



UPTIMES

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2022

NEWS AND INNOVATIONS FROM THE
WORLD'S LEADER IN MATERIALS HANDLING

SENNEBOGEN®



SCRAP/RECYCLING/WASTE

For Scrap Metal Facilities Operation, Reputations And People Make The Difference

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TREE CARE

PG10

Mechanized Tree Removal
Division Built Around
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Contractor Unlocks New
Revenues, New Efficiencies
With SENNEBOGEN Fleet

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From Where We Sit



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Welcome to the 2022 Edition of UPtimes!

Looking “Beyond the Machine” for customer satisfaction

If you have seen SENNEBOGEN advertising recently, you’ll recognize our focus on building machines that are “purpose-built, for your purpose.”

SENNEBOGEN’s purpose-built philosophy has always been customer-driven. The needs of the customer define the purpose in “purpose-built” for our engineers.

However, we also recognize that, to truly satisfy our customers, we need more than well-designed, well-built, well-supported machinery. Our engineers and technicians are the best in the industry, but we can’t expect them to come up with all the solutions to make customers happy!

This is why, in the past year, you saw our advertising shift focus to reflect our new initiatives to deliver service and support, “beyond the machine.”

Lessons learned

Our “Beyond the Machine” program is more than a new advertising slogan. The concept has its roots in a survey we commissioned over 2 years ago. All of us in head office and in the field took part in exercises to collect feedback from customers and dealers (and from each other) to learn where we were doing well, and where we were not. Our effort to deliver a better overall experience of SENNEBOGEN involved every department in the company, and each was challenged to identify ways they could improve the processes that affect all our customer relationships. Thinking “beyond the machine” led to changes in how we share information internally, how we follow up, and in the design of actual aftersale services we deliver to the people who sell, service, own, and operate SENNEBOGEN equipment.

Changing roles

One immediate change you may have noticed is the new job title for our Regional Sales Managers, now known as Regional Business Managers (RBM). The new title is just the beginning of an ongoing program that will elevate their role in supporting our dealers in their business. Through a series of two-day education sessions, our new RBMs will be better prepared to work with dealers on a wide range of planning and management needs, as well as technical and application expertise to support sales.

We have also added a new position in the company, the Customer Experience Specialist (CXS), whose purpose is to visit customers after a new machine is delivered. The CXS will ensure that the customer’s operator and maintenance personnel fully understand the machine, and will also provide another point of contact to identify needs for support from the dealer or factory.

In the field, you might now see service trucks that are operated by one of our new “Authorized Service Providers.” These ASPs form a growing network of heavy equipment service and parts companies developed to supplement SENNEBOGEN dealer support with more factory-trained professionals in your area to keep your machines healthy and productive.

Continuing improvement

We are making literally hundreds of changes throughout the organization to better serve and support customers. The feedback we have received to date indicates that we are on the right track. Some of the recent highlights include:

- Better communications for reporting on the status of shipments
- Better orientation of new staff to help them support customer needs better, faster
- Expanding our capabilities to host demonstrations of our 718 tree care handler machines
- Our recently launched Preventive Maintenance program and PM Parts kits
- Better stocking terms for dealers to increase local parts inventories
- Additional trainer: developing online training

SENNEBOGEN machines are designed to help you build a prosperous business for many years to come. Our people are committed to ensure that SENNEBOGEN continues to deliver the long-term solutions you need throughout the life of your equipment. These new “customer satisfaction” initiatives are helping us to achieve that purpose, better.

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Visit our online store and "go green" with our wide selection of great SENNEBOGEN merchandise!

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- Precision die-models
- Handy tech products, decals, golf balls and more!



store.sennebogen-na.com



OUR PERSPECTIVE

For Belson Steel, “People” Made The Difference

Marc Pozan was frustrated!

The owner and President of two scrap metal facilities near Chicago, Pozan had issues to resolve with his material handling machines as well as plans to upgrade his fleet – but he hadn’t seen or heard from his local dealer in months. “Service issues and a lack of responsiveness to my questions were the main reasons for looking elsewhere,” said Pozan.

A family-run business for 60 years, Belson Steel Center Scrap Inc. is a 16-acre scrap metal yard in Bourbonnais, IL. Pozan maintains a fleet of eight scrap handlers. Part of his plan to maintain his production levels and to meet the ongoing requirements of his major customers was to upgrade his fleet. For that, Pozan decided, he would have to find someone new.

So he went shopping.

Trusted reputations

“I looked at different brands out there,” he explains. “SENNEBOGEN has a good reputation and they are known in the scrap industry.” More important, to Pozan, was the reputation of SENNEBOGEN’s distributor in the Chicago area: Howell Tractor & Equipment (now Alta Equipment). “SENNEBOGEN has great equipment, but without Howell’s sales and mechanical service and their ownership team, I might not have gone with their machines. The people who own Howell have a great reputation for support.”

After consulting with Howell’s Area Sales Manager, Pozan placed his order for two SENNEBOGEN 835 M purpose-built scrap handlers. “By the time I heard from the other sales representative, I had already purchased my SENNEBOGEN machines,” he recalls. Since then, both the equipment and the dealer have lived up to Pozan’s expectations.

Nice, smart, capable

Pozan’s focus is zeroed in on meeting the needs of his major customer, the nearby steel mill, without fail every day. “The SENNEBOGEN machine is a very capable scrap handler, as well built as

any,” he says. “Scrap handlers today are all built for fuel efficiency; they’re built lighter than the excavators we used to have. But if I could find one built to last like they were in the old days, I’d do that. Among the ones being built today, I’d say SENNEBOGEN is the premier machine.”

Vision for PM

Pozan will only become happier with his purchases as time goes on. “His first machine has 2,000 hours on it and the newer one has 800 hours. He has service contracts on both machines, and they’re under warranty, so he hasn’t had to worry about maintenance or reliability so far. As the machines get older, though, he and his mechanics will come to appreciate the simplicity of SENNEBOGEN engineering, and how easy to service they are,” says the Howell Area Sales Manager.

Invested in Dealer Support

Pozan’s response to Howell’s service brings a smile to Constantino Lannes, President of SENNEBOGEN LLC. In many ways, his philosophy for building the company mirrors the needs expressed by Marc Pozan. Lannes has always made

dealer support a high priority, investing in a world-class parts and training facility near Charlotte, NC. Lannes says, “Our service network is constantly recruiting experienced dealers who share our commitment to application knowledge, technical expertise, and parts availability. Our Regional Business Managers are uniquely qualified application specialists who are there to give onsite support to dealers and to customers in the field. Our warehouse stocks the largest inventory of material handler parts in North America, including every component for every machine we have currently operating.”

A rarity among equipment OEMs, SENNEBOGEN’s dedicated training facility offers hands-on instruction for technicians and operators for both dealers and customers, at no cost. “It’s part of our commitment to building the industry’s largest network of factory-trained technicians.” Pozan foresees a time, before too long, when his own service team will travel to the SENNEBOGEN training facility to become part of that factory-trained network. ■



The hydraulically raised Maxcab gives the operator a perfect view of his area.

Uptime Strategy Helps Sun Services Double Recycling Capacity



In some equipment fleets, preventive maintenance is a periodic afterthought. At Sun Services LLC, it's a full time job.

Averaging 70 tons or more of construction and demolition debris to receive, process and ship every hour of its working day, Sun's recycling facility can't spare a minute for downtime.

Same-day cycles

According to Shipp, "Everything that comes in here has to go out the same

machines are operating at any given time. That's the core of Sun's full-time PM plan.

Bench strength

To ensure that each machine gets the service attention it needs to perform on demand, Sun keeps two units on the job, with another on the bench. "One 818 sits on top of the pile and feeds the shredder. While the shredder is processing, the loader can pre-sort

maintain and inspect one of the waste handlers. "Any gremlins we have had, Midlantic figured it out quickly." On the next rotation cycle, the technicians apply any adjustments they made to the other two machines, to prevent the same problem from coming up again. Sun signed on for Midlantic's service plans, and SENNEBOGEN's built-in Sencon software keeps Midlantic aware of the machines' service needs.

Safe and productive

The SENNEBOGEN hydraulic Maxcab rises to 18 ft. and gives operators a clear view for fast, efficient loading into the shredder and load-out trucks. The cab is comfortable and a safe work space in an environment that doesn't allow them to keep doors open. "They're big guys," says Shipp. "But the cab gives them the room they need; the AC keeps up with the heat, and we've seen that it gives them good protection from falling debris."

With 4,000 hours on the original 818 and about 3,000 hours for the other two, Shipp says SENNEBOGEN was the right choice. "They have been exponentially better than excavators we used previously," Shipp reports. "We're very happy with them. When it comes time to open our next plant, we plan to build our fleet with SENNEBOGEN when the time comes." ■



Moving in for a closer look, the reach on the machine allows them to efficiently sort and work the pile.

day." Operating a large truck fleet, including roll-offs and large walking floor trailers, the compact facility is now taking on peak traffic of up to 60 trucks in one hour. Their shredder line simply cannot stop. But the under-roof facility is a hot, dirty, dusty place for equipment to live and work in. No machine can be expected to keep up the pace without full-time attention. Sun's loading equipment reflects that harsh reality.

Sun started out with a conventional fleet of wheel loaders and excavators, but those machines could not keep up. In early 2019, Shipp acquired his first purpose-built SENNEBOGEN 818 R-HD waste handler from Midlantic Machinery. After seeing it perform, they added two more identical 818s later that year. But only two of the new

oversized items out of the stream, such as big concrete chunks, metal, cable and tanker vessels. Another 818 sits at the other end of the stream, loading out residual material." The capabilities of the purpose-built material handlers also helped Sun to expand its capacity. The 818's responsive hydraulics and agile grapple allow a single machine to pre-sort material while it keeps the shredder fed and producing. Thanks to Sun's efficiency in reclaiming material, the firm is able to offer LEED credits for customer projects.

While two of the 818s handle the workload of the 10-hour day, the third unit is getting serviced. "Our machines look terrible at the end of a week-long shift," Shipp admits.

Ongoing factory service

Meanwhile, factory-trained technicians from Midlantic are routinely onsite to



Equipped with tracks, the operator can safely get to the top of the pile and with the cab raised, has a clear field of vision.

Maximum Throughput • Built-in Safety

SCRAP/RECYCLING/WASTE

SENNEBOGEN scrap handlers are Action Metals' problem solver

When Boris Grinstein took over the reins of his father's recycling business in 2018, his first goal was to develop new business and clients.

Action Metals has been serving the Dallas / Fort Worth area since 1994. The younger Grinstein could see that the business was in need of some renewal, and increasing the volume of material in the yard would underwrite his renewal plan.

Step one was highly successful. More material was getting processed and revenues were on the rise. The second step, however, was harder.

"An awful experience"

Grinstein recalls: "We got an excavator and a company converted it for scrap handling. It was an awful experience. It wore out real fast. The conversions took the machine 'way out of spec.' Everything was vibrating. The cab was swinging like a pendulum. We tried welding in some reinforcements but they didn't help."

Looking for a better idea, Grinstein found what he needed working in other nearby scrap yards. "Around Dallas, you see SENNEBOGEN everywhere," he says. "They have a good name. When you see

the green, you know the work is going to get done." The size of the Action Metals yard was a key factor in choosing the tracked 821 R-HD. Action Metals doesn't have the long aisles to take advantage of wheeled mobility. However, the crawler design makes maneuvering more efficient in his compact yard. The 821 R-HD is ready to lift and swing loads, without outriggers, so it goes right to work as soon as it's in position.



From his vantage point, the operator has a clear view of the trailer, making it safe and easy to unload.

"I really, really, really like that machine," Grinstein smiles. "It loads two times faster than the excavator did. We can get into the yard early and ship out 7 or 8 trailer loads before we open up for the start of the day."

Moving ahead; moving up

After replacing that excavator with the 821, Grinstein refitted another old excavator as a mobile shear. With throughput improving, Grinstein recently added a second SENNEBOGEN machine. This time he moved up to the larger 825 R-HD. "We had the 821 running 48 hours a week for 52 weeks a year. At 8000 operating hours, it's had the life of a 5-year-old machine in two years. About 75% of our trade is retail, and we have 300 to 400 peddlers coming through here every day. So, we need a machine that's going to be a real workhorse."

