



PRODUCTS

Launching Gantry in Span by Span and or in Cantilever

The Span length can be from 25-50m in span by span method and from 40-120m in cantilever method.



Cantilever Launching Gantry 100 ton, 85m
Hongkong Lythee Bay / NESCO



Span by Span Launching Gantry 1600 ton, 38m span
Shanghai Humin Viaduct project / FEC



Span by Span Launching Gantry 530 ton, 35m
Guangzhou Light Rail No.4 Lot / MBEC



Segment Lifter

Wowjoint successfully developed world's first segment lifter in 2010 and supplied to USA.

Successfully solve the construction challenges of erecting large span beams at crossing areas of traffic arteries in Florida USA.

- 1 70T for 1-4/LEE ROY SELMON Expressway interchange bridge Florida USA / PCL

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Erect and stress segments from both ends at the same time



PRODUCTS

T-Beam Launcher



Beam Launcher 160t - Shanghai FEC



Beam Launcher 160t - Shanghai SMECO

Beam Launcher 160t - Shanghai FEC



Outer mold

Molds



Inner mold



PRODUCTS

Special Carrier

Chinese Patent No. : ZL 2005 2 0103809.3



Gantry Special Carrier / 3rd BG CRCC



Special Carrier (300 ton capacity) for Harbin-Dalian Highspeed Railway / 2nd BG CREC

Special Carrier (450 ton capacity, 40m span) for Guangzhou-Zhuhai Highspeed Railway / 2nd BG CREC



Special Carrier (300 ton capacity) in the stacked yard for Wuhan-Guangzhou High Speed Railway / 14th BG CRCC

Straddle Carrier(Mobilift)

The straddle carrier / mobilift offers the technical and economical solution to handle bulky loads on squares and inside large sheltered places. It can satisfy the needs of many carrying fields, managing big blocks of stones, steelworks, precasted concrete industries in general up to various types of warehouses. Suitable for loading and unloading trucks, they can be used also in container terminals and for many other uses.



Straddle Carrier (50 ton capacity) TITAN, Peru



Straddle Carrier/Mobilift(180 ton capacity)/SCG

Straddle Carrier (150 ton capacity)/Lifting a beam over a beam/CRCC FangShan Bridge Co. Ltd.Beijing

Straddle Carrier/Mobilift (160 ton capacity)/ The First Shanghai Municipal Engineering Co.Ltd.

Prefabrication of concrete beams (as example in Full Span Complete Box Beam)

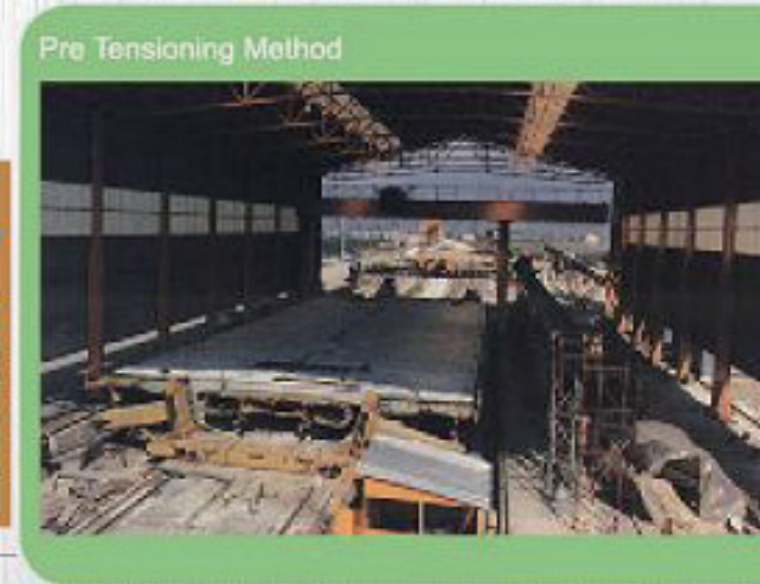
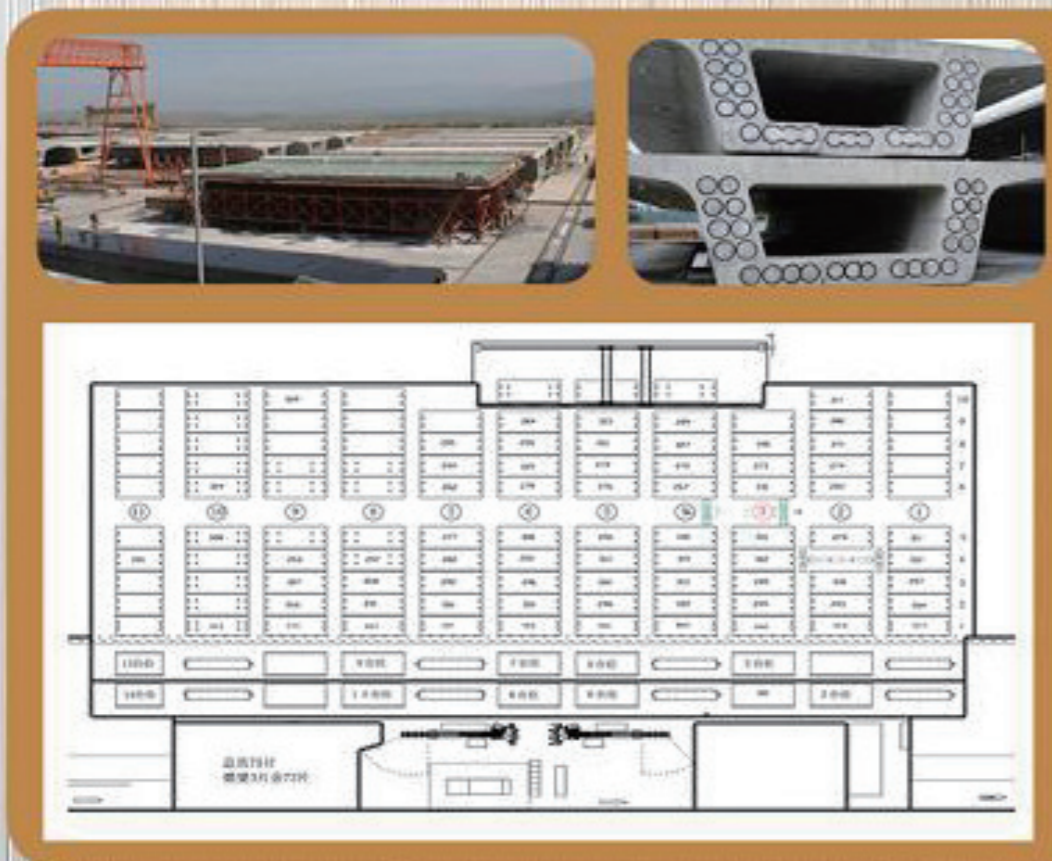
Two methods of prefabricating full span complete box beam in serve for construction of bridge erection

