

# PRE-CAST CONCRETE

# Straddle Carriers - a better way to lift

Innovation

Simplicity

Savings



A straddle with a custom spreader is used both to precisely position and also to rotate concrete rail segments during production (Belgium).

*Straddle Carriers are not just for lifting heavy pre-cast concrete loads – they are cost effective solutions for handling lighter loads from 10 to 50 tonnes.*

When people think of Straddle Carriers they usually think of large, heavy machines handling loads above 50 tonnes that are expensive both to buy and to operate. Recent trends in the container handling industry have spawned new generations of lower cost straddles that are being used to handle a variety of lighter loads including pre-cast concrete segments.

Traditionally straddles were only used to handle shipping containers in the larger ports where the high handling volumes could justify their expensive capital and running costs. Isoloader pioneered the use of lighter straddles to handle containers in micro-terminals where the volumes are lower and the solutions have to cost less. We are now bringing these innovations to the heavy lift market including that for pre-cast concrete segments weighing between 10 and 80 tonnes.

Three factors have enabled this paradigm shift in the role of straddles: new low cost, low maintenance designs, a focus on Total Cost of Ownership (TCO), and a willingness to customize the equipment to the customer's exact needs. We are not just another equipment manufacturer – we are a solution provider, allowing us to maximize the value our equipment brings to your operation.

Straddle Carriers are best when the same or similar loads must be handled, and when there is some distance to be travelled. Because they straddle their

## SERVICE AND INNOVATION

AU +61 2 6658 1333  
EU +33 6 2907 2657  
US +1 760 621 3830  
sales@isoloader.com  
[www.isoloader.com](http://www.isoloader.com)

# ISOLOADER

CONTAINER & HEAVY LOAD HANDLING SOLUTIONS

load, they offer significant advantages over forklifts (which have very heavy wheel loads) and cranes. Straddles are an alternative to rubber tyred gantries which Isoloader also manufactures, being smaller, less costly, more flexible and more manoeuvrable.



**Left:** Two straddles work in tandem to lift a 35 metre long 70 tonne pre-stressed concrete beam by the ends, directly out of the casting mould and move it around the production facility. Lifting the ends independently helps to break the beam out of the mould. (Australia).



**Left:** A small operating area and unpaved ground are not a problem when handling segments for a new highway using a small manoeuvrable straddle. (United Arab Emirates)



**Right:** With a light flexible structure and open cab, this low cost straddle is able to operate on good quality hardstand—a surfaced pavement is not required (Australia)



**Above left:** The lighter grade concrete pavement in this factory producing road and rail segments required a straddle that was small, light and cheap (Thailand).

For handling pre-cast concrete loads, straddles have 6 key selling points.

- 1. Manoeuvrability in tight spaces:** their footprint is only a little larger than the load itself. Roadways need only be as wide as the width of the load, unlike for a forklift where the roadway must be as wide as the load's length.
- 2. Low operating and maintenance costs:** straddles typically consume 50% less fuel than a forklift.
- 3. Low pavement costs:** straddles are two-thirds the weight of forklifts and the load is more widely distributed. They steer like a car and won't break up or damage the surface of your pavements. They are able to operate on hardstand (compacted earth).
- 4. Precise positioning:** direct displacement hydraulic motors mean a positioning accuracy of under 10mm.
- 5. Fast:** straddles are practical up to 35km/h as required.
- 6. Flexibility of function:** straddles can be used in many ways to simplify your operation - to rotate the load upside down or to pick it up from the bottom, to travel inside a building, to work in tandem to handle long loads, or to travel long distances.

Most importantly they are cost effective. Isoloader sells straddles to handle 35 tonnes for under US\$350,000 and machines to handle lighter loads start at half of that. Looking at the total cost of ownership only increases the attraction.

Isoloader is a leading manufacturer of container and heavy load handling solutions. A free logistics service is offered to assist in your planning. Call us – let us see how we can help.