DEAL EQUIPMENT REPORT

INNOVATIVE TECHNOLOGIES FOR BRIDGE CONSTRUCTION
Deal is a world leader in the field of specialised equipment for bridge and viaduct construction and all associated engineering services. Deal equipment has been used in the construction of over 5.9 million sqm of decks all over the world with Deal’s parent company executing directly roughly 2.5 million sqm of these. Deal provides services that range from conceptual and detailed design of pre-fabrication and erection systems, to the design and supply of specialised equipment such as launching trusses, straddle carriers, gantry cranes, casting machines as well as other custom lifting, moving and casting devices.
# DEAL EQUIPMENT REPORT
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DEAL EQUIPMENT REPORT
**LAUNCHING GIRDER**  
**Model LGS-140-84**

**EXECUTION**

**Client:** Bouygues Travaux Publics SA.  
**Project:** East Tsing Yi Viaduct (Hong Kong)  
**Year of manufacture:** 2005  
**Number of pieces:** 1

**CHARACTERISTICS**

- Max span length: 84 m  
- Lifting capacity: 140 ton  
- Max cross-fall: 8%  
- Max gradient: 5%  
- Min radius: 125 m  
- Total weight of the equipment: 692 ton

**MAIN TRUSS**

- Length: 136.50 m  
- Height: 6.60 m  
- Width: 2 m  
- Distance between C/L of trusses: 7.60 m  
- Clearance between trusses: 5.04 m  
- Unit weight: 1.20 ton/m x 2

**SPEEDS**

- **Lifting:**
  - with load: 0.1 ÷ 1.5 m/min  
  - without load: 0.1 ÷ 5.0 m/min  
- **Travelling:**
  - with load: 0.2 ÷ 12.0 m/min  
  - without load: 0.2 ÷ 15.0 m/min
LAUNCHING GIRDER
Model LGS-1300-45
Cantilever configuration

EXECUTION
Client: Flatiron General Partnerariat
Project: Port Mann Bridge Road (Canada)
Year of manufacture: 2009
Number of pieces: 1

CHARACTERISTICS
Max span length: 94 m
Lifting capacity: 100 ton
Max cross-fall: ± 6%
Max gradient: ± 5%
Min radius: 500 m
Total weight of the equipment: 690 ton

MAIN TRUSSES
Length: 142.50 m
Height: 6.40 m
Centerline distance: 7.60 m
Clearance between trusses: 4.95 m

SPEEDS
Lifting: 0.4 ÷ 1.5 m/min
Traveling: 1.5 ÷ 12.0 m/min
Self-launch:
truss 1.5 ÷ 5.5 m/min
support 2.5 ÷ 10.0 m/min
transversal movement 0.4 ÷ 3.0 m/min
LAUNCHING GIRDER
Model LGS-75-75

EXECUTION
Client: Bilfinger & Berger
Project: Lagos Osborne Bridge Project (Nigeria)
Year of manufacture: 2009
Number of pieces: 1

CHARACTERISTICS
Max cantilever span length: 75 m
Max span length: 55 m
Lifting capacity: 75 ton
Max cross-fall: 3.5%
Max gradient: 4%
Min radius: 650 m
Total weight of the equipment: 316 ton

MAIN TRUSSES
Length: 107.28 m
Height: 4.40 m
Width: 1.80 m
Centerline distance: 6.20 m
Unit weight: 1.49 ton/m x 2

SPEEDS
Lifting:
with load 0.36 + 1.5 m/min
without load 0.72 + 3.0 m/min
Travelling: 3.0 + 10.0 m/min
Self launch: 1.5 + 5.0 m/min
LAUNCHING GIRDER
Model LGS-110-100

EXECUTION
Client: Otay River Constructors
Project: Otay River Bridge (California – USA)
Year of manufacture: 2004
Number of pieces: 1

CHARACTERISTICS
Max span length: 90.50 m
Lifting capacity: 90 ton
Total weight of the equipment: 392 ton

MAIN TRUSSES
Length: 135 m
Height: 5.12 m
Width: 1.89 m
Distance between C/L of trusses: 6 m
Clearance between trusses: 4.08 m
Unit weight: 0.83 ton/m x 2

