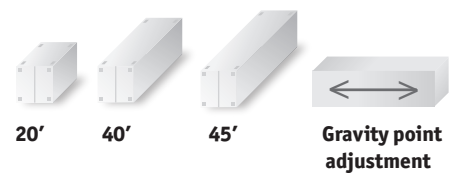
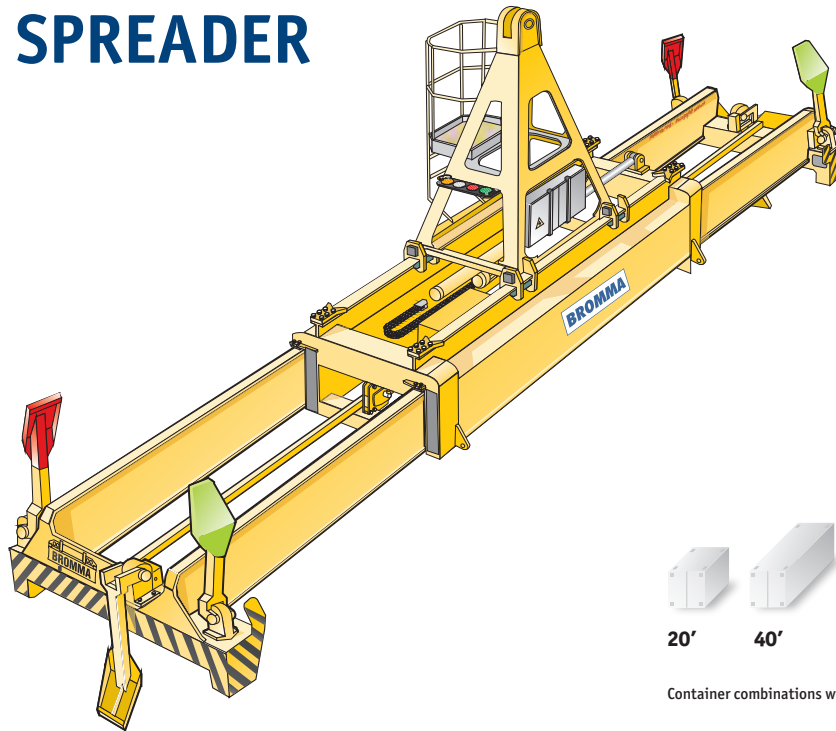


MSX45, 20'-45' SINGLE LIFT SPREADER



Container combinations with MSX45

- » **TOWER DESIGN WITH ± 1.25 M** gravity point adjustment
- » **HIGH LIFTING CAPACITY**

- » **ADJUSTABLE FOR 20', 30' (OPTION), 40' and 45' containers**

- » **SIX SIDE-FLIPPER ARM CONFIGURATION**

- » **BROMMA STANDARD ISO** floating twistlock
- » **ENCODER FOR POSITIONING** of telescopic motion

- » **FLIPPER INSTALLATION FOR BETTER** protection of the flipper arm in cell guides
- » **SHOCK ABSORPTION BETWEEN** telescopic beam and main frame
- » **FULFILLS DESIGN CRITERIA AMONG** EN13001, DIN 15018 H2 B4, FEM 1.001 and British standard BS2573

The Bromma MSX45 spreader is a single lift mobile harbour crane spreader with high lifting capacity combined with low weight. This means better performance with no impact on the load curve or the travelling of the crane. The MSX45 extends from 20 foot to 45 foot with an intermediate stop at 40 foot. Six powerful hydraulically operated flipper arms are mounted at the ends and sides of the spreader to provide efficient gathering on to a container even when the spreader is rotating.

The main frame of the spreader is connected to the crane through a sliding tower assembly. This enables the center of gravity lifting point to be moved a maximum of 1.25 meters towards each end of the spreader, so that unevenly loaded containers can be picked up horizontally. After unlocking an unevenly loaded container, the sliding tower assembly automatically returns to the central position.

The telescoping system is driven by means of a hydraulic motor connected to an endless chain, which is fitted with a block of springs to absorb shock loads. The flexibility in the system allows small changes in spreader length when handling distorted containers. The electrical components and the cable chain system are well protected inside the tower. The hydraulic unit is entirely enclosed within the main frame. The unit consists of a variable displacement piston pump, tank, motor, valves and filter.

The optional safety platform on the tower for easy access to mains power plug and lifting shaft minimizes the risk of injuries. The spreader is made of high quality steel. It is designed in accordance with EN13001. All components can be easily assembled, adjusted, removed and are accessible for inspection and maintenance. Structures are proof-tested at the plant with a minimum 50% overload.

Technical Data MSX45

» LIFTING CAPACITY

(According to EN13001)

- 41 metric tons evenly loaded
- 41 metric tons $\pm 10\%$ eccentric load

» LIFTING LUGS

- 4 x 10 metric tons in the main frame and end beams

» WEIGHT

- About 9.6 metric tons (without extra equipment)

» GRAVITY POINT ADJUSTMENT

- ± 1250 mm in 20 sec.

» TELESCOPIC MOTION

- From 20' to 45' in approx. 25 sec.

» FLIPPER ARM SPEED

- 180° in 3-5 sec.

» TWISTLOCK ROTATION

- ISO floating 90° in approx. 1 sec.

» HYDRAULICS

- System pressure 100/ 160 bar
- Piston pump pressure compensated
- Maximum flow 60 l/min
- Shock valve setting telescoping 110 bar

» POWER SUPPLY

- 400/230 VAC 50 Hz or otherwise as agreed

» MAX POWER CONSUMPTION

- 7.5 kW

» ELECTRICAL CABINET

- Stainless steel IP66

» CONTROL VOLTAGE

- 24 VDC

» SURFACE CONDITIONING

- Sand-blasted SA 2.5
- EPZn(R) Zinc-epoxy primer 60 μ m
- EP epoxy 100 μ m
- PUR polyurethane 60 μ m