It was time to let the 821 "cool down a little," with the new 825 taking over the heavy lifting. Now equipped with a lifting magnet, the 825 is only required to work alongside the shear, clearing and stacking for just a few hours a day. The 825 is a big bad boy, with a 46-ft reach. It stacks higher and has more lifting capacity.

SCRAP HANDLERS VS EXCAVATORS – BUILT FOR A PURPOSE

Action Metals President Boris Grinstein has seen first-hand how a purpose-built scrap handler is better suited to his operation than a converted excavator. But why is the difference so pronounced?

The key is the difference in purpose: one machine is built to lift heavy weights above ground, while the other is supposed to dig deep below ground level.

That difference in geometry means a lot to the engineers who design such machines. The stresses on the structural components are distributed very differently, so the parts are designed to handle different points of wear. When an excavator is forced to reach up very high with a full load, the weight is transferred to places that were never intended to carry it. The same is true when you mount a high-rise cab on an undercarriage that was not designed to stabilize such a top-heavy structure.

Excavators generate massive break-out forces to take big bites into the earth. Their booms, hydraulics and powertrains are all built for that purpose. But these forces aren't needed to swing a grapple or magnet load of scrap. Instead, the scrap handler is built

for speed, to lift high and swing fast. The engine power and heavy frame of the digging machine are simply a costly energy drain in scrap handling tasks. What the scrap handler really needs is smooth handling and dampening of the vibrations so operators can run non-stop for entire shifts without fatigue.

Outwardly, the two machine types appear very similar, but closer examination shows you how engineers recognize their different purposes. For example, on a scrap handler, the hydraulic stick cylinder is positioned on the underside of the boom, to power the stick upwards to the top of its lift range. The stick cylinder of an excavator, however, is located above the boom, allowing to leverage the stick and bucket down into the earth more efficiently. The scrap handler is also designed to support its counterweight while the counterweight on a converted excavator is added as an afterthought.

As Action Metals learned, both machines are built for a purpose. Choosing a SENNEBOGEN purpose-built scrap handler that's built for your purpose will pay off in performance, uptime and efficiency. ■

“Lease by the hour®”

As well as finding the “perfect” machine for his business, Grinstein also discovered SENNEBOGEN's innovative program to simplify financing costs. “Lease by the Hour” offers a flexible package that automatically adjusts the lease's term and costs according to actual usage. Customers have greater certainty of their machine's end-of-lease value, with no “surprise” long-term costs for over or under hours.

“We found, with the way we use the machines, this works better for me,” says Grinstein. “Because we'll be needing a new machine every few years, I won't have to worry about parts because it's leased, and it's covered. They know we'll put on 3000 – 4000 hours and they are ready for the parts. And now it's just a fixed cost for my quoting and business planning. I know how much steel I'm buying and how much it costs to run my machine, and I don't have the big headache down the road of having a 3-year-old machine with a lot of hours on it.”

According to Grinstein, Lease by the Hour is the way to go for smaller recyclers. “Every dollar is the best spent money – I make my payment, and I know I'm not spending any other money on my crane. I'm being efficient.”

“Beyond the Machine”

SENNEBOGEN's new “Beyond the Machine” program represents the company's commitment to machine uptime and customer satisfaction. Grinstein has seen that ideal in action. “I'm very impressed. The customer service is unbelievable. SENNEBOGEN is a major multinational company and they worked with me individually – the one-on-one attention was awesome.”

“When SENNEBOGEN delivered the 825, the ¾-yard grapple he ordered was unavailable. A ½-yard was installed on loan. “They were like ‘Don't worry about it; we'll look after the cost.’ I used the ½-yard for 2 months. This is how unbelievable they are to work with you. I won't buy another material handler from anyone else.” ■



Maximum Throughput • Built-in Safety



With the reach on his 821, picking material from his flat deck and moving it for processing is a snap!

SCRAP/RECYCLING/WASTE

How Gaeta Achieves Faster Loading Cycles, Lower Facility Costs And More Tonnage

In its 85 years of operation, Gaeta Recycling has seen a lot of machines pass through its yard. Michael Portannese is the fifth generation of his family to lead the operation. Serving 30 municipalities in central New Jersey, he processes upwards of 720 tons of waste material a day through his MRF-certified facility. Moving material is the heart of his business and, over the years, he has watched loading equipment become increasingly sophisticated and complex. But for his most recent purchase, Mr. Portannese was ready to try a different approach.

Switching to purpose-built

"A friend of mine recommended SENNEBOGEN to me, a purpose-built material handler to replace the excavator we were using in our solid waste building," he says. "Our latest machine had been nothing but problematic. It was constantly out of service, we had DPF and regen issues. But the garbage keeps coming in, whether we are broken down or not!" He contacted the local Komatsu Northeast branch, SENNEBOGEN's distributor in the region, and soon had a new model to test out on the Gaeta site.

When the test was over, Mr. Portannese placed his order for an 821 M SENNEBOGEN.

Faster cycles, less downtime

The impact on his operation was immediate. "We are now loading a 20-ton walking floor trailer in 8 to 14 minutes – down from the 20+ minutes or more with the excavator."

Even better, with the reliability built-in, Mr. Portannese can count on his new 821 to show up for work every day. "There's very little computerization in it," he says. "That's what really caught my eye. The hydraulic over hydraulic controls are great. Powered by a Cummins engine, it seemed like it's a very simple machine. I felt like we could work on it and maintain it much better than all these high-tech machines with these technologies that, in the end, just result in headaches."

In his estimation, SENNEBOGEN has it right for work in the dusty, harsh environment of a waste handling facility.

Gaeta Recycling offers a complete range of recycling services, from C&D waste to paper shredding and secure e-waste handling. The 821 M is assigned to load trailers for Gaeta's Type 10 and Type 13 solid waste processing facility. Because the material is delivered by compactor trucks, the SENNEBOGEN is moving very

his operators are also enthusiastic about their new machine. "Our operators are very happy with it; with the cleanliness of the operations; what they are able to see from the cab, the hydraulic functioning and the fact that it's not always breaking down!"

SENNEBOGEN's hydraulically lifting Maxcab achieves a new level of visibility for the operator. On Gaeta's previous excavators, the cab was raised on risers to a fixed height. The Maxcab lets the



With the raised cab, the operator has a perfect view of the trailer being loaded and can balance the load from front to back.

dense, heavy loads. "Our machines run," says Mr. Portannese, "sixteen hours a day, 5 days a week plus a Saturday shift. Whether it's idle hours or utilization hours, there isn't a moment that we don't have a trailer backed into the building; as soon as one trailer pulls out loaded, the next one is in there to be loaded."

Reduced costs for facility and fleet

As well as improving cycle times, the 821 M is saving facility costs for the business. Mr. Portannese explains: "When I was running excavators, I had to replace the concrete floor every two years! The rubber tires on the 821 save the floor."

Operator-approved visibility

Mr. Portannese takes pride in the experience and loyalty that his employees bring to the business. He's pleased that

operator raise the cab only as much as needed. According to Mr. Portannese, the extra visibility improves loading efficiency and also provides some assurance to OSHA for jobsite safety in such a high traffic facility.

Operators also appreciate how the Maxcab can be canted down to look directly into the trailer, instead of being set at a fixed eye-level looking over the trailer.

With Gaeta's scope of services and facilities, there is more room for Mr. Portannese to upgrade to purpose-built SENNEBOGEN equipment in loading, feeding and sorting applications. "When we do need another machine, we will be looking at another SENNEBOGEN. It definitely excels over other machines." ■

Pacific Steel Acquires One Machine To Do The Work Of Two With SENNEBOGEN Vario Tool



When Kelly Frantzich went shopping for new scrap-handlers for Pacific Steel & Recycling, he got more than he bargained for.

The company's management team had agreed that some of its smaller yards, located throughout the northwest, needed more processing capacity. Frantzich, as the firm's Equipment Manager, was fielding requests to several OEMs for mobile shears mounted on a wheeled machine. Colleen Miller, at SENNEBOGEN, said yes to the request, then anted up with an 830 M paired with a new engineered multi-function system that SENNEBOGEN had introduced recently in Europe.

As Miller explained to the Pacific Steel managers, the new SENNEBOGEN Vario Tool would give their yards a mobile shear that could still perform traditional scrap-handling duties. The Vario Tool is like an oversized Swiss Army knife, designed especially for scrap processing and demolition work. A unique coupling system connects the boom and a custom stick to any one of several familiar attachments including a shear, orange peel grapple, clamshell bucket, magnet, or lifting hooks.

Improved machine utilization

According to Frantzich, "We were intrigued by the idea for some of our smaller yards where we don't get full utilization of a shear machine and material handler. Or it might be a good fit for larger yards where we're doing some offloading, plus we get the shear too. The Vario Tool is designed to complete all the required connections for each attachment automatically, so operators are able to switch from one to another, in two minutes or less, without leaving the cab."

With the Vario Tool system installed on a wheeled SENNEBOGEN 825, 830, or 835, Frantzich said having

one machine able to do two jobs or more, would allow significant savings, compared to a single-use machine that would otherwise be utilized only 15% to 20% of the time.

"More options"

Jack Stoken, Operations Manager at Pacific Steel's facility in Kalispell, MT, agrees. Stoken's yard was the first to receive one of the three Vario Tool machines that Pacific Steel has ordered. "We are a mid to smaller sized yard for this company with our scrap iron business. We have a scrap handler and we have a Genesis shear on another machine. We handle a lot of shred here, with relatively little heavy iron. But we needed a little bit more capacity because we were falling behind in our processing."

Stoken's SENNEBOGEN 830 M arrived this past September, equipped with the Vario Tool and two attachments: a Genesis 555 rotator shear and a hydraulic grapple. "Adding a new 830 with the Vario Tool attachment seemed to make sense," he says. "The 830, with its high-flow hydraulics circuit, has plenty of power to run the shear. It will be a scrap-handler most of the time but it will also fill in as a shear. It's less costly to buy one machine versus two; it gives us more options and it's able to cover both of the other machines if one goes down."

Stoken continued, "Changing the attachments is very easy and can be done in under two minutes. We will be mounting a camera on the boom to give the operator a better look when coupling. It will get even quicker as they get more experienced with it."

Service support a "deciding factor"

The staff in Kalispell is also pleased with their new unit. The maintenance crew finds the machine accessible and easy to service. "Colleen (Miller) pointed out the effort that SENNEBOGEN put in to make it user-friendly for us to maintain, where other OEMs want to bring their own tech out. That adds a lot of extra expense that doesn't need to be there." One of Stoken's technicians was among a group of seven Pacific Steel & Recycling staff who attended a hands-on factory training program at SENNEBOGEN's Training Center in Charlotte, NC.

Stoken says that, along with the Vario Tool feature, service support was a deciding factor in going with SENNEBOGEN. The yard is also supported by a local heavy equipment shop who qualified for SENNEBOGEN's innovative Authorized Service Provider (ASP) program with the same training and same access to parts as a SENNEBOGEN distributor. ■



Maximum Throughput • Built-in Safety

SCRAP/RECYCLING/WASTE

Mowbray's Commits To "Future Of Tree Removal"

An army of arborists and tree care specialists have spread throughout California to clean up the debris and charred remains from this past year's record wildfires. The recovery effort has taken a big step forward with the delivery of a new fleet of SENNEBOGEN tree care handlers, signaling the arrival of mechanized equipment for tree removal.

Leading the charge is Mowbray's Tree Service. Based in San Bernardino, they manage skilled crews throughout the state. Richard Mowbray, along with his father and grandfather before him, built

care handlers, primarily the 718 M model. Mowbray's is well accustomed to using specialized tree care equipment, including a fleet of 75-foot aerial lifts, cranes, and grapple trucks. But with the 718, Richard Mowbray sees a new level of productivity and safety emerging in the industry.

Easy decision:

"As soon as I saw it, I knew that this was the future and we needed to get our hands on some of that equipment, immediately," he recalls. His mind was quickly made up and he ordered the first one. "We started running it in January and saw what our

the cab's tilting mechanism to improve visibility into work zones. With its clear line-of-site, powerful grip and agile saw head, the 718 is often able to extract trees adjacent to high-voltage lines without requiring the cables to be de-energized.

SENNEBOGEN also offers two larger machines in the tree care lineup. Like the 718, the new 728 is a rubber-tired model with a slightly heavier base and another 22 ft. (7 m) of reach. The 738 is even larger with a total reach of 75 ft. (22.8 m) and is designed for larger trees and more challenging terrain.

