Driving productivity through innovation

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BROMMA

v1.0

World leader since 1960

- Full range of spreaders and related software and services
- Ensuring reliable flow of containers on and off ships
- Supporting customers on all continents
- Largest market share in the world

A tradition of innovation

Join us on our journey of spreader technology breakthroughs – from 1965 to 2022 and beyond.









First telescopic spreader	First Smart spreader	First all-electric Yard spreader	First tandem spreader	Predicting spreader issues with AI	Load sensing system	Green Zone for productivity	Spreader Monitoring System	All-electric STS spreader
1967	1995	2001	2003	2007	2010	2011	2019	2022

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How can innovation drive productivity at container terminals?

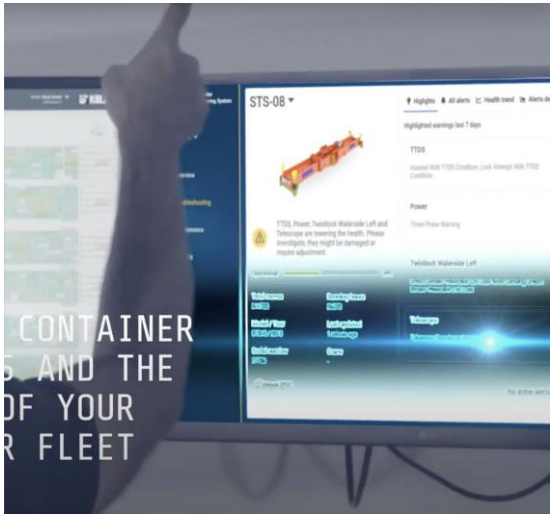
EFFICENCY

REDUCING TOTAL LIFE CYCLE COST

INCREASING TRANSPARENCY

ENVIRONMENTAL SUSTAINABILITY

Bromma innovations that drive productivity



Bromma Spreader Monitoring System

A cloud and web-based system that provides an overview over the entire spreader fleet's health: real-time troubleshooting, maintenance planning and insight to operational KPI's

All-electric STS45E G2 PLUS

No compromises on the productivity and energy consumption reduced to up to 90%

Bromma Hawkeye

Innovative camera platform that offers to monitor operations in real-time, enabling to make data-driven decisions

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Case:
Bromma SMS improving productivity at CSPV

CUSTOMER

CSP Iberian Valencia Terminal (CSPV) was one of the first terminals to adopt and start using Bromma's Spreader Monitoring System (SMS)

RESULTS

CSPV improved their daily routines and approach to spreader maintenance

The information provided by SMS has led to permanent productivity improvement for maintenance team

Bromma SMS today

- 45 terminals subscribed to SMS in 2022 globally
- Customers reporting improvements in spreader productivity and valuable information on spreader issues
- New features added in 2022, including map view, Spanish language support, Insights, and API integrations

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Climate change is a key focus area for many of our key customers

DP WORLD

CLIMATE CHANGE

ZERO CARBON BY 2040

By means of our ambitious decarbonization strategy, we aim to be carbon neutral as a group by 2040, with an intermediate target of 28% CO2 reduction by 2030 (with 2019 as the baseline). To this end, we are fully committed to:

1. Replacing fossil fuels or reducing their use to the minimum
2. The use of renewable or carbon-neutral energy
3. Maximizing efficiency by investing in innovative low-emission technologies and constructing passive buildings
4. Compensation for any residual volumes as the last option (as low as reasonably possible)

The future of container terminals is electric and green

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YILPORT HOLDING INC.

Key Environmental Focus	
Waste Management	▪ Hazardous ▪ Non- Hazardous Cargoes
Energy Consumption	▪ Renewable Energy ▪ Non - Renewable Energy
Greenhouse Gas Emission (GHG)	▪ **Scope 1** (Direct Emission from Owned/Controlled resources e.g., Combustion fuel) ▪ **Scope 2** (Indirect Emission from Purchased Energy) ▪ **Scope 3** (Indirect Emission resulted from activities not controlled by the organisation but the organisation is impacted in its supply chain
Water Consumption	▪ Water Inflows/ Withdrawal ▪ Water Outflows/ Discharges

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PSA
The World's Port of Call

