



PURPOSE BUILT for Waste Handling

SENEBOGEN®
Thinking Beyond the Machine



A productive, efficient and safe solution for waste

For decades, Sennebogen has supplied material handlers to industry sectors that include waste, scrap, ports and logging. Our business has grown within these diverse sectors by listening to our customers' needs—increasing production, providing standard safety features that go above and beyond our competitors and offering electric-driven green solutions that support their company visions.

Operators in the waste industry have believed that material handlers were not built for them—they were too large and too expensive. While this used to be the case, Sennebogen eagerly invested to design purpose-built material handlers for waste and C&D operations.

As a family-owned and customer-driven organization, we appreciate that our customers move our company forward. By listening to our customers, we have learned how important it is to respond quickly to machine service needs. When your machine is down, your operation stops.

For this reason, Sennebogen is continuously enhancing our support network. We have a network of world-class heavy-equipment dealers and nearly 100 additional Authorized Service Providers (ASPs). Additionally, we have a team of factory technicians ready to fly out, at no cost, to any customer site in the event they are needed.

Sennebogen waste handling machines deliver lower operating costs per operating hour and incorporate safety features that lead the industry. Our lower operating costs are achieved through faster cycle times and optimal fuel efficiency to maximize profitability. Hydraulically lifting cabs ensure superior visibility, allowing operators to prevent unwanted material from entering process equipment, while extended reach eliminates unnecessary machine movement and tire wear.

We continue to invest in supporting our customers. Sennebogen North America, headquartered in Stanley (Charlotte), North Carolina, carries \$48 million dollars in spare parts inventory and maintains a 98% same day parts availability!

Our facility boasts a technician training center. We remain the only manufacturer of material handlers that offers the same level of training to our customers as we provide to our dealers and ASPs, free of charge. With hydraulic-over-hydraulic controls, no laptops or software are needed to troubleshoot a Sennebogen. This allows customers to service their own machines, increasing uptime and lowering operating costs.

We invite you to explore the Sennebogen product portfolio and to tour our North American headquarters. It would be an honor to be considered when next upgrading your material handling capacity. We look forward to earning your business and forming a long-term partnership.

*Sincerely,
Constantino Lannes
President & CEO
Sennebogen LLC*



Leading Through INNOVATION

SENNEBOGEN HAS A RICH HISTORY AND, IN JUST OVER HALF A CENTURY, HAS DEVELOPED INTO A WORLD-CLASS MANUFACTURER.

Sennebogen has been active in North America for more than two-decades, delivering innovative machinery driven by a uniquely simple design approach. Since the early 2000's Constantino Lannes, president, has led the company through years of continued growth.

A customer centric vision focused on building a world class service and support network, heavily investing in parts inventory, implementing free customer technician training, and keeping the Sennebogen product simple to work on and free of electronics.

The company's thirst for knowledge pushes them to learn about their customers' needs and what's required for them to be profitable. Standard machines are often adapted to meet those requirements, ensuring an unusual return-on-investment.

Sennebogen has adhered to a simple hydraulic over hydraulic operating system. No computers mean the machines are easy to troubleshoot and service, minimizing the need for costly dealer service calls.

Sennebogen's philosophy is to understand its customers, to provide comprehensive service and support to ensure maximum uptime reliability and performance. ■



1965



1976



1996



1968



1987



2004

A glance at Sennebogen's history

1952	Erich Sennebogen founds the company at the age of 21.
1959	Sennebogen develops the S803 material handler for agricultural purposes and for the construction industry.
1969	Sennebogen develops the fully hydraulic duty-cycle crane, SK15, the first of its kind in the world.
1982	We release our first pedestal-mounted scrap handler.
1990	We introduce the first pedestal-mounted material handler on a crawler under-carriage.
1996	Sennebogen introduces the Green Line material handler; it is painted green and focuses solely on material handling.
2001	Sennebogen establishes its North American headquarters.
2002	We are formally acknowledged for 50 years of manufacturing innovation and excellence.
2003	Constantino Lannes joins as president & CEO of Sennebogen LLC.
2007	Sennebogen becomes the market-share leader in material handlers sold in the USA.
2009	Our 54,000-sq.-ft. headquarters, parts and training facility opens in Stanley, NC.
2013	Responding to continued growth and customer demand, the Stanley facility expands to 100,000 sq. ft.
2014	Sennebogen furthers its commitment to training by expanding one of America's premier OEM training centers for heavy equipment. We remain the only manufacturer to offer our customers the same free training we offer our dealers.
2019	Sennebogen launches the 895, the largest hydraulic material handler in the world.