An industry game-changer

Since then, Mowbray's Mechanized Tree Removal fleet has grown to 11 machines, with two more on delivery and the first 728 M expected to arrive in the Spring of 2021. "The 718 is a good size for us," says Mowbray. "It's a small package, easy to move around. The 728 will give us a little more reach; we get a lot of trees that are 100 ft. plus, so we'll be getting more of those. I really like the 738 too; it's much bigger and heavier and I know we'll eventually have one."

Previous SENNEBOGEN customers have claimed that the 718 is a "game-changer" and Mowbray agrees. "We recently worked on a project to take down nine large trees around a SMUD substation – with obstacles to work around down below. The operator was able to go in there like a surgeon and dismantle the nine trees safely in a day. A competitor was there last year. Using the old ways, it took him four days to bring down two trees. We had the first two trees down in 26 minutes!"

Along with their astonishing productivity, the 718 and 728 (coming soon) are easy to transport quickly from site to site. Both machines are within the size and weight limits allowed to be moved on state highways without special permits. The crew can simply drive the machine onto a flatbed trailer, lash it down and go.

Safety above all

But productivity was not the sole factor behind Mowbray's commitment to the SENNEBOGEN way of doing things. "The driving factor for us was reducing human exposure and providing a safer working



Being able to dismantle trees in precarious positions from the cab, makes the job safer.

their business providing vegetation and tree maintenance services for California's largest energy utilities.

This year Mowbray's has deployed crews totaling 1,500 tree care workers plus up to 30 subcontractors with another 800 employees. "Utility customers represent pretty much the entirety of our business," says Richard Mowbray, CEO and President of the company. "We're known for vegetation management, right-of-way maintenance and high-hazard tree removal."

A new mechanized service division

In January of 2020, Mowbray's launched a new service division dubbed Mechanized Tree Removal. This newest division of Mowbray's is built around the unique capabilities of the SENNEBOGEN tree

first operator could do with it. Then we looked at all the work coming up in fire response and started ordering more SENNEBOGENs."

A full lineup

Based on SENNEBOGEN's extensive line of log handling and material handling machines, the 718 is a 21-ton unit equipped with a 43 ft. (13 m) telescoping stick with a grapple saw attachment. Its powerful hydraulics are tuned for delicate tree trimming as well as heavy cutting. With its 3,700 lb. (1,700 kg) lifting capacity, the 718 easily grasps, cuts, moves and stacks whole trees and large limbs in a single smooth movement. Seated in SENNEBOGEN's enclosed Maxcab, the operator can hydraulically elevate to an eye-level of 18 ft. (5.5 m), and adjust

environment. Other machines can do the work, but the SENNEBOGEN takes the employee out of the danger zone.”

Richard Mowbray is well aware of the hazards involved in tree removal, considered by many to be among the most dangerous of professions. Mowbray learned the business, literally, from the ground up. He began his career on one of his father’s ground crews and worked his way through the ranks. His last stop, before taking on the role of CEO, was as Corporate Director of Safety.

“With this equipment, we can make the work environment safer, reduce the number of employees on the jobsite, and we can get the job done faster than we could before.” The difference, he says, is that one operator can do the work of a full crew, all from the safety of an enclosed, elevated cab. “For us to go out and take down 40 trees and get them out where some other equipment can clean it up, we might have had 10 or 15 employees out there before. Now we can do the exact same work with one person operating the SENNEBOGEN and a climber working around the power lines, so we are down to two employees doing that much work, or more.”

Optimizing trained personnel

This new technology allows Mowbray’s to make better use of their skilled arborists and groundsmen. “It takes us a lot of years to train employees to where we feel comfortable letting them out to climb a 100 ft. tree,” Richard Mowbray says. “But we’ve taken people who have never before cut down a tree and, within two weeks in the

SENNEBOGEN, they’re taking down 40 trees a day! But we still have a lot of routine maintenance to do for the utilities, such as tree-trimming around the power lines. I don’t think we’ll ever be able to do that with a big machine. So, if we don’t have to put an employee up in a tree for tree removal, the 718 frees him up so we can increase our crew count for the maintenance jobs.”

To help Mowbray’s get their mechanized team up to speed quickly, their first operator attended a free two-day orientation at the SENNEBOGEN Training Center in Stanley, NC. Since then, SENNEBOGEN trainers have



A big advantage is to be able to drive it on a lowboy, strap it down and go to the next job.

visited California to spend time with each of Mowbray’s operators. “These operators are younger guys; the video-game generation,” Mowbray says. “They run the boom like it’s an extension of their arm.”

Uptime - part of the package

Mowbray’s crane mechanic also received a full week of hands-on training, provided at no cost by the

SENNEBOGEN Training Center. “The machines have been really solid and our mechanic has been able to look after all the machinery and they’re running good.” Field service is key in this business, so Mowbray’s supplies every unit with its own “UPtime Kit”, specially packaged by the SENNEBOGEN parts warehouse to pre-package all the service parts required for normal maintenance of the 718 and its grapple saw. To keep its uptime promise, SENNEBOGEN backs the tree care machines with its 48-hour service guarantee. If a Mowbray’s mechanic can’t get a downed unit operational

within 48 hours, SENNEBOGEN will fly a factory technician to the site to troubleshoot and complete the repair.

Mowbray’s is the first large tree care specialist to be equipped with SENNEBOGEN machines, but Richard Mowbray is convinced that they will become a more common sight over the next few years. “We can do trees for a lower cost to the customer,” he says, “and it’s a safer environment for the operator. It saves lives, time, and money. So that’s a win-win-win for everybody.” ■



Did you know...

... that you can order “UPtime Kits” with all the parts and materials required for a specific service and machine. SENNEBOGEN’s warehouse in Stanley, NC keeps them in stock, ready to ship.

Save time in the shop and on field service calls – easy to order, easy to stock!

- Electrical Kits
- SAE Flange Kits
- Fitting Kits
- Plug & Connector Kits
- A/C Service Kits
- O-Ring Kits
- Auto Lubrication Kits
- 718 UPtime Kit
- 718 Grapple Saw Kit

And many more!



Atlas Tree Surgery Launches A New Era Of Tree Care With Growing SENNEBOGEN Fleet



Removing burned out trees from wooded areas is an ideal job for Atlas' 718.

Rich Kingsborough is feeling pretty good about his growing fleet of green machines. Since receiving his first SENNEBOGEN tree care handler in August of last year, he has added six more machines, and more are on the way. This new specialized fleet means more than added capacity and new projects for his company, Atlas Tree Surgery Inc. "The most important thing," he says, "is that SENNEBOGEN has proven to perfectly align with our company mission: To elevate the standard of our industry through safety, training, and innovation."

Game-changing innovation

"I got excited as soon as I saw the SENNEBOGEN two years ago," Kingsborough recalls. "I knew they were going to be game-changers for our industry." Atlas is currently operating five wheeled SENNEBOGEN 718 M machines, along with one of the larger 738 M models. They recently received their first crawler-mounted 718 R-HD unit.

The 718 attaches a hydraulic grapple saw to its 43 ft. (13 m) telescoping boom. With a lifting capacity of up

to 12,000 lbs. (5,500 kg), its powerful hydraulics are fine-tuned for precise tree surgery. The elevating Maxcab lets the operator rise up for an unobstructed view into the work zone. The 738 is the same idea, only bigger. Twice the size of the 718, the 738 extends its reach to 75 ft. (23 m).

Safer work in less time

The difference on the jobsite is remarkable. Kingsborough relates his first project using the 738; "We had 100 eucalyptus trees up to 150 ft. height. Branches were stretching over two lanes of a major roadway, so we couldn't just cut & drop. Typically, we would have had two climbers and 100-ton or larger crane to bring the tree down. With the 738, we completed the job in less time, with half the crew, and we didn't have one climber in the tree. We scheduled two months for the job, and we got it done in about six weeks."

Better conditions for demanding jobs

The biggest impact of the SENNEBOGENs, however, has been on Atlas' 200 employees. "Tree-climbing is one of the hardest jobs in the world. Guys get fatigued, and the chance of injury

increases. The SENNEBOGENs are not only time-saving; they're effort-saving. This type of equipment makes a really dangerous job a lot easier."

"Our operators love it. After their initial training, in two weeks you could see that they were getting the hang of it. After a month, they have really started to shine on it." Kingsborough notes that all the operators he has trained, to date, have experience as a climber, or operating logging equipment. "There's a larger learning curve to understand cuts, weights, what a tree's going to do after you cut it. It's very beneficial to have a background in tree work before you jump onto one of these machines."

Versatility on or off the road

Agile enough to piece out branches around utility lines, Atlas operators found they can also apply the strength



Clearing the path from the fires.

of the 718 to simply push trees over! As Kingsborough describes it, "If you have a skilled faller, he can make his cut, make his backcut, leave 15% hinge wood... and then just walk away. The SENNEBOGEN easily pushes it over. The faller is out of harm's way. You don't need a climber to piece it out, or put a rope on it, either. It's very efficient."

"It also saves a lot of clean-up hours. You stage it right where you need it, as you're cutting. Once the tree is down, everything is already in neat piles, ready to chip or load." ■

SENNEBOGEN Tree Care Handlers “Are The Future” For Warwick Tree Service



When Derek Oneppo’s SENNEBOGEN 718 arrived at Warwick Tree Service just over a year ago, he wasn’t really sure what to do with it.

When Oneppo and his son Kyle attended the TCI Conference in Charlotte, NC, the previous year, Kyle took in a live demonstration of the 718 at the nearby SENNEBOGEN head office campus. Kyle then persuaded his father that this was the right machine for a large tree clearing project they wanted to take on.



People came to watch Kyle working. With its reach and elevating cab, Kyle can “see” over the house.

But then, the project it was intended for never materialized. Apart from a few stints of loading a grinder on the Warwick property, the 718 sat idle for the better part of two months.

But today, that machine is earning up to four times what his typical crews bring in, every day!

A change of plan

“Kyle started pushing to take it out on his residential jobs. Finally, I said, ‘OK, take it!’”

The 718 was loaded onto the firm’s low-bed trailer. The driver dropped off Kyle and the machine at the jobsite and would come back for the next move. But just 30 minutes later,

Kyle was calling to say, “Hey, come and pick me up – I need you to take me to the next one!” And an hour later, he was back on the phone, “Come on, I need you again.”

Now, Kyle and the 718 have their own low-bed and a dedicated tractor, making as many as five stops a day. As Oneppo says, “We use it for our day-to-day residential jobs, where we would have otherwise used a crane or bucket truck. We just do it a heck of a lot faster.”

Oneppo reports that his company has had a very good year with its 718. Kyle’s crew of four went from earning \$3,000/day in revenue, up to \$10-12,000 a day, with the same crew. “The difference is that machine,” Oneppo claims. “The payments on the machine look like a lot on paper, but you can make it back, easily, in one day of work.”

Mobile service in tight neighborhoods

Weighing in at 47,180 lbs. (21,400 kg) with its 40 ft. telescoping boom and grapple saw, the 718 is compact enough to travel on city streets without special permits. Working in a small, densely populated state, the 718 is ideal for moving around to do multiple jobs in a day. Oneppo admits

that, “Sometimes it’s a little difficult to get that tractor around in some neighborhoods. So then, they might park a mile down the road and just drive in the 718 from there!”

Versatility and safety

Derek Oneppo has become one of the 718’s biggest fans. “SENNEBOGEN customers like to watch Kyle work because they want to see someone who knows what they’re doing, to see what the machine can really do,” he says. “Not just from the roadway or in these wildfire sites. They want to see us taking down a tree in someone’s front yard, around power lines, five inches from the house. It’s not just for the guys who do big highway projects. This could be used by the guy who just has a bucket crew who wants to make more money or have an opportunity to grow. For him, this machine is incredible!”

Looking ahead, Oneppo will soon be one of the first owners of the new SENNEBOGEN 728. “These machines are the future,” Oneppo claims. “We can do a lot with this first machine, but the 728 will allow us to do just that much more. It has another 19 ft. of reach, more capacity, it works at the same rate of speed – and it’s still trailerable.” ■



The operator has flexibility to work around the power line without any concern.

718 Crushes Workload For Michigan Tree Service



Jason R. Porter has been attacking his work days lately by getting away from the desk and linking back up with his crews in the field conducting tree removal operations.

