are quoted.



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Komatsu Care Plus Cost Per Hour gives you a fixed hourly rate on unlimited services for 60 months

As your machines age, increase certainty in your owning and operating costs with Komatsu's new Komatsu Care Plus Cost Per Hour program that delivers unlimited scheduled maintenance services at a fixed rate for 60 months.

"Komatsu Care Plus Cost Per Hour is a subscription-style billing plan that gives customers a very cash-flow-friendly alternative and lets them extend coverage beyond the complimentary maintenance period," said Komatsu National Accounts Manager Felipe Cueva. "There is a nominal, up-front, opt-in charge. Customers then lock in their cost per hour for that 60-month period and are billed based on the machine's monthly usage. Price protection is built in. The rate doesn't change, which offers a hedge against inflation and rising costs."

The benefits of Komatsu Care Plus Cost Per Hour include:

- Unlimited hours
- Up to 60 months of coverage guaranteed
- · Price protection
- Total periodic maintenance (oils, filters, labor, travel and oil sampling)
- Monthly payments based only on machine utilization reported in Komtrax
- National coverage

How it works

"For example, if the rate on their particular machine is \$5 per hour and the customer used the machine for 10 hours, they would be billed \$50," Cueva explained. "If they put 100 hours on the machine, the cost would be \$500 for that month."

The usage is tracked with Komatsu's Komtrax telematics system to ensure accurate billing.

"Added peace of mind comes in knowing that, as with other Komatsu Care programs, the services performed with Komatsu Care Plus Cost Per Hour are done by certified technicians," said Cueva.

He also noted that Komatsu Care Plus Cost Per Hour is restricted to current production models such as Dash-11 excavators. Hourly rates vary depending on machine. Once the initial 60-month period ends, customers may opt in again at the current rate.

"Customers can cancel their subscriptions at any time after 1,000 hours and two completed services without penalties or fees," said Cueva. "We encourage anyone who wants more certainty in their costs to check this out, as well as other options through My Komatsu. Your local Komatsu distributor can help get you covered."



Felipe Cueva, National Accounts Manager, Komatsu

Komatsu Care Plus Cost
Per Hour locks in a fixed
hourly rate for 60 months,
and customers are billed on
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Retrofit

New replacement monitors, GNSS receivers provide upgrades to your existing Intelligent Machine Control devices

Komatsu's Intelligent Machine Control (IMC) equipment has always been on the cutting edge of technology that automates grading and excavating. To ensure that's the case on all models of IMC equipment, Komatsu has now introduced remanufactured, upgraded machine control monitors and GNSS (global navigation satellite system) receivers.

"Komatsu always looks to upgrade its equipment and components in order to increase our customers' efficiency and production, and we updated these devices to the latest technology as well," said Goran Zeravica, Senior Product Manager, Reman. "There have been slight changes to the hardware, but the biggest upgrades came in software that makes them even more effective than the previous models."

The new devices are replacements for the original monitors in IMC dozers and excavators and their GPS/GNSS receivers. All are now Komatsu Genuine Reman with proprietary technology, including the PH700 IMC excavator monitor (replacing the older X31) that shows

operators where cuts and fills are, as well as other job site features. Users can upgrade their GX-60 to a new GX-55 in IMC dozers. As with the PH700, the GX-55 shows cuts and fills and other job site features.

Previous MC-i3 GNSS receivers have been replaced with new MC-i4 models, which provide GPS/GNSS positioning for the machine, so it knows where it is on the job site and in relation to final plan elevations.

Available through distributors, My Komatsu

"As with cell phones, which you upgrade periodically to have the latest technology, we encourage you to do the same with your IMC devices," said Arash Moghaddamzadeh, Product Manager, Reman Products and Forestry Aftermarket. "These new devices are available through your Komatsu distributor by contacting your product support representative, technology solutions expert, or through the parts department. Additionally, they are available as Reman by using your My Komatsu account."



Goran Zeravica, Senior Product Manager, Reman, Komatsu



Komatsu restarts production of popular HM400-5 articulated haul truck at its Chattanooga Manufacturing Operation



Rod Schrader, Chairman/CEO, Komatsu North America



Bruce Boebel,
Director of Products
and Services for
Wheel Products,
Komatsu

Due to the growing demand for off-road trucks in construction, quarry and mining operations throughout North America, Komatsu is once again producing its HM400-5 articulated haul truck at its Chattanooga Manufacturing Operation (CMO) in Tennessee. The trucks were produced at CMO in the mid-2000s, but production shifted to Japan, where it has remained until now.

"The HM400 is a very popular truck because it's built for reliability and durability," said Bruce Boebel, Director of Products and Services for Wheel Products at Komatsu. "We're excited about reshoring production here in North America. As trucks are completed, they're on a lowboy going to a customer's site immediately."

Komatsu designed the 473-horsepower HM400-5 to move material across challenging terrain while delivering productive, consistent performance for operators of all skill levels. It has a 44.1-ton payload and a low loading height of 10 feet, 5 inches.

"The HM400-5's versatility makes it a great fit for a variety of applications," Boebel noted. "A dump bed for hauling materials is most common with the HM400, but they can be customized for water and lube trucks too."

First off the line

Rogers Group Inc., an aggregate producer and highway construction company based in Nashville, Tenn., purchased the first HM400-5 off the CMO line and is using it in one of its 70-plus quarries, along with many other Komatsu products.

"We have found as we study owning and operating costs of all our fleets that the HM400 gives us the best overall value [on articulated trucks]," said Darin Matson, President and CEO of Rogers Group.
"Komatsu is a big supporter of our industry, and that's something we look at in our equipment-buying decisions. Of course, we think it's great that they are building the HM400 right here in our home state."