SPEEDS
Lifting: 0.76 m/min
Travelling:
with load 4.0 m/min
without load 8.0 m/min
**LAUNCHING GIRDER**  
Model LGS 200-100

**EXECUTION**

Client: Granite Construction Co.  
Project: Hathaway Bridge [Florida – USA]  
Year of manufacture: 2001  
Number of pieces: 1

**CHARACTERISTICS**

Max span length: 100.60 m  
Lifting capacity: 200 ton  
Total weight of the equipment: 932 ton

**MAIN TRUSSES**

Length: 175.50 m  
Height: 7.20 m  
Width: 2.20 m  
Distance between C/L of trusses: 7.60 m  
Clearance between trusses: 4.75 m  
Unit weight: 1.5 ton/m x 2

**SPEEDS**

Lifting: 0.2 ÷ 3.0 m/min  
Travelling: 0.5 ÷ 10.0 m/min
LAUNCHING GIRDER
Model LGS-C-O-40-53

EXECUTION
Client: Rizzani de Eccher USA Ltd
Project: Dulles LRT (Washington - USA)
Year of manufacture: 2009
Number of pieces: 1

CHARACTERISTICS
Max span length: 53.50 m
Lifting capacity: 450 ton
Max cross-fall: ± 0%
Max gradient: ± 4%
Min radius: 1164 m
Total weight: 291.20 ton

MAIN TRUSSES
Length: 101.25 m
Height: 5.114 m
Centerline distance: 6 m
Clearance between trusses: 4.08 m
Unit weight: 0.825 ton/m x 2

SPEEDS
Lifting:
with load: 1.14 m/min
Travelling: 4.27 - 8.59 m/min
Self launch: 4.27 m/min
LAUNCHING GIRDER
Model LGS-100-55

EXECUTION
Client: Malibu – Ashtrom
Project: South Ayalon Interchange (Tel Aviv - Israel)
Year of manufacture: 1994
Number of pieces: 1

CHARACTERISTICS
Max span length: 55 m
Winch lifting capacity: 100 ton
Total weight of the equipment: 225 ton

MAIN TRUSSES
Length: 89.60 m
Height: 4.20 m
Width: 1.15 m
Distance between C/L of trusses: 5.60 m
Clearance between trusses: 4 m
Unit weight: 0.7 ton/m x 2

SPEEDS
Lifting: 0.9 m/min
Travelling:
with load 7 m/min
without load 14 m/min
LAUNCHING GIRDER
Model LGS-90-90

EXECUTION
Client: Rizzani de Eccher Spa
Projects: Messina - Palermo Motorway (Italy)
S.S. 28 bis Ceva – Savona Expressway (Italy)
S.S. 131 and S.S. 389 Interchange (Italy)
Year of manufacture: 1991
Number of pieces: 1

CHARACTERISTICS
Max span length: 90 m
Winch lifting capacity: 90 ton
Total weight of the equipment: 275 ton

MAIN TRUSSES
Length: 114 m
Height: 4.50 m
Width: 1.40 m
Distance between C/L of trusses: 5.60 m
Clearance between trusses: 3.61 m
Unit weight: 0.75 ton/m x 2

SPEEDS
Lifting: 0.8 m/min
Travelling speed:
with load 7 m/min
without load 14 m/min
**LAUNCHING GIRDER**  
**Model LGS-110-120**

**EXECUTION**
- **Client:** GLF Construction Corporation  
- **Project:** Sea Breeze Bridge (Florida – USA)  
- **Year of manufacture:** 1990  
- **Number of pieces:** 1

**CHARACTERISTICS**
- **Max span length:** 120 m  
- **Lifting capacity:**  
  - front winch: 100 ton  
  - rear winch: 80 ton  
- **Total weight of the equipment:** 380 ton

**MAIN TRUSSES**
- **Length:** 140 m  
- **Height:** 5.80 m  
- **Width:** 1.80 m  
- **Distance between C/L of trusses:** 6.50 m  
- **Clearance between trusses:** 4.10 m  
- **Unit weight:** 0.9 ton/m x 2