Treeworks, Inc. a TCIA accredited company based in West Michigan, took delivery of a new SENNEBOGEN 718 in October of 2019. Like many tree care company owners, brothers Jason, Zach and Luke Porter started young, working with their father in the late 80s and continue to work together until this day. “Dad trained us with sweat equity and will power.”

For Jason, the last several years have taken him out of the field from the craft he enjoys and more into an administrative role. “I desperately wanted to get back into the woods with the crews and participate in productive tree work, and not just be the old tree guy in everyone’s way. The SENNEBOGEN 718 is absolutely a massive force multiplier when I’m on a project with it. I really enjoy working with it. After so many years of doing tree work the hard way, this machine feels like vacation.”

“You have to be a tree guy”

With the SENNEBOGEN 718, Porter dismantles trees, stacks the wood, and

feeds the chipper from the comfort of an air-cushion seat in a climate-controlled cab. In his hands are the controls of a hydraulic grapple saw fitted to the end of a 43 ft. (13 m) telescoping boom. He can elevate the cab for a better view of the cutting zone and swing the boom through 360 degrees to place and stack the removed limbs. A powerful and precise hydraulic system gives him the “feel” and control to operate with surgical precision.

“You have to be a tree guy,” he cautions. “Aerial experience (bucket truck and climbing), combined with equipment operator experience are invaluable when you are working with a SENNEBOGEN 718. If you have these two skillsets in your holster, you can knock it out of the park with this machine.”

Porter first discovered SENNEBOGEN in the summer of 2018 after speaking to Ken Palmer, a champion tree climber and safety instructor. Palmer invited Porter to a demo day at SENNEBOGEN’s Head Office in Stanley, NC, where he’d seen the machine going through the paces.

“Absolutely worth it”

At the demo, the features to really get Porter’s attention were the

maneuverability of the saw head, combined with the telescoping reach and amazing lift capacity.

And now with over 500 hours of operating time in the 718, Porter likes the economics as well. “I can say confidently that the SENNEBOGEN production on our jobs has consistently been equal to two bucket truck crews. For us, that would be equivalent to two bucket trucks, two track loaders, and

All that was left of a giant silver maple with a crown that arched over the road. Dismantled in 50 minutes. “And it was fun!”

four guys. Add up the operating costs of those four pieces of equipment and crew members, it’s a ton. The SENNEBOGEN 718 is absolutely worth it.”

Ease and comfort

Porter returns to the ease and capability the 718 brings to his trade. “Think of poor weather conditions, working along a road, in waterfilled ditches full of cattails, mud, and slopes. We used to do that type of work by hand – cutting, driving loaders in those areas, over stumps, and pulling material out with a tagline or whatever we could think of just to complete the task. The SENNEBOGEN takes a task that can be awful and turns it into an enjoyable, successful project.”

“On a municipal job removing 50 dangerous trees along city streets, the SENNEBOGEN was able to complete 48 of them. And one of the trees was a massive 60+ inch, multi-stem Silver Maple. The crown of this tree arched over the road, utilities, and a house. It was late in the day and I closed the street and sent most everyone home so I could focus on just this one technical tree removal. This tree would typically be most of the day for three guys and a bucket truck. I had it safely and neatly staged on the ground in about 50 minutes.”

“And the thing is, it was fun!” ■

How To Launch An Industry Revolution



SENNEBOGEN's mechanized tree care sector is built on innovative engineering plus commitment to customer service.

When Constantino Lannes, President of SENNEBOGEN LLC, first saw the new 718 tree handler in action, he knew that arborists and tree-removal specialists would be stunned by its capabilities. He also knew that stunning performance, alone, would not be enough to launch the revolution he saw coming in the industry.

"SENNEBOGEN is a well-known name in industries like scrap, recycling and barge loading, but it's not nearly as recognized in the tree care business," he says. "This sector is well served by a number of high profile equipment manufacturers. They set a high bar for us to join that select group of premium OEM brands."

Lannes quickly made the strategic commitment to deliver this "game-changing" technology to America. As predicted, the 718, along with newer models added to SENNEBOGEN's tree care fleet, attracts wildly enthusiastic praise from observers wherever SENNEBOGEN stages one of its live demonstration days. His confidence in the new lineup is rooted in the moves he made years ago to establish SENNEBOGEN as an industry leader in customer support: Prospective customers need more than a great machine to buy into an unfamiliar line of equipment – and SENNEBOGEN comes through.

Building on resources already in place, SENNEBOGEN recently unveiled a new package of value-added features, tailored to earn arborists' trust in SENNEBOGEN equipment and in the aftersale support behind it.

Extended Warranty

A 1-year/2,000 hour warranty is standard on all SENNEBOGEN tree care models. Our optional extended warranty is the most inclusive package in the industry, with up to 5 years/6,000 hours including coverage for engines.

Parts Inventory

Since SENNEBOGEN first landed in America, rapid access to parts has been a hallmark of the brand. Our 100,000 sq. ft. North American warehouse carries a \$48 million inventory. It stocks every part required by our tree care handlers, from bearings to booms, engines and cab assemblies, to service parts for their grapple saw attachments. Dealers all over the country also ensure local stocks of the most needed parts are readily available.

Free Service Training

Whether you run a single tree care handler or a large fleet, you are welcome to sign up for our five-day Service Training program, designed specifically for this line of machines. Customers and their staff attend classes at our Training Center in Stanley, NC, and they



receive the same training as our dealer technicians, at no cost. Additional onsite training is available as needed.

Uptime Kits

SENNEBOGEN Uptime Kits let every operator keep a complete service kit on board their machine while they are in the field. Each kit including the grapple saw kit contains over 90% of all the wear parts and simple repair items for their specific machine model, simply organized for easy access and identification.

48-hour Uptime Guarantee

If you or your dealer cannot get a machine up and running within 48 hours, SENNEBOGEN will dispatch a factory technician to the jobsite, at our

expense, to get the machine operational again. Lannes says, "The most important thing we do when we deliver a new machine is go to the customer and say, 'Welcome to the family.' When a family member needs help, you go and take care of them. We'll fly a technician out anywhere, any time of day or night."

Free Operator's Course

A two-day Operator Familiarization course is offered onsite, at no charge, with one of SENNEBOGEN's tree care experts. But access to expert support doesn't end there. According to Lannes: "... we're there until you're comfortable with the machine. If you're bringing new operators on board, we'll get them up to speed too. Anytime, anywhere, if you have any question about operating or servicing your machine, you'll know the one person to call."

Marketing Support

Mechanized tree care and removal is a dramatically new way of doing business for our customers: a new level of production, in less time, with less crew and higher safety. We provide plans, tools, and expertise to help business owners to assess local opportunities and bid accurately on projects. Our mentoring program gets new customers together with experienced customers, on their jobsites. They get to learn first-hand how and when to use the machines most effectively: How to market and grow the business. How to deploy crews and machines for their best ROI. How to price competitively and improve safety.

Lannes says that he and his company learned long ago that a good product is "only as good as the backbone behind it" – the backbone in service and in parts and in the branch staff supporting it. "Customer support is a core value for us," he says. "Customers all over the world respect and rely on the SENNEBOGEN name. We're in it for our customers, for the long haul. Now we want to show tree care professionals that SENNEBOGEN has their backs. We build incredible machines, but we deliver beyond the machine as well." ■

Investment For A Green Future: SENNEBOGEN Simplifies Log Logistics

Schwaiger Holzindustrie is located in the heart of Lower Bavaria. It supplies timber and wood pellets to customers from all over the world and added a SENNEBOGEN 835 M-HDS E-Series material handler and trailer to its fleet in 2020.

Founded over 100 years ago as a humble craftsman's business, it has evolved into an international company entering its fourth generation. The company has experienced continuous growth and through investments, it now processes over 1.6 million cu. yds. (1.2 million m³) per year. In order to navigate its ongoing growth while optimizing its operations, it was necessary to ensure they were maximizing their efficiencies. To achieve that, Schwaiger Holzindustrie not only invested in a 3,200 ft. (1,000 m) extension of its rail line, but also acquired its largest material handler to date, the SENNEBOGEN 835.

Material handler paired with a purpose-built trailer pulls 80 t of logs

By focusing on sustainable production and fuel-saving, low-emission handling solutions, Schwaiger Holzindustrie is paving the way to a "green" future. The 835 M-HDS E-Series was designed specifically for log yard applications using a mobile undercarriage with a protective shield and large single tires.



SENNEBOGEN's material handler is powered with a 315 HP (231 kW) diesel engine and all-wheel drive for increased tractive effort. This power allows 160,000 lbs. of logs to be transported by a hydraulically braked trailer. "With the 835 pulling the trailer, we can now transport twice the amount in the same time. This ensures a more effective and sustainable operation and saves valuable fuel and above all, time," confirms Quirin Schwaiger, responsible for Business Development at Schwaiger. In addition to transporting logs up to 16 ft. (5 m) in length, the 835 has a reach of 52 ft. (16 m)

All-rounder in the sawmill: The 835 M-HDS E-Series with trailer feeds the plant, transports and loads logs.

and is also used for unloading the railcars and feeding the sawmill.

SENNEBOGEN 835 E material handler offers optimum operator comfort and safety

The SENNEBOGEN Maxcab, which can be hydraulically raised up to a total height of 19 ft. (5.8 m) provides the operator with a clear overview of the work area, allowing them to move materials with pinpoint accuracy. Various features, such as the piston rod protection, a FOPS grid on the

Railcar unloading made easy with the 835 M-HDS E-Series material handler.



cab roof and a bulletproof windshield, provide additional safety. The steering can be switched between the joystick and steering wheel. The 835 M-HDS impresses operators, who particularly emphasize its comfort and ease of operation: "Driving the 835 is already a highlight in our operations, and you feel a little pride when you can drive such a large machine across a busy square," says driver Matthias Kornatzki at the Hengersberg site. ■



Lift More • Stack Higher • Cycle Faster



SENNEBOGEN 730 and 735 Machines Set The Pace For Pick & Carry

Purpose-built to move wood with minimal maneuvering effort along direct travel paths. With all-wheel steering and just 12 ft. (3.6 m) wide, the 735 M-HD easily negotiates its way between tight rows of stacked logs. With a 32 ft. (9.7 m) reach, it is able to pick loads quickly and safely.

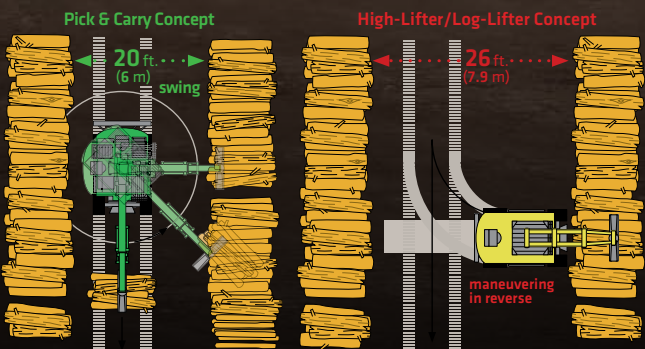
The driving and transport machine is especially designed for free-standing use with safe working loads up to a maximum of 20 t. ■



SENNEBOGEN 735 M-HD pick & carry machine in action

25%* Less Space Needed Between Stacking Rows

50%* Higher Stacking



With all-wheel steering and just 12 ft. (3.6 m) wide, the 735 M-HD easily negotiates its way between tight rows of stacked logs.

Being able to stack the logs higher makes business growth possible.

* Percentages will vary depending upon conditions.

LOGGING/FORESTRY

Cameron River Logistics Finds A Log Handler It Can Rely On

Nothing much has changed over the past three years here at Cameron River Logistics (CRL), and that, in itself, is a good thing.

The huge transload facility in BC's Peace River district still receives up to 50 truckloads a day of 16-foot CTL spruce logs. Dozens of train cars leave the yard every week, moving the logs to the Dunkley sawmill five hours south. And the SENNEBOGEN 830 M-T log handler shows up to work every day to keep the wood moving.

Three years ago, though, uptime in the yard was a challenge. Their previous log loader could do the job keeping up with the required pace of deliveries. But if the machine had a technical problem, it could cause serious productivity issues. "We had issues with parts availability," explains Andrew Moore, President of CRL. "Wire harnesses were taking 4-5 months to deliver; a steering knuckle failed and we were told it would be three months before they'd have one to ship from the factory."