SENNEBOGEN Photo Gallery

PURPOSE-BUILT WASTE HANDLERS AT WORK ACROSS THE INDUSTRY



▶ The pedestal-mounted **SENNEBOGEN 818E** is a purpose-built waste handling machine. Electrical power allows quiet, cost-effective and emissions-free operation.



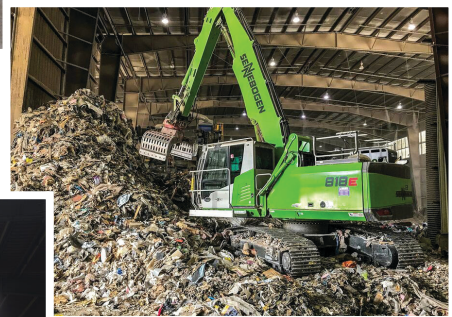
▶ A wheeled **SENNEBOGEN 821E** electric purpose-built waste handler.



The **SENNEBOGEN 355** is a uniquely powerful and versatile waste handling machine. Raised cab and extendable boom increase safety and deliver reach to manage stockpiles and loadouts.

▶ **SENNEBOGEN 818E**

making light work of
handling C&D materials.



▶ **SENNEBOGEN 818E**
tracked, purpose-built waste
handler handles the big piles.

▶ **SENNEBOGEN 821E**

feeding a shredder.



▶ An electric-power
**SENNEBOGEN
821E** loading
containers.



GAETA RECYCLING ACHIEVES OPTIMAL EFFICIENCY WITH SENNEBOGEN PURPOSE-BUILT WASTE HANDLER

In its 85 years in business, Gaeta Recycling has operated a lot of machines. Michael Portannese is the fifth generation of his family to lead the company. Serving 30 municipalities in central New Jersey, Gaeta Recycling processes upwards of 720 tons of waste material per day. Moving material is at 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, Portannese was ready to try a different approach.

PURPOSE-BUILT EFFICIENCY

"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 diesel filter 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 Sennebogen model to test. Portannese liked what he saw, so Komatsu Northeast placed his order for an 821 M model Sennebogen, a rubber-tired machine that weighs in at 52,800 pounds and is powered by a 141-horsepower (105-kilowatt) Cummins engine.

The impact on his operation was immediate. "The 821 provides all the hydraulic pressure we require. We are now loading a 20-ton walking floor trailer in eight to 14 minutes—down from the 20-plus minutes or more with the excavator."

Portannese also says he 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. 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."

DEPENDABLE, AFFORDABLE AND SAFE

Sennebogen also got it right when it comes to producing a machine able to handle a dusty, harsh environment. "They have really put the machine through its paces and realized what the user wants. We want fewer things to go wrong; more things that are easy to fix and to be able to work on," Portannese says.

Gaeta Recycling handles multiple materials. "Our machines run 16 hours a day, five days a week, plus a Saturday shift. There isn't a moment 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."

When it comes to savings from running the rubber-tired Sennebogen 821, Portannese explains, "When I was running excavators, I had to replace the concrete floor every two years! The tracks would destroy it! The rubber tires on the 821 save the floor and give us better mobility on the street when we have to move the waste handler between buildings."

Gaeta sees truck fleet savings, too. "With the way the excavator is configured, you get a downstrike to help pack the load. The size of the scoop gives us the weight we need, so we don't have to tamp down the loads at all. We aren't destroying our trailers anymore!"

Portannese continues, "Our operators are very happy with it!" Sennebogen's hydraulic Maxcab achieves a new level of visibility for the operator. As well, two safety cameras give operators a 360-degree view of the entire work area.