TAKING CLIMATE ACTION

CONTRIBUTING TO:

TARGETS/COMMITMENTS	2021 PROGRESS
EMISSIONS	
• Reduce absolute Scope 1 & 2 carbon emissions by 50% by 2030, and by 75% by 2040, against a 2019 baseline year • Achieve net zero carbon emissions by 2050 • Establish a Scope 3 inventory by 2022 as a first step towards setting a Scope 3 emissions reduction target	• No reduction in Scope 1 and 2 carbon emissions as a result of global industry disruptions creating inefficiencies, an expanding business portfolio and a lack of critical viable technological solutions • Embarked on a Scope 3 screening in the second half of 2021 to establish our Scope 3 inventory and develop an understanding of our entire carbon footprint
ENERGY	
• Aim for 90% of our Rubber Tyred Gantry Cranes (RTGs) to be electric or hybrid by 2030	• Reached close to 50% electrification or hybridisation for RTGs in 2021

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Climate change is a key focus area for many of our key customers

Lifting Global Trade.
APM TERMINALS

Environment

Commitments	**We will take leadership in the decarbonisation of logistics** We will deliver on our customer commitment to decarbonise their supply chains in time and our societal commitment to act and have impact in this decade
Strategic targets *All targets are for end of year*	**2040**: • Net zero across the business • 100% green solutions to customers **2030**: • Aligned with the Science Based Targets initiative 1.5°C pathway • Industry-leading green customer offerings across the supply chain
Overview of all ESG categories	Climate change Environment and ecosystems (incl. ship recycling)

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Bromma Climate Commitment

Cutting down greenhouse gas emissions by 50% by 2030.

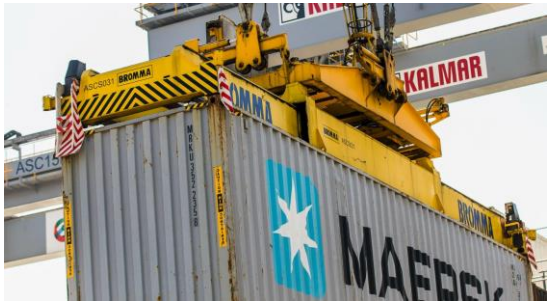
Bromma’s climate ambition includes activities across the end-to-end value chain

Materials Supply

- Integration of CO2 reduction criteria in Bromma sourcing decisions
- Evaluation of fossil-free steel for inclusion in Bromma spreaders (partnership with SSAB)

Own operations

- Implementation of clean energy in the Bromma factory
- Reduce, Reuse and Recycle Program across Bromma
- Company-wide use of electric vehicles



Use of spreaders

- Boosting our all-electric offering for all crane spreader applications
- Further developing energy-efficient solutions for hydraulic spreaders

