GREEN ZONE™
Stay up, stay productive

A Tradition of Innovation BROMMA

FLEET DOCTOR™ **ROADMAP™** **WORK ORDER™**

A NEW SUITE OF PRODUCTIVITY TOOLS DESIGNED TO KEEP YOU IN THE GREEN ZONE™

Information that is easy to access, understand and use can help terminals operate more effectively.

In 2011 Bromma introduced a new suite of terminal productivity tools designed to help terminals use information to keep operations in a "green zone" of higher performance. First out was the apps Fleet Doctor and Roadmap.

Bromma apps will be broadly available to our customers, with access across multiple communications platforms, including the notebook computer, a service technician's iPad, tablet computers, desktop monitors, or even on a service technician's mobile phone.

Now, 2012, Bromma is introducing a new app to the Green Zone Suite - Work Order.

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» BROMMA GREENZONE
Identify decelerating performance
- stay up stay productive.

FLEET DOCTOR™

A quick-start time-saver in fault resolution

INTRODUCING FLEET DOCTOR™

The first app, called Fleet Doctor™, supports terminal maintenance staffs. Fleet Doctor™ continuously monitors the operating functions of spreaders to detect decelerating performance – thereby helping terminals understand and resolve potential issues before they become real problems. Spreader performance is ultimately based on the reliability of key spreader functions, each of which should operate within an optimum performance range. When one or more of these spreader functions moves from its "green zone" of performance into the yellow zone, this is an indication that service attention is needed to prevent further decline of the function, and/or prevent faults that may cause downtime. The detection of decelerating spreader function is an important first step to staying up and staying productive. Fleet Doctor™ translates indications of decelerating spreader performance or decline into actionable steps to stabilize and improve spreader functioning.

"Versatile, multi-platform access to Fleet Doctor™ information, is part of our larger effort to make spreader service as easy, simple and short as possible."

Lars Meurling, Vice-President of Marketing and Product Business Development.

SPECIFIC DIAGNOSTICS

Fleet Doctor™ provides very specific diagnosis of the source of faults when spreader downtime occurs. This enables service technicians to find and resolve problems more quickly so that spreader downtime can be minimized and spreader change-outs eliminated. Rather than driving to the crane-mounted spreader and first looking for the problem (and then heading back to the service center for spare parts or tools or wiring that may be needed),

Fleet Doctor™ enables service technicians to know what they need to do before they even leave for the site of the crane spreader. This elimination of "fault search time" and the elimination of the time wasted during "back and forth" trips between the crane spreader on the quay and the maintenance operations center helps keep terminals operating in the green zone of higher productivity – which means a significant boost to loading and unloading productivity and faster vessel turnaround.

ROADMAP™

*Application helps terminals focus on the future
by better understanding the past*

» BROMMA GREENZONE
Road Map helps you see
the big picture.

INTRODUCING ROADMAP™

The second app, called Roadmap™, supports operations management and the terminal service manager – helping them to be as strategic as possible in their allocation of maintenance department resources. Roadmap™ maps past spreader fault areas and spreader KPIs to identify "risk areas" for spreader downtime or underperformance. Roadmap™ identifies the "10 most frequent fault areas" that have in the past affected the fleet's performance.

By looking back at the spreader's function history, Roadmap™ provides forward guidance that will help managers focus preventive service on weak links in order to strengthen the chain. Roadmap™ provides guidance to port managers in how to restructure spreader maintenance in a way that will address prior spreader fault areas. With Roadmap™Bromma both helps our customers understand where they are and helps them move where they want to go.

"All terminals want to stay up and stay productive."

Vikram Raman, Vice President and Commercial Director.

TWO BASIC FEATURES

KNOW WHERE YOU ARE

First, Bromma Roadmap™ helps management understand where they are based on various spreader key performance indicators (KPI). Spreader KPIs provide a framework for tracking fleet improvement.

By looking backwards at the spreader's function history, Bromma Roadmap™ helps management identify the "A" – where the spreader fleet is. Bromma Roadmap™ identifies the "10 most frequent fault areas" that have in the past affected the fleet's performance. By looking back, Bromma hopes to help managers more effectively look forward.

FOCUS MAINTENANCE ON WEAK LINKS AND YOU STRENGTHEN THE CHAIN

The second part of the new Bromma Roadmap™ application is the "forward" part -- Roadmap™ provides guidance to port managers in how to restructure spreader maintenance in a way that will address prior spreader fault areas.

Focus is part of the way to get there. Routine spreader service addresses many areas, but Roadmap™ highlights forward planning on risk areas that merit special attention. By using the knowledge of past "weak link" areas to shape future preventive service programmes, terminals have a better chance of strengthening the "chain" of spreader performance and staying in "the green zone".

WORK ORDER™

What to do, when to do it

INTRODUCING WORK ORDER™

When it comes to maintaining terminal equipment, there is always much to do. This is why prioritizing is so important. Smart spreader service puts first things first. It brings a laser-like focus to what needs to be done, and when.

Bromma's new spreader fleet productivity tool, Work Order™, is designed to help terminals do just this – put first things first. Like a good alarm clock, it keeps us stay on schedule and helps us do the things we need to do.

Part of the expanding suite of Green Zone™ tools now available from Bromma, Work Order™ is designed to strengthen your day-to-day maintenance planning. To achieve high performance, you need the right equipment, and you need the right maintenance.

"In the end, it takes superior maintenance to achieve superior performance."

Per-Anders Holmström, President Bromma Conquip

SERVICE PLANS BASED ON SPREADER USAGE

Bromma Work Order™ makes a simple but fundamental change in how maintenance is scheduled.

Day-to-day spreader service assignments are generated based on spreader usage rather than the calendar. This running-hour or cycle based approach to maintenance planning gives terminals a living service plan that adapts in real time to activity levels in your fleet.

Based on spreader usage, Work Order™ will create daily service priorities, and if you wish, automatically order spare parts in line with maintenance plans. It creates maintenance reminders, based on spreader cycles and service events, with pre-warning alarms that tell you when it is time to replace certain components.

Work Order™ also gives you a historical record of the "what" and the "when" of the spreader's past maintenance.

UPDATE & ADAPT WHEN THINGS DON'T GO ACCORDING TO PLAN

Work Order™ has been designed to give you maximum planning flexibility. With Work Order™ you can adjust your maintenance triggers based on your own running hour or cycle preferences. You can establish different intervals, or different actions for each interval.

PUTTING FIRST THINGS FIRST

Finally, Bromma Work Order™ has been designed to integrate seamlessly with the other modules in the Green Zone™ productivity package – namely Roadmap™ and Fleet Doctor.™ Together, they offer a comprehensive approach to addressing a key terminal strategic issue – how to get the most reliability out of your spreader fleet.

Bromma Work Order™ will help your technicians put first things first every day. It will help you run a more efficient terminal, with a more reliable spreader fleet. And Work Order™ is only available from Bromma.