"When we do need another machine, we will be looking at another Sennebogen. It definitely excels over other machines," Portannese concludes.



COUNTY'S INVESTMENT IN **SENNEBOGEN** MATERIAL HANDLERS EASES BURDEN ON OPERATORS

Solid waste facilities run at a frenetic pace, so efficiency is of the utmost importance. Thus, when Polk County Solid Waste Management in Minnesota saw an opportunity to ease the burden on its operators while simultaneously streamlining production, it jumped at the chance.

Not satisfied with how the county's existing payloaders and excavators were performing at handling incoming waste, Polk County Solid Waste Management joined with a coalition of local municipal solid waste facilities in northern Minnesota to find a better solution.

Polk County participates in a regional integrated solid waste management program that includes several adjoining counties. Polk and Beltrami counties, along with the adjacent counties, applied for and were awarded a capital assistance grant through the state of Minnesota to upgrade their waste facilities. That grant allocated funds for new equipment purchases, and the counties joined together to maximize their purchasing power.

PASSING THE TEST

After testing machines, Polk County Solid Waste Management Operations Manager Ron Larson says when operators got the chance to demo the Sennebogen material handler 818 E-Series provided by RMS-Road Machinery and Supplies in Grand Rapids, Minnesota, they knew they found the right fit.

"It's a very smooth-running machine; it's super quiet, and we really liked that aspect of it because it's running inside a building," says Larson. "We use it to load a feed hopper. It's stockpiling waste for us and it's loading walking floor trucks on a daily basis. We found that it's just a really nice machine to run."

Larson says Polk County took ownership of the Sennebogen material handler 818 E-Series in September 2017 and started using the machine on-site in January 2018. Nearby Beltrami County Transfer Station also took ownership of an 818 E-Series in the fall of 2017. Polk County Transfer Station and the Polk County Landfill each got an 818 E-Series in spring 2018. In total, three new 818 E-Series

Sennebogens were purchased in addition to a preowned E-Series for the landfill.

After outfitting the Sennebogen with a Rotobec clamshell bucket, the team was ready to put the machine into action. Larson says the difference became immediately apparent.

"We've had excavators and payloaders before, and this machine is different," he says. "It gives the operator the capability of just sitting in one spot and doing quarter turns to handle the material instead of having to completely rotate the machine 360 degrees or otherwise move it. It's much more efficient. It can go from a pile of waste directly to a hopper with limited movement. This also equates to enhanced safety since you're limiting your required movement."

STAYING ON THE JOB

Larson says, despite stresses the facility puts on the machine, the E-Series has proven extremely durable. For routine maintenance, most service can be done directly from the ground or from points easy to access from the top of the equipment.

Greater efficiency was pivotal for the team at Polk County Solid Waste Management because the machine maintains a heavy workload. The facility runs the material handler seven hours per day, five days per week to process approximately 900 to 1,000 tons of material per week.

Larson says the functionality of the Sennebogen material handlers is more seamless than that of any other machines his operators have used. This translates to greater control and more comfort for the team's personnel.

"These machines have a short learning curve," he comments. "Within 10 or 15 minutes [our operators] essentially had the motion of it down and understood how it handled. It's been a very good machine for us."

For more information on Sennebogen's material handlers for waste: <https://sennebogen-na.com/industries/waste>.



SWITCH TO SENNEBOGEN MATERIAL HANDLERS LEADS TO SUNNY FORECAST

Sun Services, headquartered in Beltsville, Maryland, has served the waste and recycling needs of customers throughout Maryland, northern Virginia, eastern West Virginia, southern Pennsylvania and Washington since 2004.

Specializing in commercial disposal, residential demolition recycling projects, construction dumpster rental and related services for job sites, its team relies on streamlined operations to increase efficiency and maximize production.

Determined to capitalize on its thriving hauling operation, Sun Services constructed a new construction and demolition (C&D) recycling plant in October 2013 to better leverage the value of the materials it collected.

The company designed the 33,000-square-foot plant on 5 acres to house all material loading and processing under one roof. Thus, having the right equipment to safely and effectively handle the vast volumes of incoming material was of paramount importance.