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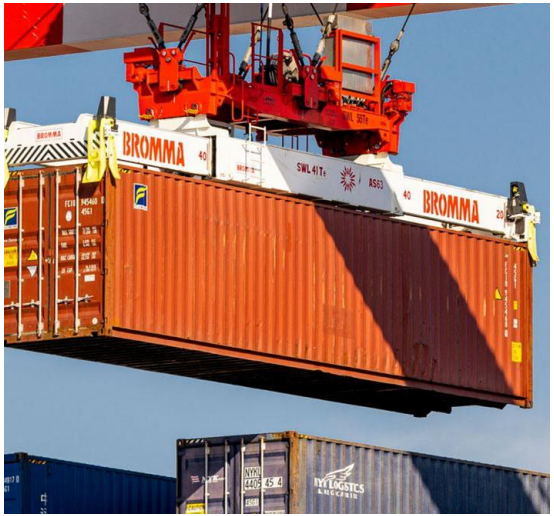
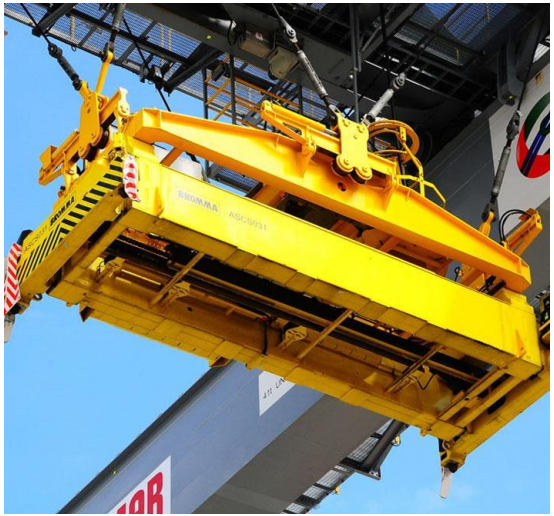
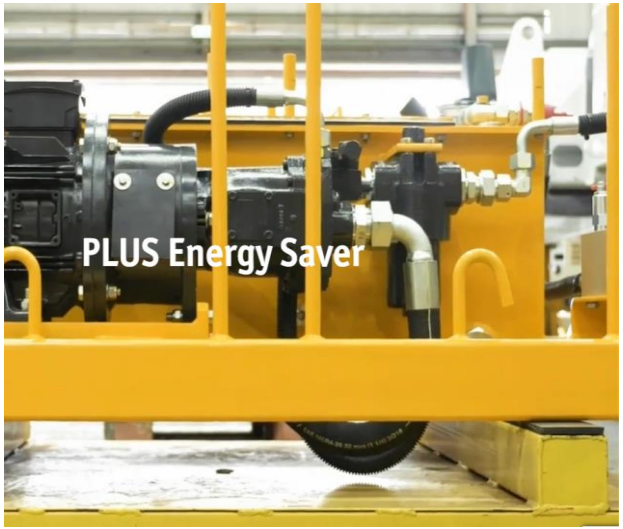
Bromma portfolio helps to decrease CO2 emissions



- All-electric STS spreader STS45E G2 PLUS



- All-electric Yard spreader YSX40E and YSX45E



- PLUS Energy Saver for hydraulic spreaders

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All-electric STS45E G2 PLUS

- No compromises on the productivity
- Improved structural design
- Reduces energy consumption by up to 90%
- Saves 5 ton CO2 emissions per year
- Eliminates hydraulic oil spills
- Significant cost savings over spreader lifetime

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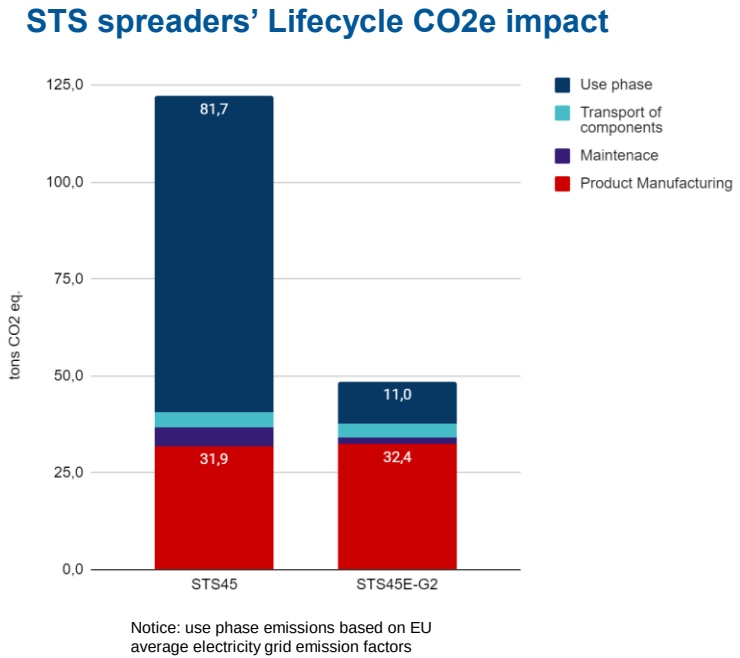
CO2e impacts of our new generation E-spreaders



Notice: use phase emissions based on EU average electricity grid emission factors

- For the new all electric STS45E G2 PLUS the emissions related to energy consumption are reduced by 87%
- The total lifecycle CO2e emissions are reduced by 60% (over 70 tons) CO2e for production as well as usage the all electric STS45E G2 PLUS

