SPREADER UPGRADE







# SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) to SCU with RML

#### DESCRIPTION

The upgrade from SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) control system to SCU with RML offers a greater solution to spreader control, monitoring and troubleshooting efficiency.

The Bromma Spreader Control Unit (SCU) is a spreader control system developed to focus on the core functionality needed to control and operate a Bromma spreader.

The SCU is mounted inside the electrical cabinet and consists of two basic elements; a spreader mounted PLC and the spreader control software which controls the spreader functions. The result is a single control system optimized for spreader control.

The Remote Monitoring Log unit (RML) provides essential diagnostic spreader information from the spreader unit connected to it. It is mounted near the electrical cabinet and has a communication reach of approximately 50 meters (depending on surroundings).

Spreader information can be accessed on an encrypted webpage from any WIFI-equipped laptop, tablet or smartphone. This enables service and maintenance personnel to review and analyze data in order to further improve spreader productivity.

### Benefits of having an upgrade from SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) control system to SCU with RML include:

- The SCU communicates with the crane PLC through a parallel I/O interface, and a serial CAN bus interface, supporting DS444 and BCAN.
- A separate CAN bus interface is utilized to manage the on-board I/Os, i.e. sensors, actuators, etc., which minimizes the need for junction boxes, relays, wiring and terminals.
- The software is built-up by using Bromma proven function blocks and system functions, minimizing configuration needs.
- The applications which control the spreader can be easily adapted according to customer requirements.
- The RML provides crucial diagnostic signals and commands from the crane interface which are monitored and displayed in real time.
- Clear symbols and text displayed enables quick understanding of the type of event and the action needed.
- The permanent diagnostic logfile is able to store up to approximately 1.8 million events, which can be used for further analysis.



## SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) to SCU with RML

SPREADER CONTROL SYSTEM

#### **SCOPE OF WORK**

The scope of work in the supply and installation of the upgrade from SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) control system to SCU with RML is as listed below:

- Rewrite program in CoDeSys V2.3
- Remove existing parts which need to be replaced
- Mount and connect all listed parts
- Install SCU PLC
- Install RML

- Install new SCU and RML software
- Install new cabling
- Revise existing drawings
- Revise spreader manuals
- Test all functions

#### **PARTS INCLUDED**

The following parts are included in the SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) control system to SCU with RML upgrade offer:

- SCU PLC
- SCU control cable
- RML
- Converted and updated spreader program
- I/0 modules

- CANopen cables
- CR9056 planksPlugs
- Cables and item markings
- ADDITIONAL ITEMS INCLUDED IN WORK SCOPE

The following additional items are included in the SCS<sup>2</sup>/SCS<sup>3</sup> (CANopen) control system to SCU with RML upgrade:

- Software update on port's computer that will be used to connect to the spreader
- Firmware update of components and spreader control system
- SCU and RML training

#### **MATERIAL & INSTALLATION LEADTIME**

Please contact your local Bromma representative for material and installation leadtime.

#### **PRICE & DELIVERY**

Please connect with your local Bromma representative for price and delivery leadtime.

BROMMA