INCREASED VISIBILITY AND CAPABILITY

In 2018, when the time came to replace the company's existing excavators used for loading material into its shredder, Sun Services President Brian Shipp did his due diligence to find the best equipment on the market.

After researching and testing various options, the Sennebogen 818 material handler on tracks won Shipp and his team over thanks to its versatility and maneuverability as well as its potential for fuel and cost savings. Sun Services added a rotating demolition grapple attachment to the machine for increased functionality.

"We wanted to get machines that had an elevated cab as well as a rotating grapple that could pick the material a lot better," Shipp says. "We also wanted to visually inspect what was in the grapple and be able to spin the load around before we dropped it in the shredder. The Sennebogen 818 material handlers offered that flexibility. Also, they priced out lower than the other equipment. The setup of the machine was way more fuel-efficient than a regular excavator of a comparable size."

Shipp says the company purchased three 818s—two to run

consecutively and one to switch out every week for Sun Services' scheduled cleaning and preventive maintenance service. Sun Services is always mindful of maximizing its equipment's uptime—a goal Sennebogen has helped it meet.

"We handle a large volume of construction and demolition debris that is brought here from our roll-off dumpsters," Shipp explains. "On any given day, the machine handles 500 to 700 tons of C&D debris over 10 to 12 hours."

"I've been in both the excavators and material handlers, and there is no comparison—the material handlers can move a lot more material than a comparable-sized excavator," he adds.

LIKED AND RESPECTED

Beyond the improvements Sun Services has seen in processing capacity since it began using the Sennebogen material handlers, Shipp says the design of the Sennebogen machines is more operator-friendly than that of comparable machines.

"The design of the Sennebogen definitely allows more freedom for the operator," Shipp says. "There's a lot more room, and the cooling system works a lot better than a standard excavator. Plus, the Sennebogen machine is able to deal with the dust a lot better than a standard excavator does. The fact that the cabs are huge in these units is ideal for our operators, because being able to work for 10-plus hours a day without feeling encapsulated makes for a better environment and is good for their wellbeing."

Shipp says that with all the benefits the Sennebogen material handlers offer, perhaps the greatest is their ability to keep working in Sun Services' demanding application long after other machines have reached the end of their service lives.

"With our rugged environment, our excavators were pretty much trashed at about 7,000 hours," he says. "With this set of Sennebogen equipment, we're hopeful we can double that, and with the volumes we process, that is significant."

For more information on Sennebogen's material handlers for waste: <https://sennebogen-na.com/industries/waste>.

SENNEBOGEN

Service & Support

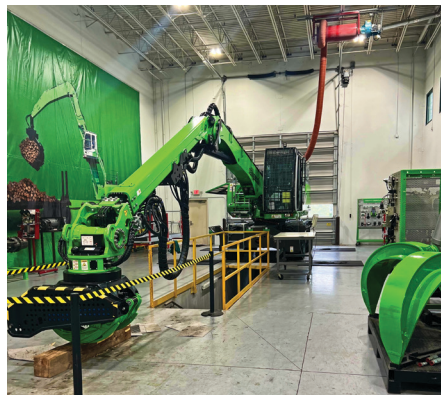


FROM ITS US HEADQUARTERS CAMPUS IN STANLEY, N.C., SENNEBOGEN PROVIDES UNMATCHED CUSTOMER SUPPORT AND SPARE PARTS AVAILABILITY.

TRAINING FACILITY

Supporting customers is so fundamental to Sennebogen that when it constructed its first facility in 2009, it integrated a state-of-the-art training center. Equipped with multiple classrooms and a fully functioning service bay to work on Sennebogen machines indoors the facility is one of America's premier OEM training centers for heavy equipment.

