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ABR Construction Inc.

Kentucky company uses innovative solutions to increase productivity



Christian Ach,
owner/president



C.A.S.E. Construction Inc.

Indiana business offers turnkey site development services



Jesse Smith,
vice president



A Message from Brandeis Machinery & Supply Company



David Coultas

**Lower costs,
maximize
productivity**



Dear Valued Customer:

We all know that high fuel prices can negatively affect profitability, but there are ways to combat those costs. In this issue, we provide some helpful tips on how to reduce fuel usage.

Technology can help play a role in lowering overall costs, from fuel to moving materials. Komatsu recently introduced its latest Smart Construction solution: Smart Construction Retrofit. This indicate-only system works well with excavators that are not already equipped with GPS. Retrofit is an excellent way to upgrade your existing excavators. See inside for details.

Retrofit was one of several Smart Construction solutions recently showcased at Komatsu's Demo Days. It was great to see the popular event's return after a hiatus due to the pandemic. We hope you were able to attend Demo Days, but if not, we offer information on some of the featured machines.

If you are considering Komatsu Smart Construction solutions for your business, read the informative article on how to choose the right ones to maximize your productivity. There is also an article on how to use the new ISO standard, which allows you to track your competitive machines through My Komatsu. I think you will find both beneficial.

Finally, learn more about the GD655-7 motor grader, Komatsu batteries and a new Reman engine for PC360LC-10 excavators.

As always, if there is anything we can do for you, please feel free to contact one of our branch locations.

Sincerely,
Brandeis Machinery & Supply Company



David Coultas,
President

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ABR Construction Inc. uses innovative solutions to increase productivity on its job sites in central Kentucky



Christian Ach,
owner/president



Darrin Darnell,
senior project
manager

ABR Construction Inc., which is headquartered in Nicholasville, Ky., began as a commercial sheet metal and roofing company owned by brothers Michael and Christian Ach. The duo decided to expand into commercial dirt work in the mid-1990s with Michael continuing to oversee the original aspects of the business and Christian expanding the site development side.

By completing several smaller site development projects, ABR Construction both learned the industry and developed a good reputation for providing quality work. Now, with about 80 employees, the company handles multimillion-dollar bids on commercial and privately owned projects in central Kentucky.

"In the last 10 years, we've settled in with a few top-quality clients," Christian said. "Having worked with them before, we have their confidence, and they have ours. On projects, we can provide input to their engineers to mitigate issues during planning to ensure a smooth progression of the site."

These days, ABR Construction primarily works on projects that are around 30 acres. Aside from subcontracting curb and paving, it handles all aspects of site development — including using a crusher and screen on-site, which decreases material costs.

"In Kentucky, you can only use rock that you generate on that project, which makes us competitive and allows our clients to benefit because of the high price of quarry rock," explained Christian.

A longtime partnership

When ABR Construction has equipment needs, it turns to Brandeis Machinery & Supply Company — particularly Alex Rains, a sales representative, and Lisle Dalton, a Brandeis Certified Rental representative.

"Lisle has been my rental guy for nearly 20 years, and he's always straight with me and gets right on it," said Christian. "It's comforting to me that I'm dealing with a guy in Alex that understands what equipment is, what it does, and why we need it."

ABR Construction rented two Komatsu D155PX dozers, and then about six years ago, the company decided to purchase its first piece of intelligent Machine Control (iMC) equipment — a Komatsu D61PXi-24 iMC dozer — and bought a second one a year later. Christian was surprised at how quickly the company's more experienced operators adopted the new iMC machines.

"We thought the younger guys that grew up with smartphones would be the ones to really capture the use of the iMC technology, but it



An operator uses a PC360LCi iMC excavator to move material. "When we dig here in central Kentucky, we often encounter rock, so we purchased grinders to pair with the PC360LCi excavators, which allows us to maintain slope, avoid over-excavation, and not waste material," said Darrin Darnell, a senior project manager at ABR Construction.



► VIDEO

With a five-shank ripper from Vail Products on a Komatsu D71PXi-24 iMC dozer, an operator scarifies material. "Instead of waiting for a site to dry, we can be proactive and use those rippers to break open the soil, and let it air dry before compacting it back down," said Darrin Darnell, a senior project manager at ABR Construction. "It goes from a three-day process to one."

was our experienced operators who loved it," Christian said. "They saw how GPS-integrated machines make them more productive and save them time by preventing over-digging."

The GPS-integrated machines immediately helped reduce labor and idle-time costs by drastically eliminating tasks like staking.

"We were constantly replacing stakes and now the whole site plan is in the dozer itself," remarked Christian. "We have less downtime, so we view iMC as a time-saving tool that makes our operators more functional. Now they produce eight to 10 hours a day rather than worrying about knocking down stakes."

"I feel as though our overall efficiency has gone up 100% since we aren't wasting time staking, and that also frees up project managers to do other tasks," added Darrin Darnell, a senior project manager at ABR Construction. "The iMC dozers have near perfect visibility compared to machines from other manufacturers, which creates a safer job site."

ABR Construction also added three Komatsu PC360LCi-11 iMC excavators to its fleet.

"We went with the PC360LCi machines on the excavators, so we could control depth and



alignment, which saves us on material costs," said Darrin.

Scarifying soil

At Komatsu's Demo Days, ABR Construction tested the new D71PXi iMC dozer and liked the features of the machine.

"We can make cuts and fills with the machine, and do fine grading of gravel and base for roads and curb shelf," said Christian. "They have power and nimbleness."