When their previous loader was ruined in a fire, Moore and his team thought twice about how to replace it. That's when, in the summer 2018, they decided to

make a change. They chose to purchase a new SENNEBOGEN 830 M-T from the nearby Fort St. John branch of Great West Equipment.

Beyond the machine

SENNEBOGEN engineers have always worked to the principle of keeping equipment repairs and maintenance simplified by using readily available parts whenever possible. Local distributors like Great West don't have to wait for OEM parts from overseas either. SENNEBOGEN's 100,000 sq. ft. warehouse near Charlotte, NC maintains a complete inventory of replacement parts for every make and model currently in service. Dealer orders are usually on their way to the customer overnight.

"With SENNEBOGEN, you're not reinventing the wheel," Moore continued. "It's got a Cummins engine, Bosch Rexroth hydraulics; all industry-standard components easily sourced nearby, should they be needed."

Constantino Lannes, President of SENNEBOGEN LLC, says that maintaining a dependable parts supply is a core value for the company. "We're thinking 'beyond the machine' to support our customers' business through the whole life of the



equipment. Recently, we introduced new programs and incentives to help our dealers think and act the same way. We're very proud of the depth of local inventories, especially in remote locations serving resource industries. And, with our Training Center, it has led to SENNEBOGEN having North America's largest network of factory-trained material handler technicians."

Purpose-built for log yard conditions

Moore reports that parts availability already had the yard leaning toward SENNEBOGEN, but the purpose-built design of 830 M-T clinched the decision. The 830 M-T is a 91,000 lb. (41,400 kg), 225 HP (168 kW) machine built specifically for log handling and trailer-pulling applications. A specially reinforced undercarriage features dual transmissions, providing powerful 4-wheel traction to handle the stresses of pulling heavy log trailers loaded with up to 64,000 lbs. through muddy yard conditions. Operators have said that the SENNEBOGEN has already pulled through spots where, in the past, the old machine would have been stuck.

Even more important is the fact that the SENNEBOGEN helps to keep operations smooth simply by showing up every day. "Going on to three years, we have 5200 hours on it now," Moore reports. "We do our own preventive maintenance servicing. Great West comes out any time we need them - we're very happy with the parts staff there. About 90% of what has been needed are hydraulic hoses that break in -30° weather. Nothing big. We added a fire suppression system, and we do a structural inspection every year. With the price of lumber as high as it is, demand for our logs has grown and our SENNEBOGEN is doing the job." ■



At Long Last – Finkbeiner Says Goodbye to Its C-Series SENNEBOGEN 835 Log Handler



In SENNEBOGEN terms, generations have passed since Finkbeiner KG commissioned its electric drive SENNEBOGEN 835 C-Series machine in 2003.

So finally, after 55,000 service hours on the job, the Finkbeiner family bid farewell to the old 835. And said “hello” to a bright new E-Series SENNEBOGEN 835 electric drive!

As Constantino Lannes, President of SENNEBOGEN LLC, commented, “The Finkbeiner experience confirms what we’ve been saying all along about the value of our electric drive machines. They cost less to operate and service, day to day with no filters or oil to change and no need to stop for refueling. But they also deliver a significantly longer service life. Electric drive results in less stress throughout the entire machine. They pay for themselves in so many ways; you can’t get a better lifetime value.”

Intelligent use of space

Located in Germany’s famous Black Forest region, the family-owned Finkbeiner business has acquired its new material handler as a first step in

a planned upgrade of its log yard. The company is located in a narrow gorge in the low mountain range and a rail gantry with integrated trolley has been installed around the 38,750 sq. ft. (3,600 m²) storage



The 16-year-old 835 C-Series model at work in the Finkbeiner KG log yard after 55,000 service hours.

site. In some instances, the rails are attached directly to the rocks. Mounted to the gantry track, the 835 can move forwards, backwards and sideways, providing a compact, nimble solution for loading and stacking wood.

Sustainability a top priority for Finkbeiner

“Sustainable management is very close to our hearts,” says Andreas Finkbeiner, Managing Partner at Finkbeiner KG. “We are a PEFCM certified company, so we only process lumber from sustainable reforestation sources. The electrically powered 835 from SENNEBOGEN helps keep our production emissions down. This is very important to us, as we have a big responsibility to get things right for future generations!”

No need to compromise between performance and sustainability

Along with the safety and efficiency upgrades that come with E-Series machines, Finkbeiner is looking forward to productivity increases with their new machine. Formerly powered by a 180 HP (132 kW) electric motor, the new unit runs with a powerful 220 HP (160 kW) version. The new machine is also equipped with an optional 62.5 ft. (19 m) ‘banana’ type boom, adding reach to grab logs that are farther away and lower down than the standard boom on the previous C-Series model. ■



The new gantry-mounted 835 E-Series electric drive machine comes with industry-leading features for safety and energy efficiency as well as a more powerful motor and longer reach.

Lift More • Stack Higher • Cycle Faster

LOGGING/FORESTRY

Green Hybrid Energy Recovery System

Bigger loads. Bigger savings.

Simple but effective, the Green Hybrid systems let your material handler lift more and lift faster with a dramatic reduction in operating costs. According to Jon Mihalic, Manager of Watco Companies barge and rail terminal in Industry, PA, as it relates to his 875 R-HD, "For fuel efficiency, there is just no comparison."

MODEL	Engine Model	Net Power
855 M	Cummins QSL9, Tier 4F	300 HP (224 kW)
855 R-HD	Cummins QSL9, Tier 4F	300 HP (224 kW)
865 M	Cummins X12, Tier 4F	355 HP (261 kW)
865 R-HD	Cummins X12, Tier 4F	355 HP (261 kW)
870 M	Cummins QSG12, Tier 4F	355 HP (261 kW)
870 R-HD	Cummins QSG12, Tier 4F	355 HP (261 kW)
875 M	Cummins QSX15, Tier 4F	525 HP (391 kW)
875 R-HD	Cummins QSX15, Tier 4F	525 HP (391 kW)
895 M	CAT C-18, Tier 4F	812 HP (597 kW)
895 R-HD	CAT C-18, Tier 4F	812 HP (597 kW)

Pressure from the energy recovery cylinder is stored in gas accumulators, secured in the back of the upper carriage with each downstroke.

Stored energy from the accumulators is released on the upstroke to assist the boom in lifting the load.



“Green Hybrid” Scrap Handler Builds Capacity and Reliability At US Mill



Space is at a premium at the Nucor scrap yard located next to the mill in Birmingham, Alabama. The facility moves about 4,000 tons per day, in total, to feed the nearby melt shop.

“It’s pretty intense,” according to Amy Alford, Scrap Yard Supervisor and Brandon Keller, Scrap Yard Lead. “It’s 24/7. We can’t afford to have downtime.”

They oversee the unloading and loading of 40 to 50 trucks plus 15 rail cars every day. “We’re melting everything we take in every day,” Alford says. “The rail cars are basically our storage. If we get 15 in one day, they have to be ready to be picked up the next day. And if they aren’t unloaded, we’re getting charged for them.”

To keep the material moving, the yard is operating three purpose-built material handlers. The latest addition is SENNEBOGEN’s new E-Series 855 M Hybrid machine, the first to arrive in North America.

Building capacity

On duty around the clock, two of the material handlers, equipped with grapples, typically log 12 to 17 actual operating hours each day. The third machine is fitted with a magnet and generally works lighter hours. The 855 is planned to take on the heavier workload but, at this time, it has taken over for the material handler equipped with the magnet while one of the older machines is out of service.

Focus on uptime

Equipment reliability is crucial to such a tight operation: “If we aren’t running, the melt shop isn’t making steel,” Keller says. “One of the things we really looked at when we were buying was the accessibility for maintaining the machines.

You could count on my hands the number of times we have cost the melt shop even 30 minutes downtime in my 17 years here.”

“This SENNEBOGEN is a lot simpler to work on than the other machines. I think we’ll also see a cost reduction in basic service parts. I’m a big fan of these Cummins engines. Starters and alternators and such are a fraction of what they cost on the other machines,” says Keller.



“Green Hybrid” models in the SENNEBOGEN lineup are recognizable by the large energy capture cylinder positioned between the boom’s two main lift cylinders.

What’s a “Hybrid”?

The 855 is one of SENNEBOGEN’s new-generation machines, featuring the unique Green Hybrid energy recovery system. According to Alford and Keller, “We wanted to do the right thing for the environment. These machines really help our numbers.”

Green Hybrid models are easily recognized by their large energy recovery cylinder, mounted between the two hoist cylinders on the lifting boom. On every downstroke of the boom, this oversized hydraulic cylinder captures the energy produced by the lowering action, and stores it in compressed nitrogen cylinders located in the rear of the machine. The stored energy is then used during the next upstroke

to supplement the hydraulic power that lifts the load. The system performs best in operations that cycle frequently through up and down strokes. In these operations, the system can reduce energy costs by as much as 30%.

SENNEBOGEN developed the Green Hybrid concept using standard hydraulic components, so service staff can support the technology with their existing skills and parts. Initially introduced on larger models used in port facilities, the 157,000 lb. (71,000 kg) E-Series 855 is the smallest in the SENNEBOGEN lineup to offer Green Hybrid emissions and fuel savings.

“So far, so good!”

The 855 M is Alford’s and Keller’s first hands-on exposure to SENNEBOGEN equipment and they’re pleased with what they have seen in its first months of operation.

Operators at the site are on-board with the decision, too. Keller notes that new operators recruited to Nucor recently were familiar with SENNEBOGEN at previous locations, and are happy with improvements in the E-Series models. “This is a really smooth machine to handle,” Keller reports. “They say it’s not bouncing them all over the place every time they load a bucket or unload a rail car.”

While the yard staff was waiting for delivery of the 855, the dealer arranged for their customer to attend technical courses at SENNEBOGEN’s Training Center near Charlotte, NC. “That is a really nice facility,” says Keller. “Two maintenance guys attended the service training, and we also brought one of our operators so he can help out with some of the service. And I went along also. We’re really lean. We run with as little as possible. The training we received was unbelievable; as a company, we were very pleased with what we saw there.” ■



Building Excellence in Technical Support

SENNEBOGEN customers throughout the Americas are supported by one of the industry's most knowledgeable and accessible service support networks. The strength of the network grows every year, as technicians and parts specialists from coast-to-coast come together at our Training Center near Charlotte, NC.

The Training Center was an essential investment to ensure that SENNEBOGEN dealers were able to support the machines they sell with factory-trained technicians. "But we took it a step further," said Constantino Lannes, President of SENNEBOGEN LLC. "Our technical programs are also offered to SENNEBOGEN customers, free of charge!"

The training department's dedicated facility at our 100,000 sq. ft. head office location in Stanley, NC, is attached to but separated from our parts warehouse and offices. Over 2,500 technicians, operators and parts counter personnel have now attended the hands-on courses in maintenance and troubleshooting, utilizing our state-of-the-art classrooms and demonstration bay.

Truly a center for developing excellence in service and support, the Training Center has earned accolades for the quality of both the facility and its instructors.

Led by Service Manager Jim Westlake, the Center's staff works closely with their counterparts in Germany to keep course materials up-to-date with the latest standards and innovations in SENNEBOGEN equipment. Our instructors have had extensive experience as working technicians in the heavy equipment industry as well as years of experience in training environments. As Westlake says, "Our service program is designed by mechanics, for mechanics."

The fast track to machine mastery is FREE

The free technical programs at SENNEBOGEN's Training Center lead technicians to an in-depth understanding of every aspect of their machines' maintenance and troubleshooting – in two easy steps.

Service Level 1 and **Service Level 2** are both offered with a specific focus on your machines. Instructions are available in English, French and Spanish.

Level 1 sessions introduce service procedures for all aspects of SENNEBOGEN material handlers and are open to anyone with a working knowledge of diesel-powered heavy equipment.

Level 2 sessions focus on advanced troubleshooting concepts. Enrollment in Level 2 is restricted to technicians who

have already successfully completed and practiced Level 1 training.

Along with our technicians' program, additional courses are available for parts staff and machine operators to accelerate their learning curve and review best practices.