- Post tensioning method
- Pretensioning method

Post tensioning beams generally requires a long curing period (28)days and and two times of post tensioning, therefore a big storage yards with important handling equipment and foundations are required.

Pretensioning beams could be moved directly after curing, hence a big area for prefabrication is unnecessary. But a strong pre-tension base and a steam curing system are indispensable, if the production is to satisfy the erection on a span per day.

Typical Yard Arrangement



Post Tensioning Method(1) (2)



Lifting and Movement in yard



Full Span Prefabrication Method on Complete Box Beam of Bridge/Viaduct

High-speed railway has had a sound and fast development in China, with about 9,676 km of routes in service as of June 2012 and more than 40% of it has been built in viaduct, even the peak in 93% of viaduct in the Beijing-Tianjin Line.

To allow for a rapid and safe construction of the lines, the technology on erection of prefabricated bridge/ viaducts called "Full Span method" has been widely applied.

The story started in 1994, when the new technology concept, the application of full span complete prefabricated beams in bridge construction was introduced to China via the founder of Wowjoint. Wowjoint provided the equipment for the construction of the first high-speed passenger rail in 2000 and became the first supplier in China to provide the huge erection machine for bridge construction in full span prefabricated box beam.

During last 12 years this technology with these kinds of equipments are developed by Wowjoint with more innovations and widely employed in all the construction projects of high-Speed Railways, such as: Beijing-Tianjin High speed railway line, Beijing-Shanghai High Speed Railway line, Wuhan-Guangzhou High Speed Railway line and so on.



Erecting bridge at tunnel exit and entry



Launching gantry in 900 ton capacity for Wuhan-Guangzhou High Speed Railway/11st BG CRCC



Special Launching Gantry (Passing through tunnel) in 900 ton capacity for Wuhan-Guangzhou High Speed Railway/12th BG CRCC



Working in mountain area or Space limited



Pick up Box beam at Yard

PRODUCTS

Special Launching Carrier with Variable Platform for Passing Through Tunnel

Chinese Patent No.: ZL.2010.2.0125155.1

Special Launching Carrier with variable platform provides new method to effectively solve the problems of erecting bridges at tunnel portals and even in tunnels in mountain areas. It contributes advantages as follow:

- The Special Launching Carrier combine the lifting, transporting and launching the concrete box beam, it can also go through the tunnel without any disassembly because of its small section size.
- Solve the zero distance erection when there are only two or three spans of bridge between tunnels.
- Simplify the procedures of zero distance erection for the first beam at tunnel portal, with less auxiliary workloads and time;
- Distribute always the wheels' loads on more than two separated span of decks;
- Move all machine parts by itself to go through tunnel for changing new jobsite;
- Main machine can achieve bi-directional erection.



Launching at tunnel portal
Special Launching Carrier (900 ton capacity) for LiuZhou-NanNing High Speed Railway
12nd BG CRCC



180° turning operation on deck

Special Launching Carrier



The Special Launching Carrier going through the tunnel with concrete box beam



The Special Launching Carrier (450 ton capacity) for Guangzhou No.4 Light Rail Line / 5th BG CREC



The Special Launching Carrier (400 ton capacity) for the Capital Airport Light Rail Line / 5th BG CREC



The Special Launching Carrier changing Job Site by itself by
Nanning-Guangzhou High Speed Railway / SINOHYDYO

PRODUCTS

Launching Gantry with Shorter Under-Bridge



Launching Gantry (900 ton capacity) for WuHan-GuangZhou High Speed Railway / 11th BG CRCC

Launching Gantry with Longer Under-Bridge for Passing through Tunnel



The Launching Gantry is being loaded on tyre trolley for changing jobsite and passing through tunnel



Launching Gantry for going through tunnel (900 ton capacity) for Fujian-Xiamen High Speed Railway / 21st BG CRCC

Launching Gantry for Erecting Double Box Beam



The Launching gantry was loading on tyre trolley for moving from one erecting jobsite to other one Launching Gantry (900 ton capacity) for Beijing-Tianjin High Speed Railway / 6th BG CREC

Launching Gantry (900 ton capacity) for Fuzhou-Xiamen High Speed Railway 16th BG CRCC



Launching Gantry (450 ton capacity) for GuangZhou-ZhuHai High Speed Railway / 2nd BG CREC