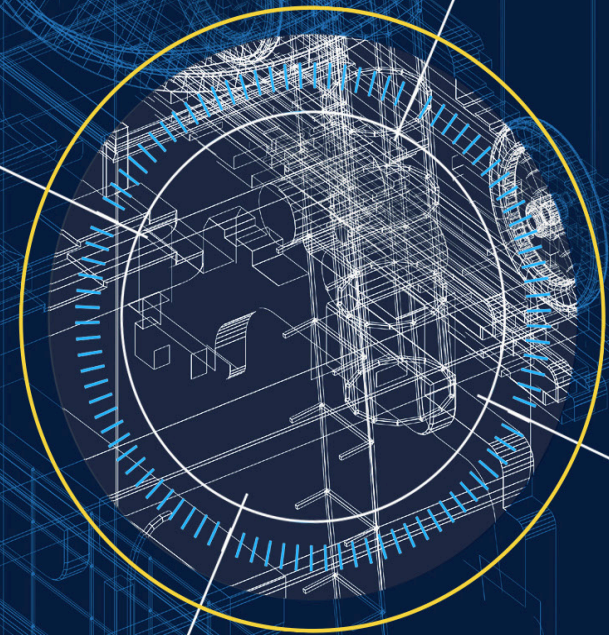


Upgrades to enhance your spreader's performance.

Bromma Spreader Upgrades Catalogue



Spreader Upgrades to increase **safety**

























Spreader Upgrades to boost **productivity and performance**




















Spreader Upgrades to **cut repair costs** and unplanned downtime






BROMMA

A Tradition of Innovation

	Bromma Upgrade Kit		STS Spreader	Yard Crane Spreader	Mobile Harbour Crane Spreader	Mobile Equipment Spreader
1.	Flat Shaft Flipper Gearbox 		✓			
2.	Spring Steel Flipper Arm 		✓		✓	
3.	Six Paddle Flipper Arms 		✓			
4.	CAN Filter Kit 		✓	✓	✓	
5.	MHC Spreader Control Levelling System 				✓	
6.	New Lifting Shaft Locking Pin for MHC spreader 				✓	
7.	New Telescopic Drive 			✓		
8.	Twistlock Drive PLUS 			✓		
9.	Twistlock Service Kit 		✓	✓	✓	
10.	Load Cell Kit for RS & RSX40 		✓	✓	✓	✓
11.	Flipper Tie 					✓
12.	SCS4 Damping Buffer 		✓		✓	
13.	Safety access for MHC tower 		✓	✓	✓	
14.	SCS4 to SCU with RML 				✓	
15.	TURCK replacing old led lamp 		✓	✓	✓	
16.	Center Power Pack for MHC spreader 		✓	✓	✓	✓
17.	Spreader Information Display 				✓	
18.	Fixed Guide Kit for RS & RSX40 		✓	✓	✓	
19.	CAN Encoder Upgrade Kit 		✓			✓
20.	Hawkeye 			✓	✓	
21.	Spreader Monitoring System (SMS) 		✓	✓	✓	
22.	Standard Flipper Kit 		✓	✓	✓	

		Upgrade Kit	Features & Benefits
1.		Flat Shaft Flipper Gearbox	Designed for increased flipper strength and durability. Remove rotation key function and make maintenance easier
2.		Spring Steel Flipper Arm	Protect your flipper gearbox from high impact collisions and make parts replacement easier
3.		Six Paddle Flipper Arms	Increase operation speed and accuracy in spreader placement
4.		CAN Filter Kit	Designed to be mounted on a standard DIN-rail to protect the CAN bus against transient voltage spikes. Reduces transmission errors on CAN bus and noise interference
5.		MHC Spreader Control Levelling System	Improved speed and efficiency with self-contained level controller
6.		New Lifting Shaft Locking Pin for MHC spreader	Improved locking between spreader and rotator
7.		New Telescopic Drive	Higher torque, longer life and excellent shock resistance, improving the telescoping functionality when the spreader needs to telescope with load on the twistlocks
8.		Twistlock Drive PLUS	Higher torque and excellent shock resistance especially at the beginning and end of the twistlock rotation

		Upgrade Kit	Features & Benefits
9.		Twistlock Service Kit	All you need to secure hassle-free twistlock servicing
10.		Load Cell Kit for RS & RSX40	Crane operator is able to receive data on overload and/or uneven load distribution in container with easy to install load cell kit
11.		Flipper Tie	Equip spreader with flipper tie to increase safety of operations. The tie acts as a precautionary feature, where it will hold the flipper connected to the spreader.
12.		SCS4 Damping Buffer	Protect your SCS4 unit from damage due to high impact during spreader landing
13.		Safety Access for MHC tower	The tower platform provides a safe working space for maintenance and service personnel. It allows better access to the main power plugs and lifting shafts when connecting or disconnecting the spreader to the crane or rotator
14.		SCS4 to SCU with RML	Improve spreader control, monitoring and troubleshooting efficiency
15.		TURCK lamp replacement	Replace out of date LED indicator lamps. The lamps are vibration and shock resistant, and can be mounted directly onto the main frame without dampers
16.		Center Power Pack for MHC spreader	Reduce maintenance work and eliminate hydraulic tank at TBU
17.		Spreader Information Display	Provides quick and easy access to vital spreader information and helpful tool for fault finding and parameter setting

		Upgrade Kit	Features & Benefits
18.		Fix Guide Kit for RS & RSX40	Fix Guide Arms are located on the long side of the spreader. By installing fix guides, you can reduce spreader operational time.
19.		CAN Encoder Upgrade Kit	Designed to protect your CAN bus against transient voltage spikes
20.		Hawkeye Camera Platform	The cameras generates video streams that can be used as is on an operator display or further processed through additional Hawkeye sub-systems, such as Optical Character Recognition (OCR), twin-twenty detection and automatic spreader guiding systems.
21.		Spreader Monitoring System (SMS)	Real-time overview of the health condition of every spreader in your fleet, so you can be aware of any potential risks
22.		Standard Flipper kit	Solution for flipper arm

Please contact sales@bromma.com for further information