After deciding to purchase two D71PXi dozers, the company worked with Brandeis Machinery to add five-shank rippers from Vail Products to the machines.

"Brandeis is way ahead at meeting the needs of their customers due to their service department, which helped us find a compatible ripper for the D71PXi," said Christian.



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Continued...

'We purchased grinders to pair with the PC360LCi excavators'

... continued



Ben Troxell,
project manager

The purpose of the shanks is not removing rock, but to scarify wet sub grade.

"Instead of waiting for a site to dry, we can be proactive and use those rippers to break open the soil, and let it air dry before compacting it back down," said Darrin. "It goes from a three-day process to one."

Trendsetting rock excavation

The dozers aren't the only iMC machines in ABR Construction's fleet that are paired with other tools. ABR Construction has become an industry trendsetter by being the first company to attach an Antraquip head to an iMC excavator to grind through rock.

"When we dig here in central Kentucky, we often encounter rock, so we purchased grinders to pair with the PC360LCi excavators, which allows

us to maintain slope, avoid over-excavation, and not waste material," said Darrin. "Rock grinders usually tend to get off the line, but the iMC excavators allow us to stay on a line. They have been the easiest machine we've used to do pipe work in rock."

To pair the Antraquip head with iMC technology, Komatsu rewrote the machine's algorithm. Instead of measuring the points around a bucket, the new algorithm measures the points around an Antraquip head to make excavation as accurate as before.

"Using grinders with the iMC technology allows you to achieve grade without over-digging or misalignment because misaligning a rock trench can be a very expensive mistake," said Ben Troxell, a project manager for ABR Construction.

The head attachments paired with the iMC excavators also quickly cut through rock to speed up production.

"With an Antraquip head, we're able to bench the soil, get down to the rocks, and when it's done, it looks like you took a knife and cut through cake," said Christian. "With a normal hammer digging and cleaning, you'll get maybe a stick a day, but with the Antraquip head and PC360LCi, you are getting two sticks a day."

Comfortable position

Looking ahead, ABR Construction is going to continue developing its strong relationships with its clients. It will also continue to use iMC technology and innovative ideas to create a better and more efficient job site.

"We have a good client base right now, and we are trying to provide the best service for those people," said Darrin. "If we continue the path we have been, we will be in a comfortable position in the next five years." ■



▶ VIDEO
(L-R) ABR Construction's Ben Troxell, Christian Ach and Darrin Darnell work with Brandeis Machinery's Lisle Dalton and Alex Rains. "Lisle has been my rental guy for nearly 20 years, and he's always straight with me and gets right on it," said Christian. "It's comforting to me that I'm dealing with a guy in Alex that understands what equipment is, what it does, and why we need it."

An operator digs to grade in Kentucky soil with a Komatsu PC360LCi iMC excavator.

▶ VIDEO



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C.A.S.E. Construction Inc. serves as a turnkey site development company and one-stop shop for clients across Indiana



Jesse Smith,
vice president

When Phil Jackson and John Roberts saw how using several independent contractors was not cost-effective and caused unnecessary problems on development sites, they decided to take matters into their own hands. They purchased several pieces of equipment to jumpstart their own company, C.A.S.E. Construction Inc., which has served as a turnkey site development company and a one-stop shop for its clients for about 30 years.

Jesse Smith, a friend of Jackson and Roberts and the vice president of C.A.S.E. Construction, joined on in 1999 as a site development crew member.

"I was always upset when I was in the field because I never got what I needed, and I was always short of materials until I complained enough," joked Smith. "They brought me into this role to order materials and make sure the crews have everything they need."

During the late 1990s and early 2000s, C.A.S.E. Construction grew into the do-it-all business for general superintendents it is today. From utilities to curbing and asphalt, C.A.S.E. Construction handles all aspects of site development to ensure the project is ready to go vertical when it is completed.

"We usually work with general contractors that have less site experience," said Smith. "We help them because we avoid mistakes that can happen with multiple contractors since we have years of experience doing it. We're going to handle and schedule everything for our clients."

C.A.S.E. Construction began with about 30 employees and has grown to approximately 120. The company currently focuses on medium-sized commercial projects around their headquarters in Edinburgh, Ind.

"We have the approach of doing jobs that are too big for the small guy but too little for the big guy," said Smith.

C.A.S.E. Construction also works in several other locations in Indiana — including Richmond, Kokomo, Terra Haute and Lafayette — and handles asphalt repairs such as sidewalk segments, pothole patches and general repairs from utility work.

"We primarily work with utility companies, but whenever somebody digs a hole in the street, we're the people that fix it," noted Smith.

Identifying talent

To ensure the company's continued success, Smith and the leadership team at C.A.S.E.

C.A.S.E. Construction utilizes several Komatsu machines, including a PC210LC excavator.





An operator uses a Komatsu PC88MR excavator to move material. "They have good visibility from the front and side, and the rear backup camera helps pick up what you might not see behind you, because you never know what might be there," commented operator Jesse Walker. "When you have zero tail swing and good visibility, it makes for a safer work site."

Construction have recently prioritized finding and developing the next generation of employees.

"If we have the right people, then the company will always find work," said Smith. "They don't need to have the knowledge right now, but they need the character we're looking for."

That character was found in operator Jesse Walker, who began his career working in diesel engine testing in Columbus, Ind. For him, excavating was a side business, and he mostly did smaller landscaping jobs. However, he decided to make it his full-time profession with C.A.S.E. Construction.

Walker commented, "I was brought in as a younger guy to learn from the ground up and

create a foundation for the future of this company that I can be a part of."