Tree care: Growing with our customers

As we have expanded the range of equipment and industries we serve, our training programs have grown, too. The Training Center recently added a new course focused specifically on arboriculture operators and technicians and servicing our tree care handlers. In addition to maintaining the SENNEBOGEN platform, these specialists require additional orientation for the grapple-saw attachment at the end of their boom. As the machines are very often on the job in remote locations, far from any maintenance shop, we ensure that operators are able to take on most service needs and basic repairs in the field (or in the woods!).

Our team offers hands-on instruction in how to make best use of the grapple-saw

to execute cuts safely and efficiently, based on the practices of experienced arborists and climbers. If needed, these trainers are available to follow up with on-site instruction at the customer's location to help improve their proficiency with our unique tree care handling system.

Learning by doing

The Training Center's large indoor "service" bays allow attendees to learn

and practice course procedures in a highly interactive hands-on experience. The Center is "firewalled" from our adjacent warehouse and sales offices to create a distraction-free learning-focused classroom and hands-on environment for both staff and trainees.

The Training Center is designed to ensure that graduates can apply their training as soon as they return to work.

While other manufacturers' training programs may rely entirely on paper-based schematics and drawings, our well-equipped classrooms prepare students for hands-on training with a live machine in the facility's 3-tiered indoor bay. The training bay also includes demonstration models and cutaway components that help attendees understand the inner workings of their machines. ■



**Service Level 1
5-Day Course**

Course Content:

- Machine Safety, Operation & Functions
- Preventive Maintenance
- Read & Understand Hydraulic Schematics
- Read & Understand Electric Schematics
- Basic Troubleshooting: Magnet System, Hydraulics, Electrics

Course fees: No charge to SENNEBOGEN dealers, staff and customers.

**Service Level 2
5-Day Course**

Course Content:

- Remote Trouble Shooting
- Component Training & Repair
- Failure Analysis
- In-depth Troubleshooting Magnet System, Hydraulics, Electrics

Level 2 classes are smaller & more intensive & build on Level 1.

**SENNEBOGEN
COURSES**

- Service Level 1
- Service Level 2
- Operator Familiarization
- Parts Training

Visit us online at sennebogen-na.com/training or scan the QR code on the top corner of this page

NEW! Preventive Maintenance Kits Make Every Service Cycle Easier

As part of our ongoing commitment to uptime, the SENNEBOGEN Service Team has developed a series of Preventive Maintenance Kits to simplify parts ordering and save preparation time on every service cycle.

Each kit is "purpose-built" for your specific E-Series machine and for each scheduled service interval. The kits include everything your service technician will need to complete SENNEBOGEN's recommended PM task. Whether your machine is a 718 tree care handler or an 875 Green Hybrid

material handler, tracked or wheeled; whether it's coming up on its initial 250 hours service or approaching its 500, 1,000 or 2,000-hour cycle, the kits you need are ready to go.

- Pre-packaged: one part number for easy ordering and picking
- Includes all required supplies for your machine and components

Using our comprehensive Factory Authorized PM Kits will add residual value and extend the life of your machine, all while ensuring uptime. ■



EQ Machines Leverage Simple Engineering Into World-Leading Lift Capacities

“Give me a place to stand, and a lever long enough, and I will move the world.” - Archimedes

The basic lever is among the simplest principles in the engineering toolbox, but SENNEBOGEN’s application of it is making a big impression worldwide in ports, mammoth wood yards and large scrap handling operations. With these machines, SENNEBOGEN is delivering the capability to reach farther, lift larger loads and dramatically reduce operating costs – simply!

Equilibrium balance cranes are offered in a complete range of reach and lift capabilities to suit your operation and related equipment:

Model	Power (Electric)*	Power (Diesel)	Operating Weight	Max Reach
880 EQ	585 HP (430 kW)	630 HP (470 kW)	595,160 lbs. (270,000 kg)	114’10" (35 m)
8100 EQ	150 HP (110 kW)	162 HP (119 kW)	284,400 lbs. (129,000 kg)	75’6" (23 m)
8130 EQ	179 HP (132 kW)	175 HP (129 kW)	310,900 lbs. (141,000 kg)	82’ (25 m)
8160 EQ	218 HP (160 kW)	N/A	363,800 lbs. (165,000 kg)	98’5" (30 m)
8320 EQ	335 HP (250 kW)	N/A	573,200 lbs. (260,000 kg)	131’2" (40 m)
8400 EQ	218 HP x 2 (160 kW x 2)	N/A	705,500 lbs. (320,000 kg)	137’10" (42 m)



*Combine the EQ balance system with our eGreen electric drive technology, and our EQ models draw a fraction of the energy of a conventional machine – a **75% saving** in both operating costs and in environmental footprint.

With models able to reach from 68’11" (21 m) to 137’10" (42 m), a stationary EQ material handler can serve a loading area of 32,500 sq. ft. (3,000 m²) or as much as 55,000 sq. ft. (5,100 m²), and it can safely manage piles to heights exceeding 85 ft. (25.9 m).

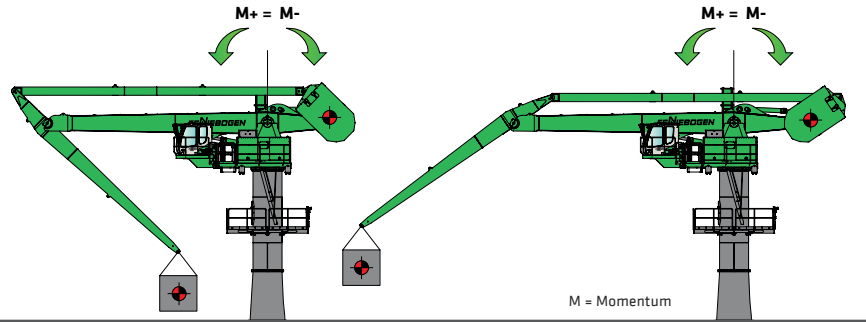


How It Works:

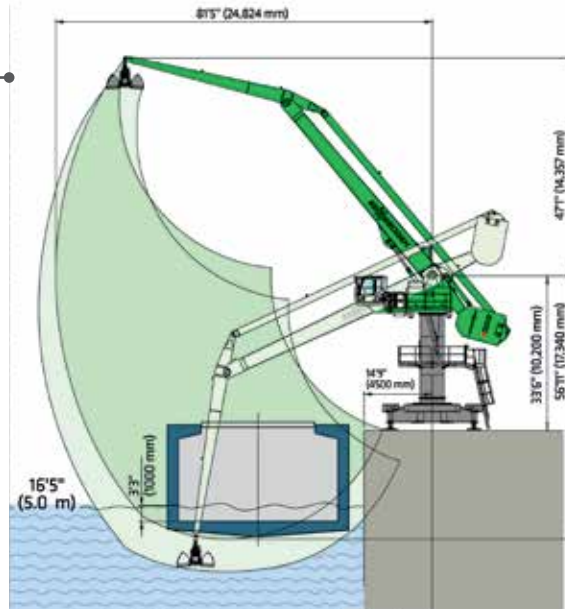
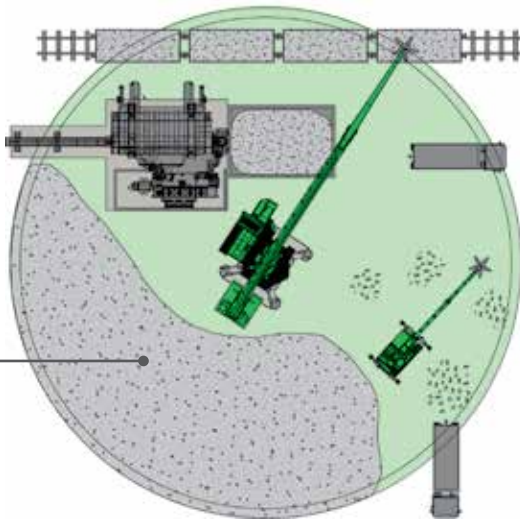
The innovative EQ system is an easy to operate, easy to maintain mechanism that multiplies the productivity of fast cycling material handlers without needing exotic electronics or complex hydraulics.

A connecting beam, running parallel to the boom, links the stick directly to a rear counterweight. With every movement of the boom and stick, the beam simply levers the counterweight forward or backward. The counterweight system allows the machine to lift and lower the weight of its own boom and stick without using diesel or electric power. This energy saving alone can reduce operating costs by as much as 50%.

The self-adjusting counterweight continuously maintains the center-of-balance over the slewing ring without requiring complex controls. The simple design reduces stress on the machine structure and hydraulics, leading to high reliability with increased throughput.



In port operations, the EQ can unload goods from ships or handysize-class vessels up to a depth of more than 50 ft. (15.3 m) and can move loads of up to 10 tons per cycle.



Where It Began – The 880 EQ

The 880 EQ was SENNEBOGEN's first material handler to introduce the equilibrium principle, raising the bar globally for material handling efficiency.

Instead of a connecting beam, the 880 EQ uses an outboard counterweight mounted on its own superstructure at the rear of the boom. This design lets the 880 EQ out-perform traditional rope cranes twice its size. In operation on river ports of the USA, the 880 EQ has demonstrated how it can unload coal barges at rates of **1,700 to 1,800 tons/hour**.



Great Lakes Dock & Material On Solid Footing With SENNEBOGEN

You need to be well grounded any time you start swinging tons of material at the end of a long boom. That need is even more true when you're working on a floating platform!

No one understands that better than the engineering team at Great Lakes Dock & Material, LLC (GLDM), one of the leading dredging and marine construction contractors on the Great Lakes. The firm takes on a host of projects that require heavy lifting on the water or at the water's edge, from building docks and break walls to dredging and environmental remediation projects.

Keeping pace

Mike Russell, Senior Project Manager explains: "We were looking for an efficient machine that can keep pace with our production dredging plant as well as provide versatility for unique projects."

The firm considered several brands of excavators and material handlers to upgrade their loading capacity. But in the final analysis, SENNEBOGEN material handlers stood out.

"They all have full load capacity through their 360° working radius. Being on barges or improvised platforms, we felt this capability was

essential for our machines to have. Crawler mounted undercarriages provide capabilities in unimproved sites as well as safety benefits when walking machines onto and off of barges."

GLDM added a "new to them" crawler-mounted 835 R-HD to its fleet in late 2018, then a larger new 840 R-HD about six months later. While the individual machines are assigned according to the specific needs and scale of current projects, both machines perform the same basic duties: primarily offloading dredge spoils or stone from material barges and, in some projects, actual dredging, placing of stone or construction-related activities.

Purpose-built

The 840 R-HD is a 130,000 lb. (58,968 kg), 305 HP (224 kW) machine equipped with a hydraulically elevating Maxcab. Even with the boom fully extended, the 840 can lift well over 8,818 lbs. (4,000 kg) and move it safely through its full 360° range of swing.

Big vs. mobile

"We were looking for the biggest machine

we could get that was economically transportable; that we did not have to break down to ship," says Russell. "You can save a lot of costs if you can keep the track width under 12 ft.: you typically don't need any escort vehicles; no special lanes or super load permits." This telescoping capability makes the 840 R-HD (835 telescopes, 840 tracks come off) a high production machine with the travel footprint of a much smaller model. According to Russell, the prep time for transporting the 840 is "nothing at all." GLDM provides services within about 500 miles of its base in Muskegon, MI, on Lake Michigan. For most projects within the region, the unit can be economically shipped with the tracks on. In this instance, the unit can be driven itself onto the truck bed then drive off, ready to work, at the jobsite. The simplicity is an important saving on smaller, short-term projects.

Good match for marine work

With their combination of 360° lifting capacity, stability, long reach and portability, the SENNEBOGEN machines have proven to be an excellent match to the unique needs of GLDM. "Pound for pound, they're a pretty productive machine," Russell says. He notes that excavators are often more common in



this type of work, especially for their digging ability. The purpose-built SENNEBOGENs won out at GLDM on a few key counts.

“On a barge, your work is often in front of you and the material barge is at the side. You want as much reach as you can. We aren’t normally making big stockpiles, but you want to spread the material as far as you can so

you’re working at maximum radius most of the time. Barges require the deck loading to be relatively evenly distributed. This prevents overstressing structural members as well as aiding in stability. And when you’re dredging, a critical component is how far down from the barge deck you can reach. The arch in the banana boom allows us to reach over the coaming of the material

barges alongside. It can also reach deeper depths than the normal straight boom and stick configuration. It can work over the coaming, reach down 20 ft. below the tracks and lift it up. An excavator doesn’t have that lift above the track level capability (at full radius), and the SENNEBOGEN works fast.” ■



Guntersville terminal on “the cutting edge”

As president of Guntersville Marine barge services, Mike Leuken is keenly aware of the dramatic changes in material handling equipment over the past thirty years. “The evolution of material handlers has gone so much faster than what we’ve seen on the automotive side. Thirty years ago, every terminal was loading and unloading with a clamshell cable crane. Then we went through some smaller hydraulic excavators. We feel very fortunate with this purchase that, once again, we’re on the cutting edge and looking forward.”

