

# MODEL 857 INNOVATION<sup>[E]</sup>

INTERMODAL TOP LIFT SPREADER FOR LADEN  
CONTAINER HANDLING WITH REACH STACKERS



## Standard supply includes:

- ♦ Mounting arrangement to fit the boom head
- ♦ Four pendular ISO twistlocks
- ♦ Lifting eyes near twistlocks
- ♦ Hydraulic powered pile slope (PPS)
- ♦ Hydraulic telescoping
- ♦ Hydraulic sideshift
- ♦ Hydraulic rotation
- ♦ Hydraulic leg folding
- ♦ Hydraulic clamp and unclamp
- ♦ Solenoid valves for all hydraulic functions
- ♦ Four foldable piggyback legs in an automatic sequence
- ♦ Electric twistlock indication system
- ♦ Electric and mechanical twistlock protection system
- ♦ Electric telescoping protection system
- ♦ Electric indication system for trailer handling
- ♦ Lift interrupt signal
- ♦ LED-indication lights
- ♦ LED-work lights
- ♦ Also available with Australian specification

**ELME Spreader Model 857 INNOVATION is the New Generation intermodal top lift spreader for the handling of laden ISO containers and trailers weighing up to 45 tonnes. 857 INNOVATION is designed for use with reach stackers.**

The strong and basic concept offers distinct advantages, such as two parallel telescopic beams, assuring max overlap. Beam sections are dimensioned to absorb not only the vertical, but also the very considerable horizontal forces.

## INNOVATIVE DESIGN

INNOVATION's new and improved design implies a New Generation 857 INNOVATION spreader with the unique combination of increased structural strength and reduced weight.

The New Generation 857 INNOVATION Spreader is estimated to have an increased life expectancy of 30 % related to fatigue resistance and standard load case conditions.

The reduced spreader weight enables improvements on the reach stacker design and makes it possible to increase the lifting capacity in second and third container row. The New Generation design also implies numerous improvements to promote easier service.

## TWISTLOCK SYSTEM

The previous generations well-proven Twistlock system, manufactured in a rugged design, carries all its benefits into the New Generation of spreaders. 857 INNOVATION has hardened ISO quick exchange pendular twistlocks that are hydraulically activated with mechanical interlocking against faulty locking and unlocking.

## PIGGYBACK LEGS SYSTEM

The leg arrangement is done according to the ELME design system which is a load clamping system that involves all four foldable piggyback

legs in an automatic sequence. Thanks to this feature the spreader can be lowered between containers that are block stacked front to front and also side to side.

The feet are designed according to European standard and made of Strenx® 900E material (meets S 890 QL) to extend life time. Sensors (integrated in the feet) detect when the trailer is clamped and send signals to the indication system. To avoid unintentional unclamping, a signal is also sent as soon as the container/trailer is lifted off the ground.

## TELESCOPING, SIDESHIFT AND ROTATION SYSTEM

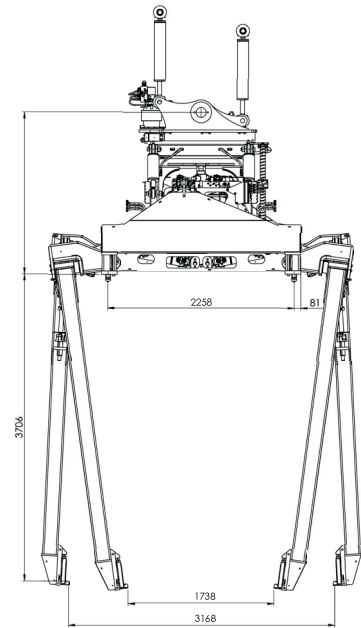
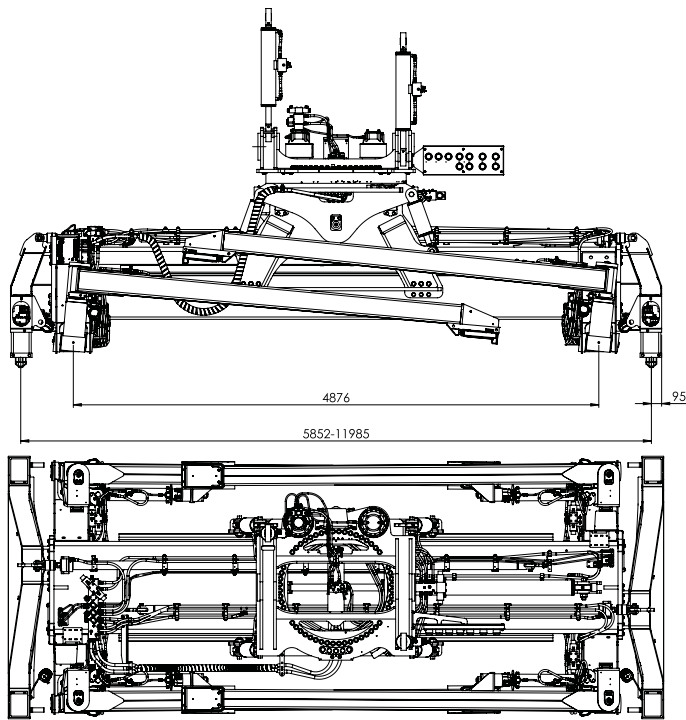
Telescoping is powered by one hydraulic cylinder for each end beam and sideshift is executed by one hydraulic cylinder. Rotation is done by a slewing ring with double transmissions for turning and brakes for holding.

## CONTROL AND PROTECTION SYSTEM

The ELME Neuron CAN bus system, designed for maximum robustness, monitors the state of the spreader at all times. Indicator lights advise the operator when the spreader is correctly seated, locked or not locked, clamped or not clamped. Each signal is a precondition for the important protection functions of the spreader such as twistlock activation, telescoping, piggyback legs and lift interrupt.

Neuron uses J1939 protocol which provides fault code messaging to alert driver and maintenance personnel of possible component failures.

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## TECHNICAL SPECIFICATIONS

Type of lifting system	Four vertical twistlocks
Spreader weight (TW)	11 700 kg without extra equipment
Lifting capacity (SWL), spreader	45 tonnes $\pm$ 10 % eccentric load
Lifting capacity (SWL), piggyback	45 tonnes $\pm$ 10 % eccentric load
Lifting capacity (SWL), lifting eyes	4 x 11,25 tonnes
Twistlock	ISO pendular 20 mm
Telescopic positions	20, 30 and 40ft
Telescoping speed, 20-40ft	< 16 sec.
Telescoping speed, 40-20ft	< 18 sec.
Rotation, 105° CW/195° CCW	< 42 sec. between endpoints
Sideshift, $\pm$ 800 mm	< 20 sec.
Powered pile slope (PPS)	$\pm$ 6°
Legs clamping distance, min / max	1,738 $\pm$ 60 mm / 3,168 $\pm$ 60 mm
Legs centre distance	4,876 mm
Legs folding / unfolding	< 25 sec. / < 29 sec.
Hydraulics, operating pressure up to	140 bar
Hydraulics, flow	60 L/min
Electric - control voltage	24 VDC
Communication	CAN 2.0B
Colour	Black grey RAL 7021

All specifications are subject to change without notice. A list of options enables you to adapt the product more precisely to your needs and further information is available on request.



Piggyback foot, European Standard.



Twistlock and lifting eye.

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