Building together

When looking for new equipment, C.A.S.E. Construction relies on Brandeis Machinery & Supply Company and Brian Cook, machine sales representative, due to the relationship they've built.

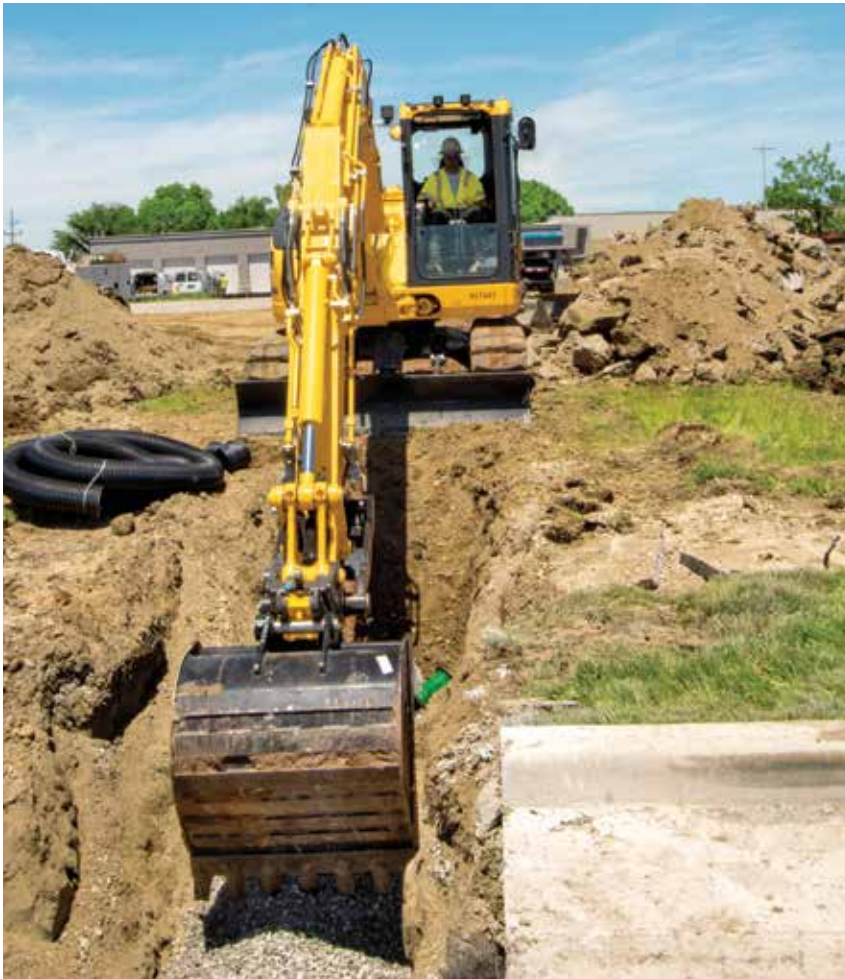
"If you need support, Brandeis is going to show up and be there," said Smith. "If you have to go back to the manufacturer for solutions, they're with you the whole way. If you need repairs done, they have good mechanics that know what's going on."

C.A.S.E. Construction's current fleet of Komatsu machines from Brandeis

Continued...

PC88MR excavators have 'good visibility'

... continued



With a Komatsu PC88MR excavator, an operator digs to grade. "Being able to switch between ISO and backhoe-style controls is simple with the easy switch valve," said operator Jesse Walker. "I've found it's a responsive machine that doesn't have any lag, and the auto-idle function responds quickly."

Machinery includes three PC88MR excavators, a PC78 excavator, a PC210LC excavator, a PC200LC excavator and a D39PX dozer. It also has a HAMM roller.

Walker noted that the safety features on the PC88MR excavator made a quick impression on him.

"The zero tail swing on the PC88MR is super handy when you are on a tight job site," remarked Walker. "You always have concrete piles, dirt piles and laborers around. The excavators have good visibility from the front and side. The rear backup camera helps pick up what you might not see behind you, because you never know what might be there. When you have zero tail swing and good visibility, it makes for a safer work site."

The PC88MR's adaptability is also a perk, according to Walker.

"Being able to switch between ISO and backhoe-style controls is simple with the easy switch valve," said Walker. "We have two operators at this site that use opposite controls and being able to switch quickly between controls allows us to get working faster."

Walker added, "I've found it's a responsive machine that doesn't have any lag, and the auto-idle function responds quickly."

The future

While content with the current state of C.A.S.E. Construction, Smith said he wants to continue developing versatile employees and possibly sees the company making future investments in other locations in Indiana to further its site development sector.

"The people at this company are great, and I know they are capable of much more," remarked Smith. "It's about the people here, because they are the future of C.A.S.E. Construction." ■

(L-R) Jesse Smith, the vice president of C.A.S.E. Construction, and Brian Cook, a machine sales representative at Brandeis Machinery, shake hands. "If you need support, Brandeis is going to show up and be there," said Smith. "If you have to go back to the manufacturer for solutions, they're with you the whole way through all those conversations. If you need repairs done, they have good mechanics that know what's going on."



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Newly renovated Lexington, Ky., branch increases customer support capabilities

Brandeis Machinery & Supply Company recently hosted an open house to reveal the renovated Lexington, Ky., branch. The improvements include 1,200 square feet of additional office space and a conference room, a new side entrance leading directly to the parts counter, and a larger parking lot for customers and equipment.