“This purchase” is the SENNEBOGEN 860 R-HD material handler that was recently commissioned for Guntersville Marine’s terminal at Mile 358 on the Tennessee River. The 860 is a giant 192,900 lb (87,500 kg) purpose-built material handler mounted on a crawler undercarriage. Powered by a 350 HP (261 kW) Cummins engine, the boom of the 860 can reach almost 60 feet across and into the barges. Then it can lift at least 10 tons in any direction.

“Purpose built” for barge work

Leuken explains “We were impressed with the fact that it is a material handler – built & designed that way. We looked at a variety of pieces to add to our terminal but, after looking at all the options, SENNEBOGEN was the clear choice. We chose it for the versatility and the economy it brings to our operation.”

Leuken has no trouble keeping the big green machine busy. “We’ll have upward of 100 barges up here at any given time,” he says. “Of those, 60 will



Operators feel more confident with every lift because of the 860 R-HD’s center of balance with equal load limits through 360° of swing.

be here for loading, 35 for outbound tows, plus some bound for other customers in the area. The majority are discharged here, which is what led us to purchase the SENNEBOGEN.”

Reach for productivity

The long reach of the 860 was a compelling feature for the Guntersville terminal. “The long boom lets you reach all the way over to the other side of the barge, to the outside wall and move the material directly to truck or conveyor. With a 5- or 6-yard bucket, it’s moving up to 40,000 lbs per lift.”

“Often times you’ll get to that position where you have to move your material handler along the dock wall or move the barge. If our push boats are busy, we would have to wait before we can continue production. With this SENNEBOGEN, we don’t have to move with anywhere near the frequency that we did before – if at all.”

Quick-change versatility

“The other thing we’ve learned is the value of the quick changing of the equipment,” Leuken continues. “Whether we’re using one of the clamshells, a hook, or forks; we have a 25 kW generator onboard so it even switches to a magnet. Time is money! Given the cycle times and the flexibility we have, we can shave off 20% of our unloading time, depending on the product. The speed and versatility increase the capacity of our facility. We take off the water at six different places in this terminal, but the SENNEBOGEN is a piece that we use more frequently now.”

“Hybrid” savings

The 860 is one of SENNEBOGEN’s new “Green Hybrid” models, featuring a unique energy capture system. A large hydraulic cylinder, centered between the boom’s two lift cylinders, uses the weight of the boom on each downstroke, to compress inert gas into storage cells at the rear of the upper carriage. On the next upstroke, the compressed air drives hydraulic fluid back to the recovery cylinder to assist in lifting the load. The system is ideally suited to applications with frequent up & down cycles, such as barge loading, where the process typically reduces the machine’s fuel cost by about 30%. Leuken looks forward to seeing the effect on his operating costs. “So far it looks favorable. The savings on fuel is certainly an incentive for us to buy SENNEBOGEN.” ■

“Gentle Giant” At The Port

The world’s largest purpose-built material handler, a 460-ton giant unveiled at Bauma 2019, joined the ranks of working port machines. The SENNEBOGEN 895 E-Series Hybrid was commissioned for the Tosyali Holdings fleet, at the Mediterranean Port of Iskenderun.

Since then, the 895 has been moving massive amounts of scrap metals around the clock, every day. Electrically powered, the machine never needs to take a break for refueling.

Productivity on a giant scale

Powered by a 670 HP (500 kW) electric motor, it is fitted with a 13-yard orange peel grapple. It can reach out to 130 ft. (40 m) to grab



12 tons (10,900 kg) of scrap with every bite from the holds of panamax and post-panamax ships.

“We handle 10,000,000 tons a year in this port alone,” says Harun Karaarslan, Tosyali’s Technical Port Director at Iskenderun. “Our machines are in constant use. We rely on our fleet to be producing constantly – downtime would be fatal.” The 895 material handler, of course, does not produce all that throughput alone. Tosyali’s facility operates a total of seven material handlers, including two 600,000 lb. (270,000 kg) SENNEBOGEN 880 EQ balance cranes. Both the 880s also run on electric drive. These machines, says Karaarslan, were a big part of Tosyali’s confidence in moving up to the 895.

“Green Hybrid” energy savings

The reason for that is the distinctive Green Hybrid energy re-capture system engineered into the 895’s boom hydraulics. The re-capture system saves up to 55% of the energy for every lift, all day long!



And that’s a lot of lifts! The operator’s viewpoint from the elevating Skylift port cab as much as 72 ft. (22 m) above ground level is ideal for loading and unloading bulk goods deep inside ships’ hulls. Cameras mounted behind and on the right-hand side of the cab provide the operator with the 360° view of the entire work zone, allowing faster cycle and travel time, safely. The SENNEBOGEN 895 also has a third camera location on the business end of the stick, near the grapple, for direct view inside holds, hoppers and other conveyor equipment. ■

SENNEBOGEN Is Onboard

A new fleet member of Berge Rederi AS has been defying the rough conditions on the choppy high seas since 2019. Mounted on a special trolley, aboard the “Kjervaagsund”, this ship-mounted version of the 860 Hybrid material handler from SENNEBOGEN, showed the Norwegian company to aim high and succeed in making their loading and off-loading processes more efficient than ever before. Virtually floating above the loading area, it’s easy to get to the material in the cargo hold with a custom-built 70 ft. (21 m) banana boom.

On their routes, they operate in the ARAG Ports (Amsterdam-Rotterdam-Antwerp-Ghent), Ports in Norway and in the Baltic Sea.

Purpose-built competitive advantages

The Norwegians have chosen a SENNEBOGEN 860 material handler with its proven Green Hybrid system. Compared to conventional, diesel-



hydraulic models without an energy recovery system, this can reduce energy costs up to 35%. The SENNEBOGEN Green Hybrid system offers a decisive strategic advantage, especially in the highly competitive port business where a green solution provides even more uptime.

“Our new SENNEBOGEN has further advantages when compared to what we worked on before using a conventional excavator: The banana boom has

allowed us to increase the reach and our working depth, giving us more flexibility in everyday use. We are also very pleased with the material handling speed of the machine,” says Managing Director Øivind Berge. Depending on the capacity of the port of call, the Kjervaagsund never spends more than twelve hours at the piers to unload its freight. As a result of the gain in cargo handling speed with the 860, the costs for berthing times in the ports has already significantly decreased and will continue to pay dividends in the years to come.

Choosing SENNEBOGEN is an investment for the future

“We are currently working at full speed on our latest acquisition, “Sletringen”. It will have an electrically powered 870 in order to further reduce our CO₂ emissions while benefitting from lower operating costs in the long term.” ■

Multi-Purpose 875 Is Purpose-Built For Broussard Coastal Restoration Projects



“Mobility” isn’t the first quality that comes to mind when you’re talking about a 300,000 lb. machine, but that’s what attracted Chip Broussard to his new SENNEBOGEN 875 R-HD material handler.

The Broussard family is one of the leading marine and land construction contractors on the Gulf Coast. Coupling oilfield and pipeline projects with marine towing, dock and crane services, Broussard Brothers is a big part of the heavy contracting scene in Louisiana’s Intracoastal region. Now their part just got a little bigger!

Competing for rock business

Broussard Brothers was looking for ways to be more competitive in bids for upcoming government contracts for seawall restoration work. With miles of Louisiana coastline requiring thousands of tons of rock to be loaded and placed, these jobs would be a welcome addition to the Broussards’ long-term plans. But, with their largest cable crane only able to handle up to 150 tons-per-hour, the firm was concerned that their current fleet would not measure up against the competitors’ equipment.

“We originally saw the 875 at CONEXPO,” says Chip Broussard, a third-generation member of the family-owned business. “What

originally intrigued us is that the SENNEBOGEN is on tracks - it doesn’t have to be welded down on the barge. At times we might be doing a rock job and we want the material handler on the ground; then we pick up crane work and want to put the SENNEBOGEN on the barge. With its versatility, we didn’t have to get another barge!”

More tons per hour

“It’s very adaptable to our wide range of operations,” Chip continues. “Some of these rock jobs, the stones are very large, more than the clamshell can handle, so we have the grapple for that. We have also done some dredging with it; some maintenance work.” This was where the 875 first showed off its real capacity for production. “We were loading some material barges, one that can hold up to 50 tons. We loaded it in about 20 minutes!”

Broussard admits that this first dredging project let the 875 shine in optimal conditions. But in a more realistic application, such as shoreline restoration work requiring precise placement of man-sized boulders, Broussard is quite confident that the machine can maintain his target of 400 to 500 tons per hour. “We just increased our capacity by a factor of three or four times!”

Moving more, with less

As the 875 gets out into more commercial projects, Broussard looks forward to the bonus profits the machine will earn with its exceptional fuel efficiency. The giant material handler features SENNEBOGEN’s “Green Hybrid” energy recapture system. An oversize hydraulic cylinder mounted between the two boom lift cylinders captures energy



Sometimes a grapple, sometimes a rock grapple, sometimes a bucket. No problem with a quick change coupler.

on each downstroke of the boom, then releases on the upstroke, like a compressed spring, to assist in lifting the load. The simple, mechanical system reduces fuel consumption by as much as 50%!

“I’m anticipating that we will run on 8 to 10 gallons of diesel per hour: about the same gph as a large excavator or our cable crane. But if you compare gallons per ton of material moved, it’s very impressive. Our fuel cost on bids will be cut in half, or even less.”

Ready to compete

With the 875’s efficient throughput and low operating costs, Broussard feels ready to take on the competitive coastal restoration market. “There’s a lot of people chasing this business, as other sectors have slowed down,” he says. “They are also investing in new equipment, new excavators. But an excavator is not built for this work. You have to add a counterweight to it, and then make other modifications. This 875 is purpose-built for the kind of material handling we do here.” ■



With cab in position, the operator has a perfect view of the barge and the pile.

THE WRECKING CREW

SENNEBOGEN R-HDD models turn two tough material handlers into purpose-built demolition machines

SENNEBOGEN 830 R-HDD and 870 R-HDD models adapt proven standard platforms to the unique needs of demolition work, without the cost of custom engineering.

Undercarriages with telescoping tracks hydraulically expand each machine's footprint to provide wide-stance stability on the jobsite. At the end of the job, the tracks retract to a more compact stance, allowing it to self-drive onto its trailer for transport to the next job. The 870 R-HDD also features an intelligent self-mounting system for the machine's counterweight, simplifying transportation and set-up.

The elevating Maxcab on both models is equipped with hydraulic tilt of up to 30°,

allowing operators a comfortable working position while working at heights. Bulletproof glass with added safety guarding on the windshield and skylight are standard features on both models.

With a maximum reach of up to 118'1" (36 m), the towering SENNEBOGEN 870 R-HDD is built to safely tear down buildings up to 10 stories tall, with as much as 4 tons of lifting capacity.

The precise, multi-functional 830 R-HDD is the standalone solution for one-stop demolition projects. Equipped with a 62'4" (19 m) boom and responsive control, it efficiently manages every task from tear-down to sorting and loading to clean-up. ■



830 R-HDD



870 R-HDD

QUICK SPECS	830 R-HDD CRAWLER TRACKS	870 R-HDD CRAWLER TRACKS
Net Power	225 HP (168 kW)	355 HP (261 kW)
Operating Weight	96,780 lbs. (43,900 kg)	217,705 lbs. (98,750 kg)
Magnet System	20 kW	33 kW
Max Reach*	62'4" (19 m)	118'1" (36 m)
Lift Capacity @ Max Reach	7,000 lbs. (3,175 kg)	8,000 lbs. (3,630 kg)

* Multiple configurations available with varying reach and lift capabilities

Adamo Demolition Unlocks New Revenues, New Efficiencies With SENNEBOGEN Fleet

"How could we have missed this for so long?"

Richard Adamo and his team still feel a little irked that they did not bring purpose-built material handlers into their demolition business sooner than they did.

