

**EQUIPMENT** 

**SERVICES** 

SPREADERS AND RELATED 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 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



# Bromma's digital solution is Spreader Monitoring System

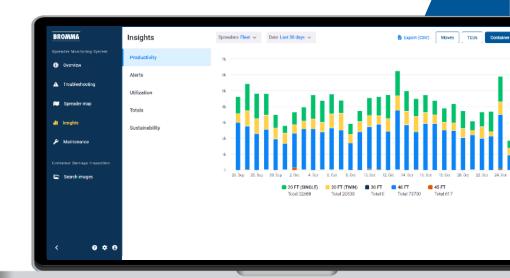


Standard in new spreaders and possible to retrofit to most existing models

## 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'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



### 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 PLUS

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
- 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



## BROMMA

A Tradition of Innovation