"We felt it was important to bring the customers out for an open house to not only show our appreciation for them, but to let them see the work that's been done to the branch," said Alex Rains, a Brandeis Machinery sales representative. "By investing in the branch, we're furthering our investment into the Lexington community. We have a young

and eager team that's ready to grow with our customers and help them achieve their goals."

Approximately 200 customers, employees, friends and family members attended the event, which included local catered and grilled food, branch tours, and a raffle. The event served as an opportunity for customers and branch employees to interact in person.

"The open house was a great opportunity to put a face to a name for a lot of our guys that typically interact with customers over the phone," noted Rains. "The machines we sell are great, working with dirt is phenomenal, and making money is the name of the game, but it's the relationships that bring us together and keep the community moving forward." ■



Alex Rains,
sales
representative



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Attendees visit with friends and eat lunch at the Lexington, Ky., open house.



Brandeis Machinery employees, customers and family members get a look at all of the improvements at the branch.

Brandeis Machinery recently hosted an open house at the renovated Lexington, Ky., branch.

► VIDEO





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Here are some considerations if you are new to bidding federal projects

The \$1.2 trillion Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act (IIJA), has many contractors considering federal projects for the first time. Before you dive into the world of federal construction, there are a few key factors you should examine to ensure you are well-equipped and ready for the challenge.

Federal projects are slow paying

If you are working directly for the government, it could easily be 90 days from the time you submit a pay application to when you get paid. If you are a subcontractor, it could take even longer because of the Pay-When-Paid (PWP) clause. Before taking on a federal project, ensure that your cash flow is steady enough to handle financing your materials and labor for the project for several months after submitting your pay applications.

Federal projects often require bonds

Nearly every federal construction project requires bonds. There are two types: a payment bond and a performance bond. A payment bond guarantees that all your laborers and material suppliers are paid. A performance bond covers the cost of completing your scope of work if you abandon or are terminated from the project.

The law requires that the general contractor acquires a payment bond for federal projects, but the federal government has no duty to make sure that one is actually provided. This is why it is so important to get a copy of the general contractor's bond before you start work, so you know exactly who you need to contact if you don't get paid.

The general contractor's bond company will usually require that all subcontractors "bond back," which means that they will receive both a payment and performance bond in the full amount of their subcontract that is payable to the general contractor in case they cannot pay their team or complete their work. If you are a subcontractor or material supplier, you must send the general contractor notice of your bond claim. The notice must be sent within 90 days of the last day of work or the last time materials were supplied. While you don't have to send it to the bond company, you'll probably have more leverage if you do.

Be prepared

If you rarely sign public works contracts, consider having your contract reviewed by an experienced construction attorney. Even if you do not want to negotiate any of the terms, it's wise to clearly understand what you are agreeing to do when you sign the contract, and be prepared on the front end. ■



Karalynn Cromeens

About the Author: Published author, award-winning lawyer, devoted wife and mother, and owner and seasoned managing partner of The Cromeens Law Firm (TCLF), Karalynn Cromeens is a true jack of all trades. She is the co-founder of Morrell Masonry Supply and owner of The Subcontractor Institute, an easy-access online educational platform for contractors. In the 17 years Cromeens has practiced construction, real estate and business law, she has reviewed and explained thousands of subcontracts. Providing education to contractors on a national level has become her personal mission, and she is always doing what she can to help make it a reality.

The new \$1.2 trillion Bipartisan Infrastructure Law provides a wealth of new opportunities, but if you have not done federal work before, you should carefully consider some things, such as delayed payments, before diving right into bidding.



Here are some tips on how to lower fuel costs even when prices are high

Fuel is a major expense for most construction companies — and when its cost goes up, so does the threat to companies' bottom lines.

While we cannot control the price at the pump, the good news is there are still ways for construction companies to reduce their fuel usage and lower costs.

Negotiate

In some cases, you can help defray costs through contracts and agreements. Negotiating a surcharge clause that gives you the ability to raise prices if fuel costs reach a certain level is a possibility. You may also have a simple deal with a customer that gives you the ability to do the same. If you signed a contract before prices soared and don't have fuel surcharges in place, you can try to add them, but it's more likely you will have to seek ways to reduce your owning and operating costs to offset the higher price.

Reduce your idle time

If you are idling for extended, unproductive periods of time, you are wasting fuel.

Idling is necessary in certain situations such as warming up and cooling down a machine. It could also be justified when you

are in high-production activities that involve near-constant movement, such as loading trucks with an excavator and charging crushers with a loader, where restarting would negatively affect productivity.

Telematics let fleet managers easily track idle time by machine for their entire equipment lineup. If they see excessive idling, they can address it with operators and other on-site personnel.

Using Auto Idle Shutdown, a feature available on most Tier 4 Final machines, is an easy way to decrease idle time during unproductive periods. Your machines' operations and maintenance manuals can show you how to set it — the minimum is five minutes before shutdown begins in most cases — and your local dealer can help too.

Heed ECO Guidance suggestions

ECO Guidance, which provides information to operators on energy-saving operations that reduce fuel consumption, is a feature on most machines introduced during the past 10 years. It displays messages on the monitor in certain situations, such as an idling stop guidance if



Watch the video

Excessive idle time wastes fuel and reducing it can be one of your biggest cost savers. Using Auto Idle Shutdown, a feature available on most Komatsu Tier 4 Final machines, is an easy way to decrease idle time during unproductive periods. Another available feature is ECO Guidance, which provides information to operators on energy-saving operations that reduce fuel consumption.

► VIDEO





Fuel is a major expense for construction companies, but no matter the price, there are easy ways to reduce usage, such as using technology, choosing properly sized machines, and running them in the right mode.

no operation is performed for more than five minutes, and the engine is idling.