**SPEEDS**
- **Lifting:**  
  - with load: 0.15 m/min  
  - without load: 1.5 m/min  
- **Travelling:**  
  - with load: 6 m/min  
  - without load: 12 m/min

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![Image of launching girder model LGS-110-120 with construction site background]

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![Diagram of launching girder model LGS-110-120 with technical specifications]
LAUNCHING GIRDER
Model LGS-110-55

EXECUTION
Client: Joannou - Paraskevaides
Project: Limassol – Paphos Motorway (Cyprus)
Year of manufacture: 1990
Number of pieces: 1

CHARACTERISTICS
Max span length: 55 m
Winch lifting capacity: 110 ton
Total weight of the equipment: 225 ton

MAIN TRUSSES
Length: 89.60 m
Height: 4.20 m
Width: 1.15 m
Distance between C/L of trusses: 5.60 m
Clearance between trusses: 4 m
Unit weight: 0.7 ton/m x 2

SPEEDS
Lifting: 0.9 m/min
Travelling:
with load 7 m/min
without load 14 m/min
LAUNCHING GIRDER
Model LGS-110-120 L

EXECUTION
Client: Strait Crossing a J.V.
Project: Confederation Bridge (Canada)
Year of manufacture: 1989
Number of pieces: 1

CHARACTERISTICS
Max span length: 120 m
Lifting capacity: 100 ton
Total weight of the equipment: 390 ton

MAIN TRUSSES
Length: 144 m
Height: 5.80 m
Width: 1.80 m
Distance between C/L of trusses: 6.50 m
Clearance between trusses: 4.10 m
Unit weight: 0.9 ton/m x 2

SPEEDS
Lifting:
with load: 0.15 m/min
without load: 1.5 m/min
Travelling:
with load 6 m/min
without load 12 m/min
LAUNCHING GIRDER
Model LGS-80-60

EXECUTION
Client: Rizzani de Eccher Spa
Projects: S.S. 13 Pontebbana Expressway (Italy)
Roma – L’Aquila – Teramo Motorway (Italy)
Ancona Urban Expressway (Italy)
Year of manufacture: 1988
Number of pieces: 1

CHARACTERISTICS
Max span length: 60 m
Winch lifting capacity: 80 ton
Total weight of the equipment: 150 ton

MAIN TRUSSES
Length: 84 m
Height: 3.55 m
Width: 1.05 m
Distance between C/L of trusses: 4.10 m
Clearance between trusses: 2.72 m
Unit weight: 0.55 ton/m x 2

SPEEDS
Lifting: 0.8 m/min
Travelling:
with load 7 m/min
without load 14 m/min
LAUNCHING GIRDER
Model LGS-S-SSC-O-80-100

EXECUTION
Client: Hyundai
Project: Chung San Bridge (Korea)
Year of manufacture: 1995
Number of pieces: 1

CHARACTERISTICS
Max span length: 100 m
Winch lifting capacity: 80 ton
Total weight of the equipment: 620 ton

MAIN TRUSSES
Length: 184.30 m
Height: 6 m
Width: 5.20 m
Unit weight: 2.2 ton/m

SPEEDS
Lifting: 0.9 m/min
Travelling:
with load: 6 m/min
without load: 12 m/min
2
LAUNCHING GIRDERS FOR SPAN BY SPAN ERECTION

DEAL EQUIPMENT REPORT
LAUNCHING GIRDER
Model LGS-1200-55

EXECUTION
Client: UEM
Project: Penang 2nd Crossing Bridge Project (Malaysia)
Year of manufacture: 2009
Number of pieces: 4

CHARACTERISTICS
Max span length: 55 m
Lifting capacity: 1200 ton
Max cross-fall: 2.50%
Max gradient: 2.50%
Min radius: 2500 m
Total weight of the equipment: 640 ton

MAIN TRUSSES
Length: 66.30 m
Height: 4 m
Width: 2 m
Distance between suspension lines: 8.40 m
Unit weight: 1.56 ton/m x 2