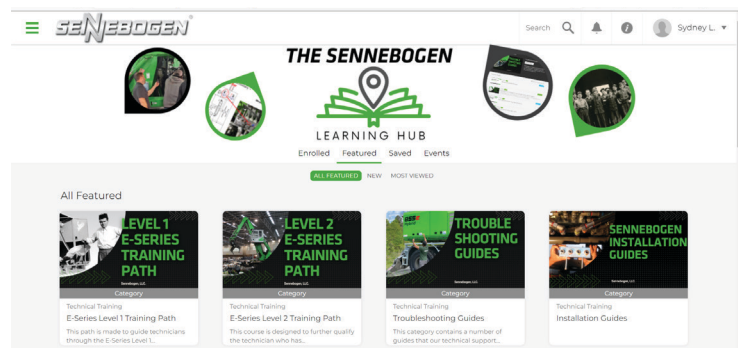
Sennebogen remains the only manufacturer that provides its customers with free training at the same level as our dealers. Training classes are held throughout the year at the Stanley facility.



Learn more about Sennebogen training.

LEARNING HUB

Reaching beyond classroom training, the Sennebogen learning hub is online portal offering 24/7 virtual learning as well as troubleshooting. The hub is unique in the material handling industry, allowing customers to learn new techniques and procedures while also providing tools to troubleshoot operating issues. The Sennebogen learning hub is available to customers in North America entirely free.



The Sennebogen learning hub offers a variety of resources.



SERVICE & REPAIR PARTS

From major components to routine service parts, Sennebogen's 100,000-sq.-ft. warehouse maintains the largest inventory of material handler parts in the Americas. Sennebogen maintains stocks of every part for every model and type of machine currently in service, with a record of **98% order fulfillment** within 24 hours.

Sennebogen engineering relies extensively on industry-

standard parts for engines, hydraulics and electrical systems. Common service parts can be found easily and affordably through local industrial supply sources.

Sennebogen also works closely with its nationwide network of full-service dealers and authorized service providers to keep the most commonly required service and wear parts in stock for its customers' fleets.

"SMART PARTS"

Sennebogen offers two types of **pre-packaged parts kits** to simplify ordering and stocking and to streamline service calls. Uptime Kits and Preventive Maintenance Kits are all packaged to match specific machine model and series:

- One part number to order
- Save time sorting loose parts
- Ideal for stocking service trucks
- Save costs on common service parts

UPTIME KITS

Each kit combines all the parts and materials required to complete a type of specific maintenance task. Delivered in custom organizers, pre-sorted for easy identification. Its growing list of Uptime kits currently includes:

- Hydraulic service
- Electrical service
- Autolube service
- A/C service
- O-ring kits



Learn more about Uptime Kits.



PREVENTIVE MAINTENANCE KITS

PM Kits start with a checklist of service parts specified by the factory for each scheduled service interval for your machine model and engine. Eliminate costly picking time to prepare for each service call—simply pull today's PM Kit off the shelf! Available for 250-hour, 500-hour, 1,000-hour and 2,000-hour intervals.



Learn more about PM Kits.

SENNEBOGEN

in the field

SENNEBOGEN HAS INDUSTRY PROFESSIONALS, FULL-SERVICE DEALERS AND AUTHORIZED SERVICE PROVIDERS ACROSS NORTH, SOUTH AND CENTRAL AMERICA.

FULL-SERVICE DEALERS

These sales and service locations are operated by leading independent heavy-equipment dealers. Their Sennebogen-trained sales representatives and service technicians have extensive product line knowledge. This ensures the right machine for the right job with new equipment investments and rapid, experienced machine service when customers need it.

AUTHORIZED SERVICE PROVIDERS (ASPs)

Sennebogen has adhered to a simple hydraulic-over-hydraulic operating system. No computers mean the machines are easy to troubleshoot, but sometimes support and preventive maintenance are required. Sennebogen ASPs offer support service, dispatching Sennebogen-trained technicians fully qualified to work on Sennebogen machines no matter what's required.

REGIONAL BUSINESS MANAGERS (RBMs)

Sennebogen RBMs and applications specialists are direct representatives dedicated to supporting industry operators in analyzing their equipment needs and supporting them in new equipment investments.

SENNEBOGEN LLC

From its North American headquarters campus in Stanley (Charlotte), N.C., Sennebogen stands ready to support clients with more than \$48 million parts inventory, a state-of-the-art technical training center and an extensive team of product, parts and industry professionals.



**ACCESS A FULL LIST OF
SENNEBOGEN CONTACTS.**

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