ENVIRONMENTAL LEADERSHIP

LIGHTER. SIMPLER. MORE RELIABLE. ENERGY-EFFICIENT.

GREENLINE™ SPREADERS. ONLY FROM BROMMA.

A Tradition of Innovation
Since the dawn of container handling, Bromma has been synonymous with leadership in spreaders. Today Bromma continues to demonstrate industry leadership through spreaders designed with our environment in mind. The new GreenLine™ product family reduces the energy consumption of the spreader, and due to lower weight, GreenLine™ spreaders also reduce energy consumption in the container crane. These are spreaders that meet the triple bottom line of more productive, more efficient, and more environmentally responsible spreaders. As such, GreenLine™ will help your terminal meet environmental goals, while achieving your underlying commercial objectives.
THE RIGHT PRODUCTS FOR THE RIGHT TIME

The GreenLine™ spreader family offers the right products for the right time in our industry’s history. At Bromma, listening to our customers is a core value of our organization. Today, as all terminals know, the container handling industry is facing a time of both significant opportunity, and significant challenge. These challenges include:

- ENORMOUS GROWTH IN SHIPPING VOLUME
- INCREASING ENVIRONMENTAL IMPACT SCRUTINY BY GOVERNMENT BODIES
- CONTINUING DELAYS IN THE GRANTING OF TERMINAL EXPANSION PERMITS
- SERIOUS CONGESTION AND NOISE ABATEMENT CONCERNS AT MANY LAND-LOCKED TERMINALS

The Bromma GreenLine™ family of spreaders offer container terminals equipment solutions that will help ports make additional strides toward “greener” operations. In addition, the GreenLine™ spreader family has clear operating advantages for terminals. GreenLine™ spreaders are a new generation of ship-to-shore and yard container handling solutions that are:

- LIGHTER
- MORE ENERGY EFFICIENT – AS MUCH AS 85% LOWER SPREADER ENERGY CONSUMPTION
- QUIETER
- FASTER, EASIER AND LESS COSTLY TO SERVICE
- ELIMINATE THE CLEAN-UP COSTS ASSOCIATED WITH OIL SPILLS
Bromma GreenLine™ solutions for ship-to-shore include both single-lift and twin-lift all-electric spreaders. Bromma has a long tradition of technical innovation, and the new ship-to-shore all-electrics are now an important part of that tradition, as they represent a new day in container handling.

The STS GreenLine™ product family includes the SSX40E and SSX45E single-lift all-electric spreaders; the STR40 and STS45 twin-lift all-electric spreaders; and the STS45E separating twin-lift all-electric spreader.

The STS45E all-electric represents, in particular, the ideal mix of a spreader that is highly productive, versatile in the containers it can handle, easy and inexpensive to service, and environmentally advanced.

It is lighter, with a best-in-class weight of only 11.7 tonnes. Lower weight is financially significant, since spreader weight has a direct correlation with crane power consumption costs. The heavier the spreader, the higher the crane power consumption costs. The 1.5 tonne in spreader weight savings in the STS45E reduces crane power consumption by an estimated $4,000 USD per year. Over its lifetime, accumulated STS45E crane power consumption savings will be dramatic.

In addition, eliminating spreader hydraulics on the STS45E reduces spreader power consumption by an estimated 85%. For every 5 kWh consumed by an STS45, less than 1 kWh is consumed by an STS45E. This represents savings of more than $1,100/year USD per STS45E spreader.
A MAJOR ADVANTAGE IN LIFETIME SERVICE SAVINGS

In addition to energy-related savings, the reduced maintenance costs associated with all-electric spreaders means significant service-related lifetime cost savings. There is no hydraulic powerpack, or hoses, or fluids to change, or oil filter to replace. In GreenLine™ spreaders, many routine service points have been taken away. This should reduce annual routine maintenance costs on the STS45E by more than $2,000 USD per year.

All-electric design lightens maintenance and boosts uptime in three important ways:

» REDUCED SCHEDULED SERVICE TIME, THEREBY INCREASING SPREADER UPTIME
» LOWER SERVICE MATERIALS COST (FOR OIL, HOSES AND FILTERS)
» REDUCED UN-SCHEDULED SERVICE TIME, DUE TO THE ELIMINATION OF MANY OF THE “NUISANCE” DOWNTIME EVENTS THAT OCCUR DUE TO SPREADER HYDRAULICS (BAD HOSE CONNECTIONS, ETC.)