Choose the most effective mode

ECO Guidance might also suggest operating in Economy (E) mode instead of Power (P) mode.

E mode provides better fuel efficiency, so it's often the best choice. Excavators and dozers are used for both digging and moving naturally compacted soils, and in most instances, E mode will get the job done without unnecessary fuel burn. However, if the material is hard such as heavy clay and requires greater power to move, then P mode should be used.

Properly size and match equipment for the task

Bigger is not always better and using a large machine for a job that a smaller one can efficiently do increases fuel usage and overall operating costs. Fleet managers need to consider several factors when utilizing equipment, including choosing the right size for the job.

It is also important to consider sizing attachments correctly. Excavator buckets are

a prime example. Many contractors believe bigger is always better with buckets. However, at the end of the day, the pile of dirt excavated or loaded is often the same with a properly sized smaller bucket. Larger buckets extend cycle times, work a machine harder, spend more time over hydraulic relief, and end up burning more fuel.

Use technology

GPS-based grading helps increase productivity and lower per-yard costs to move material. In the last 20 years, GPS technology has improved significantly with integrated machine control that lowered costs associated with replacing cables, masts and additional satellites that increased accuracy.

Many of today's machines with integrated GPS grade control also feature additional technologies, such as Komatsu's Proactive Dozing Control logic, that help operators get to grade even faster and at lower costs, including reduced fuel usage. An added benefit is that technology is helping new operators become proficient at moving dirt faster than ever before. ■

Editor's Note: This article is excerpted from a longer blog. To read it in its entirety and find out more about fuel savings, visit <https://www.komatsu.com/en/blog/2022/tips-for-lowering-your-fuel-costs-even-when-prices-are-high/>.



New tech helps drive record attendance at Demo Days, extra day added to the event



▶ VIDEO
Ryan Stachowski,
lead demonstration
instructor and
sales trainer



Watch the videos

Brandeis Machinery's Chad Porter (left) and Matt Buettel (right) helps Bret Lutgring (center) from Lutgring Bros. Inc. try out a wide range of Komatsu iMC dozers.

Attendees could speak with Komatsu personnel about machine features and how they could benefit their business.

▶ VIDEO

Komatsu's 2022 Demo Days was years in the making — three, to be exact. Komatsu last held the event — which invites customers to try its latest machines and technologies — in the fall of 2019 before the COVID-19 pandemic shut down large gatherings. While events might have been paused, Komatsu innovation wasn't. During the pandemic, the company released new machines and technologies that many customers were eager to try.

So, when Komatsu announced it was bringing back the popular event at its Training Center in Cartersville, Ga., current and potential customers, as well as their distributors, couldn't wait to get back. Interest was so high that Komatsu turned Demo Days into a four-day event instead of its usual three.

"We could definitely see there was pent-up demand," said Komatsu's Ryan Stachowski,

lead demonstration instructor and sales trainer, who was the emcee and host of Demo Days. "Our number of available slots were filled almost immediately. It took a lot of work and long hours to put Demo Days together, and the payoff is seeing the smiles on customers' faces. You can tell that they truly enjoy being here."

Among the highlighted machines was the D71PXi-24 intelligent Machine Control (iMC) 2.0 dozer that features new technology such as lift layer control, tilt steering control, quick surface creation and proactive dozing control. It's now the largest of Komatsu's hydrostatic dozers and maintains the super-slant nose design.

Attendees could also run a PC210LCi-11 iMC 2.0 excavator with auto tilt bucket control that enables automatic control of the bucket/attachment angle to match the cutting edge of the surface. Like all iMC excavators, the full bucket profile protects against over-excavation even when the machine is not facing directly toward the target surface. With iMC 2.0 and an IMU sensor, the full bucket edge stays on the surface and automatically returns the bucket to a horizontal loading position.

In total, more than 20 machines and haul trucks were available to operate at Demo Days. Komatsu also displayed products from its forestry and forklift lines, as well as provided information on ground engaging tools from Hensley Industries (a Komatsu company). Additionally, attendees could tour Komatsu's Chattanooga Manufacturing Operation and see excavators and forestry equipment being built.

Komatsu Smart Construction solutions managers were on hand to answer questions and provide information about Smart Construction solutions, including the upcoming Smart Construction Office.

"Smart Construction is a foundation for what's coming in the future," said Bryce Satterly, Smart Construction solutions manager. "If you have Field, Office is the next logical progression of digital solutions. The integration of Office and Field offers great time savings because it reduces or eliminates the need to manually update scheduling and cost analysis, which is typically done weekly or monthly.





► VIDEO

During Demo Days, attendees could operate more than 20 machines, including the popular D71PXi-24 iMC 2.0 dozer, a PC210LCi-11 iMC 2.0 excavator with tilt bucket control, and a PC238USLC-11 excavator with a Smart Construction Retrofit kit.



Brandeis Machinery's Alex Rains (left) and PECCO's Kyle Perdue check out everything at Demo Days.



Smart Construction personnel were on hand to answer questions about how the solutions can transform attendees' businesses and make them more efficient.



Brandeis Machinery sales representative Jason Douglas (left) helps James Jones Excavating's Nathan Jones check out Komatsu's wide range of iMC excavators.



(L-R) Buchanan Contracting's Mikey Harrington, Judy Construction's Allen Creech and Dig-it Excavating's Heath Hager look at Komatsu's iMC excavators with Brandeis Machinery sales representative Alex Rains.

Project managers always have the most current information, so they can make faster decisions."

