Segment Lifter

Segment Lifter (referred to as bridge deck crane for pre-cast segment balanced cantilever construction) is mainly used for assembling construction of roads, cross river cross sea steel box beam of cable-stayed bridge, the equipment is installed on the bridge deck, and accurately and safely lift the steel box girder section from sea beam transport ship (or steel trestle bridge) to the bridge deck for assembling and welding, and it can also be used to hoist for other beam block or steel girder.

Segment Lifter is mainly divided into fixed deck crane, luffing deck crane and tower type deck crane and its derivatives products “shore crane”

Huada Heavy Industry has developed several types of Segment Lifter system tailored for the various erection requirements of pre-cast segmental viaduct. The technology has been used successfully to complete several large balanced cantilever bridges worldwide. The lifter is fitted with electric winches or strand jacks system and is launched forward by hydraulic system. The lifter can also be equipped with steel wheel/rails or rubber tyre mounted for increased mobility.
Main Features

1. Segment Lifters are designed to install segments that weigh between 45 and 250 tons, in varied design configurations like ramps, in tight locations, or in areas that are generally difficult to access.

2. Segment Lifters are constructed from steelwork, however a Segment Lifter is not required to span from one pier to the next and consequently it does not contain as much steel as the launching truss.

3. A Segment Lifter is much easier to construct than a launching truss and is more versatile.

4. Two Segment Lifters work in tandem with its mirror equivalent, with one lifter erecting in one direction from the pier and the second lifter erecting in parallel in the opposite direction.

Segment Lifter Project

120 Ton 65 M Balance Cantilever Segment Lifter

Segment weight: 120 Ton

Equipment Supplied: 120 Ton Balance Cantilever Segment Lifter

Main Specifications: 65M Span, 120 Ton

Year: 2013
The 120 Ton 65 M Segment Lift can be optimally used in a balanced cantilever structure in which pre-casting can be carried out and the segment can be transported below the span.

The device allows the establishment of industrial sector and faster erection, so it is suitable for large span bridges. This 120 Ton 65 M Balance Cantilever Segment Lifter could meet the longitudinal slope 7%, and transverse slope 7% with a minimum radius with 80M.

The Segment Lifter could be designed to have a structure which has a length from 2.5m to 4m and a weight from 60 Ton to 120 Ton, and to apply to different applications such as, ramps, tight locations or areas that are often difficult to pass through the riverbed.