LOWER NOISE, LOWER DOWNTIME

For terminals with nearby residential or commercial communities, the STS45E has another significant advantage: it is quieter. The sound you don’t hear is your spreader beam telescoping. Plus, there’s no continuously running hydraulic powerpack. So if a terminal requires noise abatement, the STS45E is a big step in the right direction.

All of these environmental advantages make the GreenLine™ family unlike any other ship-to-shore spreaders on the market today. In addition, the STS45E is easy to use, highly reliable, and likely to considerably shorten spreader downtime. The STS45E comes equipped with the Bromma SCS3 spreader control and communications system, featuring a user-friendly touchscreen display, fast fault diagnostics, and the industry’s first generation of spreader prognostics.

GreenLine™ spreaders equipped with SCS3 reduce crane downtime that is spreader-related in 3 ways. First, out-of-adjustment sensors are a primary cause of twistlock malfunction, and SCS3 gives terminals the ability to continually evaluate sensor status and make sensor adjustments online, thereby boosting MMBF. Second, the reduced wired terminal points and I/O relays in SCS3 means reduced wire breakage, another cause of spreader downtime. Third, more specific diagnostic information gives technicians the ability to respond much faster to spreader faults, thus reducing downtime duration.
On the yard, the Bromma GreenLine™ offers a broad family of efficient, productive, and environmentally advanced all-electric solutions. These include single-lift all-electric spreaders, such as the YSX40E and YSX45E, as well as high-productivity yard solutions, such as the separating twin-lift YTS45E all-electric spreader. Bromma was the environmental innovator on the yard, introducing the first all-electric yard crane spreader many years ago. Due to the excellent operating economy and unmatched reliability of these spreaders, Bromma all-electric yard spreaders are today the preferred customer yard crane spreader choice, and Bromma is the #1 market share leader in yard crane spreaders.
SUITABLE FOR AUTOMATED & NON-AUTOMATED OPERATIONS

Bromma all-electric yard solutions are suitable for a wide variety of terminal operating environments. Since they need to be taken out of service less often for routine maintenance, and since they deliver high reliability, GreenLine™ solutions are ideal for automated operations. By eliminating hydraulics, service intervals are longer and there are fewer mechanical risks that can lead to a costly disruption of automated operations. Plus, the GreenLine™ yard family has clear weight-related and design-related energy consumption advantages over heavier spreaders. In fact, it’s estimated that a Bromma all-electric yard crane spreader uses just 1/10th of the annual energy of a hydraulic yard crane spreader.

GREENLINE™ SUPPORT

Bromma supports its spreaders with the industry’s largest and strongest field service organization. At Bromma our mission is not only to provide the equipment terminals need, but the support you need. Bromma Services solutions include everything from quick availability of spare parts [spare parts shipped from depots situated around the world] to a full spectrum of preventive and corrective maintenance services. Bromma information services also include knowledge products derived from our advanced, pioneering SCS³ technology. Bromma means service reliability: we are a company with a tradition of stability, quality, professionalism, and trustworthiness.

A GREATER RETURN ON INVESTMENT

Due to energy and service savings, and their enhanced reliability, GreenLine™ yard spreaders offer another major advantage: a greater return on capital invested. More reliable spreaders mean less required capital investment in spreader “spares.” All-electric spreaders, with their fewer service points, mean less service cost today, and longer operating life tomorrow. Enhanced container flow due to higher equipment reliability also leads to faster ship turns, and a stronger competitive position for your terminal.

ACHIEVING YOUR COMMERCIAL & ENVIRONMENTAL AMBITIONS

The challenge to our industry today is how to meet growth ambitions, while also demonstrating environmental responsibility and leadership. At Bromma, we are committed to success in each area. We are committed to helping our customers realize both your commercial and environmental ambitions.
ABOUT BROMMA GROUP

Headquartered in Stockholm, Sweden, Bromma is the world leader in crane spreaders. A pioneer in container handling industry, Bromma spreaders are in service today in 96 out of the world’s largest 100 container ports, and Bromma has market share leadership in every business segment: ship-to-shore crane spreaders, mobile harbor crane spreaders, and yard crane spreaders. Resource-rich Bromma, a Cargotec company, manufactures more than 2,000 spreaders per year of all types at state-of-the-art spreader factories in Scandinavia and Asia. Bromma continually strengthens its product line with the largest research and development budget in the spreader industry, and has a tradition of technical innovation, including the first telescopic spreader; the first twin-lift spreader; the industry-standard TTDS spreader safety system; the MPS memory positioning system; SCS spreader diagnostics and prognostics technology; the Tandem™ line of twin-40 and twin-45 spreaders; and the GreenLine™ family of all-electric yard and ship-to-shore crane spreaders.