Attendees have fun

Stachowski emphasized that in addition to being able to operate equipment, attendees were eager to learn.

"They had really in-depth conversations with our experts and really challenged them for real solutions," said Stachowski. "What I hope they

take away from an event like this is that they learn a little bit more about Komatsu that they didn't know before, and that this is a place they can get their questions answered by the people that work day in and day out to develop these machines for them."

Komatsu plans to host another event sometime this fall. ■



Editor's Note: This article is excerpted from a longer blog.

Learn more about Demo Days by visiting <https://www.komatsu.com/en/blog/2022/new-tech-helps-drive-record-attendance-at-demo-days/>.

Incorporate the right Smart Construction solutions by assessing your operations and goals



Jason Anetsberger,
director,
customer solutions

Construction technology continues to play an ever-increasing role on today's job sites and in the office. Companies and their fleet managers can use technology from pre-bid to final closeout to help improve productivity, increase efficiency and reduce costs.

"If you are not using technology, you are being left behind," said Komatsu's Jason Anetsberger, director, customer solutions. "When aftermarket GPS grading was introduced, it reduced the amount of time to get to grade. Intelligent machines now have it integrated, which is further reducing costs and increasing productivity because you don't have hardware on the machine that can get damaged or stolen, and you don't have to take time to put up and take down masts and cables."

In addition to intelligent Machine Control (iMC) excavators and dozers, Komatsu offers a suite of Smart Construction solutions to help you maximize job site and personnel tracking as well as use the data to make faster decisions on how to best utilize your assets. Smart Construction specialists can help you determine which are the best options for you.

Anetsberger noted that in addition to intelligent Machine Control (iMC) dozers and excavators, Komatsu's suite of Smart Construction solutions includes Smart Construction Dashboard, Design, Drone, Field and Remote. While iMC machines help with excavation and earthmoving, the others assist with tracking production and progress, managing time, and remotely supporting field operations, including updating plans from the office directly to iMC machines.

"With the number of Smart Construction solutions we have, now is a great time to get connected," stated Anetsberger. "Adopting the right solution to give you maximum value involves assessing your operations and determining which ones are the right fit. Start with the low-hanging fruit that's going to bring you the fastest payback or reward."

As an example, Anetsberger said if you are not already using iMC machines, that may be a great starting point. With automatic features, they are proven to reduce staking, get you to grade faster, decrease material costs and help new operators become more effective faster.

What's your pain point?

"If you have iMC machines, the next step is determining your biggest pain point," commented Anetsberger. "Do you want faster, more accurate mapping and progress tracking? Do you want to move from 2D to 3D digital design files? Do you want to combine drone data with 3D design data to confirm quantities? Do you want better labor, machine and material cost tracking? Do you want to save time and fuel costs by remotely supporting operators without driving to the job? Do you want better fleet management? Maybe it's all of the above."

Anetsberger emphasized that Komatsu and its distributors have Smart Construction specialists that can help determine which solution is the best fit.

"We encourage anyone who wants improvement in their operations and bottom line to reach out for more information." ■





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Want grade control for your standard excavators? Here's a solution with an added bonus

If you have an excavator without GPS grade control, you may be missing out on time and costs savings. What if there was a new solution that reduces staking, surveying and over-digging and allows you to do it cost-effectively with an added bonus?

"The new Smart Construction Retrofit Kit gives customers who want an entry-level, indicate-only system a solid choice," according to Ron Schwieters, senior product manager, iMC and hardware, Komatsu. "It is three-dimensional, so operators get the advantage of seeing where they are on the project, as well as their relation to target elevation."

Multiple components make Smart Construction Retrofit highly accurate, Schwieters added. The kit includes four inertial measurement units (IMU) mounted on the bucket, arm, boom and frame of the excavator. Two GNSS antennas for GPS are on the rear. There are options to transfer design data to and from the Smart Construction Cloud.

"Users download our Smart Construction Pilot app from the Google Play Store, and use it with their connected device," Schwieters noted. "They can set audio alerts that will change tones the closer they get to finish grade. That, along with the visual representation on the app, helps

keep operators from digging too deep, saves valuable time and lowers costs."

A key differentiator

Schwieters said that the added bonus of Komatsu's Smart Construction Retrofit Kit is a payload system.

"As you load the bucket, it weighs the material, and operators see that in real time," said Schwieters. "If you're loading trucks, that helps ensure you are putting the proper amount of tonnage in and not overloading or underloading. Typical aftermarket systems don't offer that. It's a great feature for quarries, batch plants and construction projects to accurately monitor materials loaded onto trucks."

To remotely track progress, that information and production data can be sent to project managers and other stakeholders using other Smart Construction solutions. Design changes can be sent to the machine using the cloud.

"The Smart Construction Retrofit Kit can be used with practically any brand or size of construction excavator," Schwieters noted. "Installation can be done easily by your distributor or dealer. We recommend you contact them for more information about this valuable solution." ■



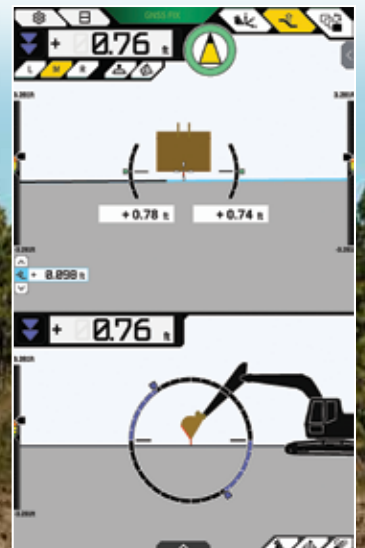
Ron Schwieters,
senior product manager,
iMC and hardware,
Komatsu



Watch the video

The Smart Construction Retrofit Kit gives customers who want an entry-level, indicate-only system a solid choice. It is three-dimensional, so operators get the advantage of seeing where they are in relation to target elevation, and the payload system is an added bonus.

