Driving productivity through Innovation

BROMMA

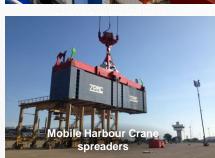


- > Over 20,000 spreaders delivered
- Delivered spreaders to most of the terminals in the world
- > Headquarters in Singapore
- Spreader production is located in Ipoh, Malaysia
- Global sales & service network in 40 countries

Full range of **SPREADERS AND RELATED SERVICES**

EQUIPMENT

SERVICES









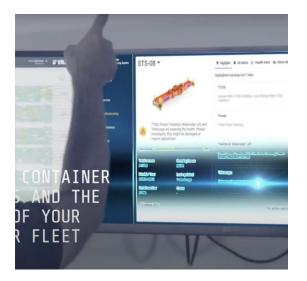








Bromma innovations that drive productivity



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

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 datadriven decisions



Bromma's digital solution is Spreader Monitoring System

Maximises uptime and drives reduction in MTTR Web application based on state of the art cloud and edge technology

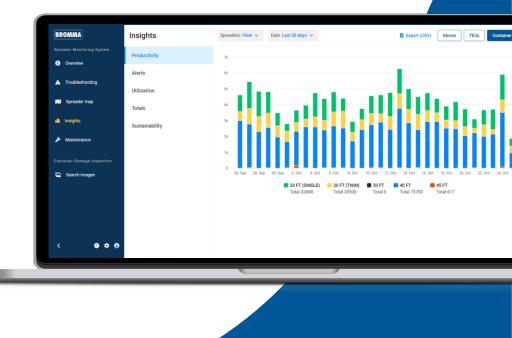
Provides real time monitoring of spreader health

Standard in new spreaders and possible to retrofit to most existing models

BROMMA SMS AT A GLANCE

SPREADER MONITORING SYSTEM IS A SUBSCRIPTION BASED WEB APPLICATION PROVIDING:

- Real time monitoring of spreader "health" for each spreader in the fleet
- Packaged information on issues and recommended solutions, with highlights on what is most important
- Structured overview of planned maintenance for spreader fleet
- Statistics on performance, productivity and issues on fleet level and for individual spreaders



Bromma Climate Commitment

Cutting down greenhouse gas emissions by 40% 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 electricity 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



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



All-electric STS45E G2

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







Bromma Hawkeye platform is a spreader based camera platform that seamlessly integrates advanced vision technology with spreaders. A range of applications have been developed to meet specific requirements:

- > Support to operations (TOS) by Optical Character Recognition
- > Support to driver by Streaming and driving assistance
- Support against claims by providing pictures to detect container damages

- Support for safety by providing backup for TTDS
- > More supports are being developed



Hawkeye supports terminal operations



Crane operator

• Video feeds

BROMMA

• Visual information(s)





Container handling

- OCR
- Safety features helping to avoid risks
- Container Damage Inspection

Automation

- Video feeds
- OCR
- TTDS

Give your spreaders accurate and precise vision with Bromma Hawkeye



Boost productivity with accuracy Installation to any spreader type (STS, Yard or Mobile Equipment)



Easy integration with other systems





A Tradition of Innovation