Optimum traction in soft ground

The HM400-5 features the Komatsu Traction Control System (KTCS) that is designed to provide excellent traction in soft and slippery ground conditions without sacrificing steering performance. If conditions worsen and the truck detects tire slippage, the inter-axle-lock kicks in. If tire slippage continues, it will automatically apply an independent brake to the wheel on which the slip was detected to help regain traction.

Boebel added, "The hydro-pneumatic seat suspensions help cushion the ride for operator comfort and reduced fatigue."

An integrated payload meter is standard and displays loaded-material weight on the in-cab monitor. External lamps illuminate green, yellow or red as the payload increases to help prevent under- and over-loaded haul cycles.

Komatsu made service convenient with a lightweight resin hood and a cab that tilts rearward for easy access to the engine and transmission. Production data and other information is stored on board the HM400-5 and is accessible by plugging a laptop into a port or remotely via Komtrax. Users can monitor daily, weekly or monthly detailed data to allow for full production studies.

"We have seen the demand for our HM400-5 trucks grow significantly in both the U.S. and Canada, which is why we began producing the trucks here in the U.S.," said Rod Schrader, Chairman and CEO, Komatsu North America. "The domestic production of this popular truck supports Komatsu's commitment to jobs and manufacturing in the U.S." ■



Darin Matson, President/CEO, Rogers Group Inc.



Watch the video

Komatsu's PC78US-10 earns top honor with EquipmentWatch's Highest Retained Value Award for small crawler excavators



With a five-year retained value of 76%, the Komatsu PC78US-10 won the 2022 Highest Retained Value Award for small crawler excavators Tight tail swing excavators continue to gain popularity due to their high production in confined spaces. Add in a solid value when it comes time to sell or trade them in, and you have a winning combination, according to EquipmentWatch, which gave Komatsu's PC78US-10 a Highest Retained Value Award.

The PC78US-10 has an ultra-short (US) tail and a rounded cab design that allows it to swing within the same swing radius as the counterweight. The 65.5-horsepower excavator has a five-year retained value of 76%, which was 15 percentage points higher than the overall average for the small crawler excavator category, according to EquipmentWatch. The retained value is a prediction for the value of a piece of equipment five years from now. Analysis was limited to models still sold in 2022 to ensure that the results can be applied to buying decisions today.

"Retained values are often related to the concept of depreciation, which is a measure of how far a piece of equipment's value decreases over time," said Don McLoud in the article "Komatsu PC78US-10: The Small Excavator with the Highest Retained Value for 2022." "Retained values are an important

factor in equipment purchases or lease decisions, as some new equipment holds its value better than others over time. This could mean more money in your pocket when it comes time to trade it in."

High output, six working modes

Komatsu recently released an upgraded PC78US-11 model that features a quiet, high-output engine with increased fuel efficiency. The hoist swing and lift rate are both faster compared to the PC78US-10 model, and the standard auxiliary hydraulic circuit now has up to 12% greater hydraulic flow.

The PC78US-11's versatility can be expanded with attachments such as hammers and grapples. The excavator has the standard two-way auxiliary hydraulic control and a dual-stage relief valve. Adding an optional thumb lets you run most tools in the industry, which could potentially increase profitability and lead to a better return on investment.

Six working modes are available: Power, Economy, Lifting, Breaker, Attachment-Power, and Attachment-Economy. The improved blade is designed to better roll material for more efficient dozing and backfill work.





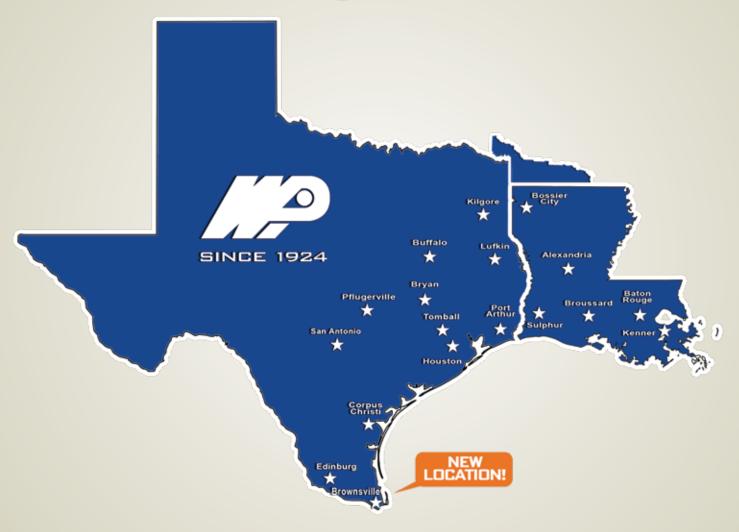




MODEL	WEIGHT	REACH	STICK	воом	GRAPPLE	HORSE POWER
ATLAS 200 MH	44,100 LBS	33'	13' 2"	19'8"	5 YARD	143
ATLAS 270 MH	65,000 LBS	46'	19'8"	26' 3"	.75 YARD	175
ATLAS 300 MH	68,000 LBS	46'	19'8"	26'3"	.75 YARD	1 175
ATLAS 350 MH	80,640 LBS	53"	22' 8"	31.0.	I YARD	245
ATLAS 400 MH	98,000 LBS	57'	22' 8"	34' 9"	- .25 YARD	245
ATLAS 520 MH	125,000 LBS	62'	30' 4"	32, 5	1.5 - 2 YARDS	295

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