► VIDEO



Get impactful visual analyses of telematics data from your mixed fleet in one convenient location with My Komatsu



Michael Carranza,
manager,
digital experience,
Komatsu

Simple steps to add non-Komatsu machines to My Komatsu

1. Get credentials from your OEM representative
2. Log into your My Komatsu account
3. Click on the My Fleet page
4. Enter your credentials under Manage Other OEM
5. Test the connection
6. Monitor your mixed fleet

"The information will show up the next morning, and you can start collecting data and utilizing the benefits of having all that key information in My Komatsu," said Komatsu's Michael Carranza, manager, digital experience.

My Komatsu now lets you access telematics data from Komatsu and non-Komatsu machines. "There are up to 25 key data points available such as location, hours, fuel consumption, idle time and production," said Komatsu's Michael Carranza, manager, digital experience.



To get the most value from your telematics data, you need an efficient way to interpret it. What if you could monitor the health of your entire mixed-equipment fleet from one dashboard, receive maintenance alerts on your phone, and order parts without searching through manuals?

With Komatsu's comprehensive digital hub, My Komatsu, you get easy-to-interpret visual analyses of data collected from numerous sources displayed on easy-to-read dashboards. My Komatsu can pull data from Komtrax and ISO API 15143-3 (AEMP 2.0) data from other OEMs (original equipment manufacturers). It can also provide powerful analytics to help you manage your fleet and drive your business without managing multiple IDs and passwords.

The system has been designed to make it easy to collect, visualize and monitor telematics data from Komatsu and non-Komatsu machines.

You can:

- Quickly view and manage data on one dashboard
- Receive maintenance alerts and order parts
- Troubleshoot to help minimize downtime
- Monitor for theft and unauthorized use
- Benchmark machine performance
- Track fuel consumption and manage fuel efficiency
- Access data anytime

"This allows customers to add telematics data from any manufacturer who is compliant with the ISO standard and see all their assets in one convenient place," said Komatsu's Michael Carranza, manager, digital experience. "There are up to 25 key data points available such as location, hours, fuel consumption, idle time and production. My Komatsu is complimentary and so is access to this valuable data from other OEMs through My Komatsu. We recommend contacting your Komatsu dealer for assistance." ■

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How to prepare for extreme weather events to help keep workers, property safe

Editor's Note: This article is excerpted from a longer blog. To read it in its entirety, visit <https://www.komatsu.com/en/blog/2022/extreme-weather-is-predicted-are-you-prepared/>.



There are apps for smartphones and tablets that can give workers the ability to track weather and plan for potential emergency situations.

Severe weather and natural disasters can strike anytime. Whether from climate change, natural weather patterns or other causes, their frequency has increased during the past two decades. Now more than ever, it's essential to be prepared and have plans in place that protect staff members and your valuable business assets in the event of extreme weather and/or natural disasters. Here are some tips for putting a good plan together.

Create an emergency response plan

Preplanning is a main factor in successful project completion, and it's also essential for responding to emergency situations, according to Troy Tepp, director of safety services with Sentry Insurance.

"Predicting when those events will occur is nearly impossible, and that's why it's essential to be prepared with response plans," said Tepp during a webinar for the Associated Equipment Distributors titled "Developing Your Emergency Response & Recovery Plans – Before They're Needed." "Thoughtful preplanning that addresses potential scenarios is vital."

As a starting point, Tepp suggested establishing goals and priorities.

"The top priority within any emergency response plan must be developing procedures that prioritize the protection of lives and the safety of your staff, customers and any other visitors to your facilities. Keep in mind, your procedures also need to account for employees outside of your fixed-base operations, such as field personnel, drivers and equipment operators."

In Jacksonville, Texas, WHM Construction Inc. uses technology to help protect personnel from severe weather.

"Watching the weather is essential because it can affect everything we do, but keeping our staff safe is of utmost importance," said Justin Holman, vice president. "We prepare by having apps on our smartphones that alert us if severe weather is imminent. If that's the case, everyone is instructed to get out of harm's way as safely and quickly as possible. After it's passed, we assess the situation and determine our next course of action."

Prioritize for your area(s)

Natural events such as tornadoes, fires, severe storms, hurricanes, ice and snow, and earthquakes are all considerations for weather plans. Prioritize those that are most prevalent and likely to occur in your area.

Tepp used a tornado as an example of how to align risk assessment with planning and awareness and stated, "If that is one of your foreseeable emergencies, begin to create a plan by identifying the alarms and alerts that identify those events. Then, you develop action that mitigates the risk, such as designating a shelter or shelters. You will also want to clearly identify them as such with signage, and train staff to know where shelters are located and that they should immediately proceed to the shelters if they hear the alarms. You also need to designate and train staff members to assist those with special needs. If personnel are off-site, have a communication plan to check on their safety and well-being."

When designing your response procedures, make sure they are specific. They should define roles and responsibilities as well as activate an assigned response team.





Severe weather such as thunderstorms can happen anywhere and at any time of the year. Having emergency plans and procedures in place can protect lives and property.

Kort Wittich, owner of Kort's Construction Services Inc. in Covington, La., knows that preparation for multiple scenarios is essential.