With the new equipment, Adamo has created a valuable new revenue stream, increased loading and logistics efficiency and even improved relations with landfill operators.

"Unrealized revenue"

Like most demolition contractors, Adamo was accustomed to using specially-

equipped long-reach excavators to tear down structures and then machines with a grapple followed up to pick through and load the debris for disposal. It was in 2004 that the firm first experimented with attaching a magnet to an excavator to pull out rebar and other ferrous scrap from the piles of rubble.

"We were floored by the amount of scrap we were recovering," Adamo recalls. At the time, he had a team working on an automotive factory project, with a large volume of metal in the structures. "Look at the recovery we can get – all this material we've been sending to

the landfill, picked as clean as you can get it." In one job, metal recovery added significantly in revenue to Adamo's bottom line.

A new way of "maging"

A short time later, Adamo took advantage of an opportunity to acquire a used material handler and decided to "give it a shot at maging the site." Maintaining that machine proved to be problematic. However, it demonstrated the advantages of replacing excavators with purpose-built material handlers. It was just a question of finding the right material handler for this application.



This is when Alta Equipment, a leading equipment dealer in Michigan, connected Adamo with its SENNEBOGEN lineup of material handlers. “I attended an open house at Alta and I saw an 821 M on their lot. I thought... That’s really cool. I’m really interested in that machine. It’s a good little unit, very mobile and it could suit a specific need.”

“Through the roof” support

Adamo had two priorities in mind when he saw the 821: mobility and dealer support. With projects scattered across the country, the ability to transport equipment efficiently is a key point in planning. Larger sites also call for machines that travel quickly between work zones under their own power. And, as in any major project, reliability through long operating shifts is essential to meet deadlines.

Mobile and productive

Adamo is just as pleased with the other machines that Alta has supplied. He purchased an 825 M soon after seeing his first 821, then larger 830 M models were added for new projects. “I’m pretty critical of equipment,” he says. “Our excavators were challenging at times to move. The 825 is night and day better.” Each of these models, up to the 830, can simply drive themselves on and off a lowboy to transport with greater ease.

“Effortless” reliability

One 830 spent over three years on a major industrial project in Muskingum, OH. “We had no problems in all that time – we learned something from that! Reliability is very high with SENNEBOGEN.”

The laydown area collected up the material and when ready, it all gets loaded on the barge.

Bigger machines for bigger jobs

The fleet was expanded recently to include even larger material handlers. A SENNEBOGEN 840 M was acquired for a power plant project in Ohio, where barge loading operations required a heavier machine with longer reach. The laydown area is located near the barge facility, a considerable distance from the demolished structures on the site. Using a 67" lifting magnet, the 840 loads off-road trucks with the recovered material, which delivers the scrap to the laydown area. Once enough material is accumulated, the 840 is driven to the river to fill the barge.



All of this used to be unrealized revenue to Adamo Demolition.

When it’s not loading trucks, the 840 continues maging out the debris piles. According to Adamo, thanks to SENNEBOGEN’s elevating Maxcab his operators also appreciate the visibility they get, looking into the barges. “I always get good feedback from the operators; they just raise the cab and go to work. The machine doesn’t stop.”

Unexpected rewards

“Our biggest accomplishment, really, is segregating the metal to recycle,” says Adamo. “We were among the first to use the magnets for sweeping and cleaning the piles. We are now getting paid for material that otherwise would have been a cost for tipping fees at the dump.”

“We have been engaged with SENNEBOGEN and Alta now, for eight years and the experience has been great. Constantino Lannes (President of SENNEBOGEN LLC) came to town a while ago and I was happy to tell him that SENNEBOGEN is hands-down the best material handler in the market. They are all outstanding units: durable, reliable; the dealer support is remarkable. As we grow our business and our fleet, we won’t go anywhere else.” ■



Durability • Safety • Versatility

DEMOLITION



MAXCAB PUTS YOU IN THE DRIVER'S SEAT FOR SAFETY AND PRODUCTIVITY

For operators who go to work in SENNEBOGEN material handlers, cab comfort is more than a luxury. Our Maxcab design is engineered to keep operators (and their jobsite) safe from fatigue and to enhance the productivity of the machines.

- Climate-controlled cab with automatic A/C and partially tinted glass
- Nine air outlets strategically placed in the cab for optimum air flow
- Ceiling-to-floor windshield allows wide-open view of the entire worksite
- Bulletproof glass above and to the front shields operators from flying debris
- Consoles and the hydraulic-over-hydraulic joysticks move with the Comfort Seat®
- Low-noise environment with sound-attenuating insulation
- Sliding door with a secure railing and catwalk for ease of entry and exit
- Ergonomically designed, low effort controls within easy reach
- Convenient electrical outlets with 12V, 24V and USB charging sockets

A "Joy" to hold

Our ergonomically designed SENNEBOGEN joysticks are easy to hold and provide direct, responsive control. The convenient control is always within comfortable reach no matter how you adjust the seat.

Work fatigue-free with climate-controlled Comfort Seat®

Standard in all Maxcab models, our air-suspension Comfort Seat® is fully adjustable to suit your size, shape and preference. The seat provides stepless, fully automatic weight adjustment up to 330 lbs. When you move the seat to your preferred operating position, the machine's control console comes with you!



"PURPOSE-BUILT" OPERATOR STATIONS

The original Maxcab is now available in four different versions, purpose-built for your operating environment. Every model includes the same suite of comfort features and ergonomic ease-of-handling.

These models are also available in a range of mounts, allowing smooth, stable hydraulic elevation and forward positioning for optimum visibility into your work zone.





Maxcab

The original Maxcab for maximum comfort and versatility

- sliding door entry with safety catwalk
- roof to floor bulletproof windshield
- climate-controlled with heating, A/C and multiple fresh air vents
- air-cushioned adjustable Comfort Seat®
- joystick control
- wide panoramic view



Maxcab Industry

Heavy-duty Maxcab with added protection for harsh environments

- sliding door entry with safety catwalk
- roof to floor inwardly inclined bulletproof windshield
- climate-controlled with heating, A/C and multiple fresh air vents
- air-cushioned adjustable Comfort Seat®
- joystick control
- wide panoramic view

Looking up!

Maxcab can provide up to 30° hydraulically controlled tilt, allowing operators to maintain a comfortable seating position while working at heights.



Portcab

Purpose-built Maxcab for ports and barge docks with superior visibility into holds

- flip-up & sliding windows
- large bulletproof windshield
- large floor window
- resiliently mounted
- climate-controlled with heating, A/C and multiple fresh air vents
- air-cushioned adjustable Comfort Seat®
- large easy-to-read instrumentation



Mastercab

Extra spacious high-visibility Maxcab with stowaway instructor's seat

- largest cab in this machine class; 50% wider, 25% higher than standard cabs
- sliding windows
- roof to floor inwardly inclined bulletproof windshield
- large floor window for direct downward view
- resiliently mounted
- climate-controlled with heating, A/C and multiple fresh air vents
- air-cushioned adjustable Comfort Seat®
- large easy to read instrumentation
- storage area

The best equipment choice deserves the best business choice: **SENNEBOGEN Capital**

SENNEBOGEN brings you more than the industry's best purpose-built material handlers. We look "beyond the machine" to deliver the best complete business solution.

Through SENNEBOGEN Capital, we can tailor an equipment financing strategy that's customized to the needs of your business for sustainable cash flow and growth.

Financing for long-term flexibility

SENNEBOGEN Capital offers the full range of financing tools to let you:

Conserve capital

Capital is best used for income-producing investments, not to acquire depreciating equipment.

Keep your fleet fresh

Leasing allows flexibility to update or replace equipment as technology and project requirements change.

Protect access to credit

Financing with SENNEBOGEN Capital keeps your conventional lines of credit open for other opportunities.

Hedge against market fluctuations

SENNEBOGEN Capital will lock in terms at today's dollar and at today's rates, allowing you assured costing over the life of the contract.

Qualify for AMT relief

Your SENNEBOGEN Capital lease may let you minimize or even negate the impact of the Alternative Minimum Tax (AMT).

Simplify equipment replacement

Leasing eliminates the need to sell or store the equipment at the end of its economic lifecycle.

Simplify accounting

Accounting for a true lease agreement becomes little more than just recording payments, reducing accounting costs.

Flexible fleet planning

Manage fleet acquisitions piece-by-piece, lease-by-lease or under one Master Lease, with options to terminate, replace or extend your lease at the end of the term.

LEASE OPTIONS

SENNEBOGEN Capital can offer a wide range of financing solutions to match your business needs for cash flow management, cost certainty and seasonal utilization.

Lease By The Hour[®]

An option to avoid extra costs associated with under- or over-utilization.

Full Payout Loan

Fixed payments over the term of the lease build ownership equity in the equipment.

A Fixed Price Purchase Option

Purchase the equipment for a specified amount at the end of the term or just turn it back to the dealer.

A Tax or True Lease Option

At the end of the lease, choose whether to purchase the equipment for a fair market value, extend the lease or return the equipment.



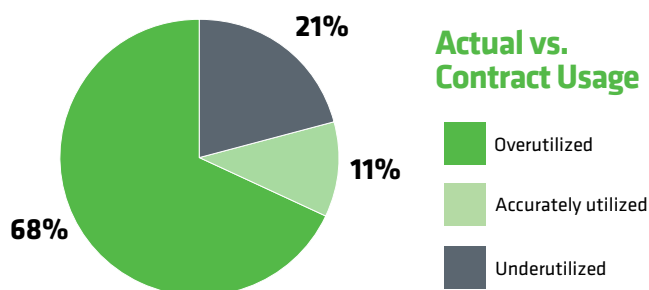
What if... ... equipment costs went down when your job activity goes down?

Managing your business would be lot easier if the cost of owning equipment was based on the productive hours you get from the machine. Our Lease By The Hour[®] financing package has been attracting more attention from customers, year by year, for exactly that reason.

SENNEBOGEN Capital will help you structure a lease based on your historical usage. With Lease By The Hour[®], your payments then reflect the machine's minimum monthly usage over the long term. But, if your business slows down, the lease contract automatically extends the term and reduces your payment. Then, when business normalizes, we'll adjust the term and payments accordingly.

Simply: Lease By The Hour[®] means that you aren't really leasing a machine – you're leasing production.

Most busy owners find it challenging to accurately predict how and when their machines will be busy in the years ahead. As a result, almost 80% of them end up overpaying for hours they didn't use, or else they pay penalties for extra hours of utilization. Lease By The Hour[®] is the one way you can always keep your leasing costs in balance with your productivity and cash flow.



Get more from your machine, too

Our typical Lease By The Hour[®] agreement is paired with a planned Repair and Maintenance Program (RAMP). A RAMP puts your dealer's technicians onto your site with the machine every month. Your machine always gets the proper care to minimize downtime and to extend its service life. In the end, your SENNEBOGEN machine delivers more through the lease term, and retains more value at the end of the lease.

Learn More About Lease By The Hour[®]

See your SENNEBOGEN dealer for more information on all the financing options available from SENNEBOGEN Capital – or scan this QR code for the answers to common questions about Lease By The Hour[®].



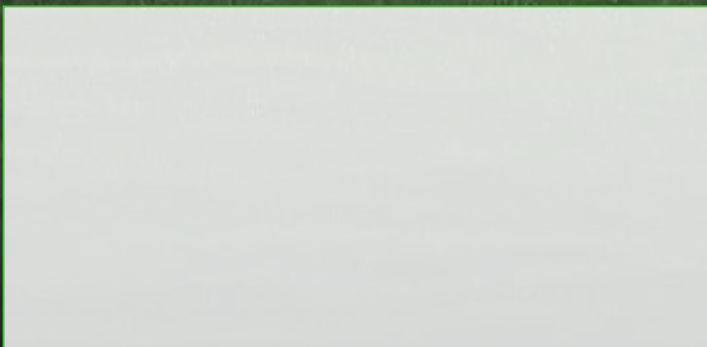
“ Every year SENNEBOGEN continues to invest in its facilities, staff, inventories and services – because we believe in the strength of our distributors and their customers. ”

Constantino Lannes



OUR COMMITMENT

The SENNEBOGEN 100,000 sq. ft. (9,300 m²) facility in Stanley, North Carolina is built on a 33 acre (13.4 hectare) site and includes the offices, Training Center and warehouse.



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