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Bromma Hawkeye

- Spreader-based camera platform for the crane-operator or TOS applications
- Seamlessly integrates advanced vision technology with spreaders
- Improve operational efficiency and elevate safety
- Designed with customers' needs in mind
- Offers a range of applications to meet specific requirements
  - Recognition of container IDs*
  - Documentation of container damages
  - Real-time video streaming
  - Identification of accidental twin lifts

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Hawkeye OCR

- Scans and recognizes container IDs for more precise and accurate container handling
- Up to 97% recognition accuracy ensures reliable and trustworthy data capture
- OCR integrates container ID information with operational data, e.g. in TOS
- Cost-effective solution

**Hawkeye OCR is not presenting the live video footage to the crane-operator, but providing the container-ID for TOS purposes*

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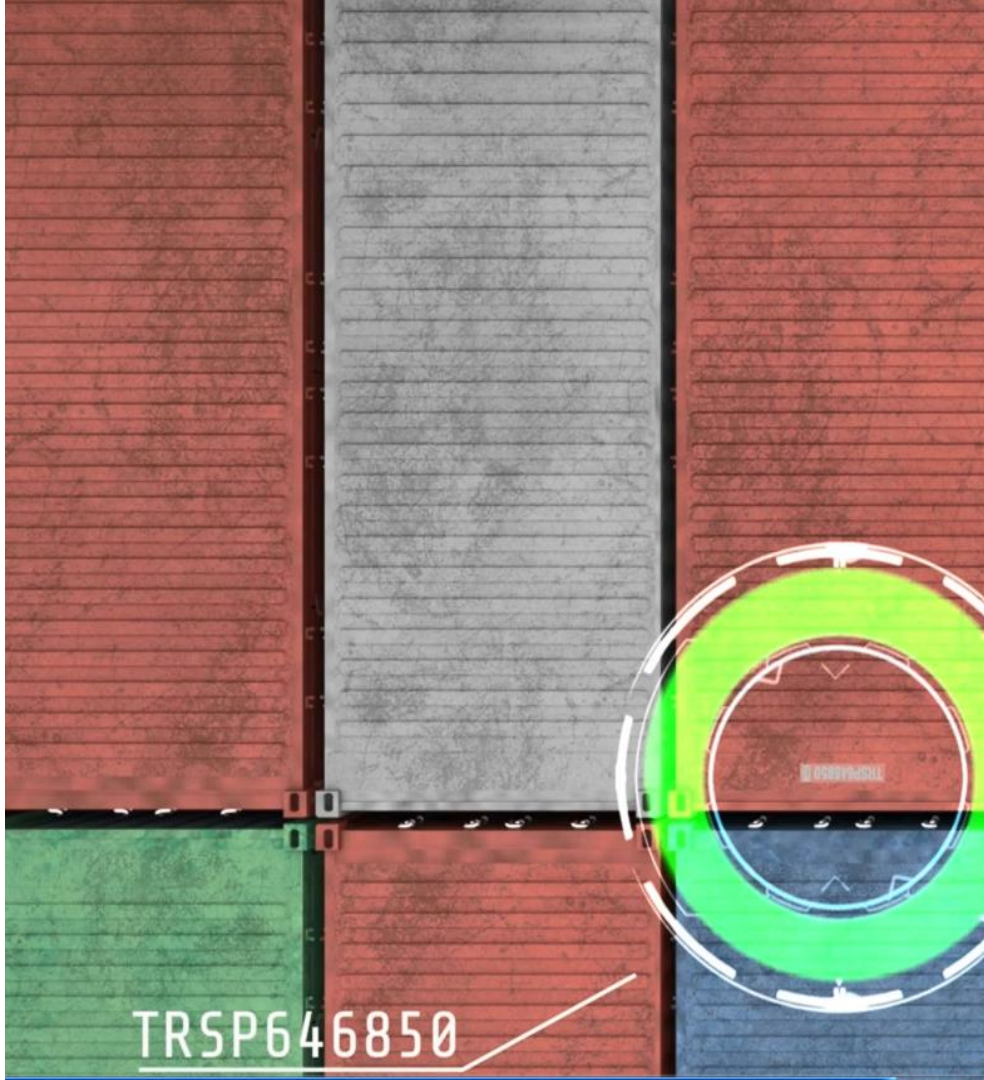

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