"We have a couple of major considerations in this region," said Wittich, who provides a diversified list of site construction offerings, mainly in the New Orleans metro area. "One is thunderstorms. We keep our eyes and ears open to the television and radio stations for forecasts and updates and base decisions from those, as well as looking at radar on our phones and watching the sky. If we determine that severe weather is coming, we pull personnel off-site, so they can get to safety.

"Unfortunately, hurricanes come with the territory, but unlike thunderstorms, which can pop up anytime, you generally have a few to several days' notice before a hurricane," said Wittich. "That gives us time to move assets out of areas where they may potentially be damaged and get them to a more secure location. Our goal is to do that in a safe manner as quickly as possible, so our staff also has time to prepare their homes and families."

Blue Mountain Minerals also faces multiple scenarios at its limestone quarry in Columbia, Calif., including fires.

"Like anyplace that's surrounded by timber and mountains, wildfires are more prevalent,"

added Richard Stringham, plant manager.

"We had one across the lake adjacent to our property last year, and we had to evacuate. Our plans definitely include that situation. We have roads besides our main road that lead out of the site for us to exit. Being in Northern California, there is less of a chance of an earthquake than in the southern part of the state, but the possibility is always there, so we are prepared for that too."

Communication remains key

To prepare effectively, create a business-recovery plan. According to Tepp, the plan should designate a pre-assigned business-recovery team. Other elements of the plan should include determining essential staff versus support staff, creating recovering operations, outlining IT needs, looking at communication considerations, preparing daily progress updates and phased recovery, testing, and training.

"Reporting the incident to your insurance carrier in a timely manner should be your first step [after an incident has occurred]," said Tepp. "The faster it's reported, the quicker an investigation can occur, and reimbursements can be made. Your team will oversee successful recovery by putting the plans in place that you developed to deal with emergency events." ■



If a weather event hits your business during work hours, there should be designated areas for workers to report to.



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Precise control for the perfect crown

A 2D cross slope system on a motor grader allows operators to control the slope angle more easily for the entire length of the moldboard while effortlessly adjusting on the fly. That's why the system is a standard feature on Komatsu GD655-7 motor graders.

The operator controls the height of the moldboard by adjusting just one end while the 2D system automatically maintains the desired cross slope angle. This allows operators to focus more on the leading or trailing end of the blade and the machine's travel path. Automatic or manual mode can be set for either end of the moldboard.

With the 2D cross slope system, operator fatigue and stress can be reduced when making

precision passes. The system also allows for quick slope angle when cutting road crowns and shoulders. It works even if the machine is articulated and does not require daily recalibration.

Insider Tip: "The memory presets and the slope match features make it easy for the operator to quickly maintain slope angle when returning in the opposite direction," said Nathan Repp, product marketing manager, Komatsu. "One of the memory presets could be a mirror angle setting, and the slope match setting means that the operator can set the blade on an existing slope and use it as the base setting for the moldboard cross slope angle." ■



Genuine batteries for proven performance

If you're looking for a battery that's proven to perform under nearly all circumstances, Komatsu recommends its genuine Komatsu batteries for its machines. They undergo numerous quality-control checks and are manufactured to stand up to challenging conditions.

With proper maintenance, Komatsu batteries typically last three years or longer — even under rigorous demands. A wide range of 6- and 12-volt sizes are available, as well as less common types through Brandeis Machinery & Supply Company. Komatsu supports all batteries with its standard parts' warranty, which is one or two years depending on the part number.

Insider Tip: "If you think Komatsu genuine batteries are great in our machines, consider them for other uses," said Komatsu's Veronica

Vargas, product manager, parts. "They also power class 1 through class 8 on-highway trucks, boats, RVs, power sports products, golf carts and more." ■



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Komatsu now offers a completely remanufactured engine for its popular PC360LC-10 excavator. This valuable option comes with a standard one-year, unlimited-hours warranty. A four-year, 10,000-hour Komatsu Genuine Reman

Component Quality Assurance warranty is also available.

Insider Tip: "This is a fully remanufactured engine designed specifically to fit in the PC360LC-10," said Komatsu's Goran Zeravica, senior product manager for reman. "It is available by contacting your local Komatsu distributor, and we recommend installation by their highly skilled and trained technicians." ■





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2018 Komatsu PC210LCi-11, S/N 500528, 3,889 hrs.



2019 Komatsu PC650LC-11, S/N 80108, 4,507 hrs.



2013 WIRTGEN W 120 Fi, S/N 1310.0128, 6,348 hrs.



2018 WIRTGEN W 150 CFi, S/N 8130134, 4,245 hrs.

Year/Make/Model	S/N	Equipment Number	Location	Hours
Excavators				
2015 Komatsu PC210LC-10	A10925	J00683	Knoxville, TN	4,467
2018 Komatsu PC210LCi-11	500528	BTE22301	Evansville, IN	3,889
2019 Komatsu PC290LC-11	A28065	J00677	Memphis, TN	1,944
2019 Komatsu PC360LC-11	91032	J00682	Nashville, TN	2,515
2018 Komatsu PC360LC-11	A36601	J00681	Nashville, TN	2,677
2019 Komatsu PC650LC-11	80108	J00670	Memphis, TN	4,507
Mills				
2013 WIRTGEN W 120 Fi	1310.0128	BTN21010	Indianapolis, IN	6,348
2011 WIRTGEN W 150	513.0221	BTN21N08	Indianapolis, IN	6,333
2018 WIRTGEN W 150 CFi	8130134	BTN21D09	Indianapolis, IN	4,245



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