SPEEDS
Lifting:
with load 0.2 ÷ 2.0 m/min
without load 0.2 ÷ 4.0 m/min
Travelling:
with load 0.2 ÷ 8.0 m/min
without load 0.2 ÷ 16.0 m/min
Self launch: 0.2 ÷ 5.0 m/min
LAUNCHING GIRDER
Model LGS-SS-O-750-44

EXECUTION
Client: VFR Ltd VSL – Freyssinet – Rizzani de Eccher Spa a J.V.
Project: Dubai Metro Project – Red Line (UAE)
Year of manufacture: 2006
Number of pieces: 8

CHARACTERISTICS
Capacity: 750 ton
Max span length: 44 m
Winch lifting capacity: 75 ton
Min radius: 300 m
Max gradient: 4%
Total weight of the equipment: 420 ton

MAIN GIRDERS
Length: 97 m
Height: 2.65 m
Width: 1.20 m
Distance between suspension lines: 7.93 m
Unit weight: 1.05 ton/m x 2

SPEEDS
Lifting:
with load 0.2 + 2.0 m/min
without load 0.2 + 4.0 m/min
Winch travelling: 0.5 + 10.0 m/min
Self launch: 0.5 + 5.0 m/min
**EXECUTION**

- **Client:** Kiewit - Flatiron General Partnerariat
- **Project:** Port Mann Bridge Road (Canada)
- **Year of manufacture:** 2009
- **Number of pieces:** 1

**CHARACTERISTICS**

- **Max span length:** 47.28 m
- **Lifting capacity:** 1300 ton
- **Max cross-fall:** ± 4.8%
- **Max gradient:** ± 4%
- **Min radius:** 500 m
- **Total weight of the equipment:** 710 ton

**MAIN TRUSSES**

- **Length:** 142.50 m
- **Height:** 6.40 m
- **Centerline distance:** 7.60 m
- **Clearance between trusses:** 4.95 m

**SPEEDS**

- **Lifting:** 0.4 ÷ 1.5 m/min
- **Travelling:** 1.5 ÷ 12.0 m/min
- **Self launch:**
  - **truss:** 1.5 ÷ 5.5 m/min
  - **support:** 2.5 ÷ 10.0 m/min
  - **transversal movement:** 0.4 ÷ 3.0 m/min
LAUNCHING GIRDER
Model LGS-SS-O-340-36

EXECUTION
Client: RSL J.V. – Rizzani de Eccher Spa – SNC Lavalin
Constructions [Pacific] Inc.
Project: Richmond – Airport Vancouver Rapid Transit Project
[British Columbia - Canada]
Year of manufacture: 2006
Number of pieces: 1

CHARACTERISTICS
Capacity: 340 ton
Max span length: 36 m
Winch lifting capacity: 40 ton
Min radius: 185 m for 32 m span
Max gradient: 5%
Max cross fall: 10%
Total weight of the equipment: 392 ton

MAIN TRUSSES
Length: 90.80 m
Height: 4.20 m
Width: 1.34 m
Distance between suspension lines: 5.60 m
Unit weight: 0.70 ton/m x 2

SPEEDS
Lifting:
with load 0.1 ÷ 1.4 m/min
without load 0.1 ÷ 3.5 m/min
Winch travelling:
with load 0.2 ÷ 6.0 m/min
without load 0.2 ÷ 10.0 m/min
Self launch: 0.6 ÷ 6.0 m/min
LAUNCHING GIRDER
Model LGS-SS-O-185-30

EXECUTION
Client: Rizzani de Eccher Spa
Project: Metro Manila LRT Line 2 (Philippines)
Year of manufacture: 1999
Number of pieces: 2

CHARACTERISTICS
Capacity: 185 ton
Max span length: 30 m
Winch lifting capacity: 30 ton x 2
Min radius: 175 m
Total weight of the equipment: 130 ton

MAIN GIRDERS
Length: 59 m
Height: 1.77 m
Width: 1.12 m
Distance between suspension lines: 1.26 m
Unit weight: 0.88 ton/m

SPEEDS
Lifting:
with load 0.1 ÷ 1.4 m/min
without load 0.1 ÷ 5.4 m/min
Travelling: 0.2 ÷ 10.0 m/min
**EXECUTION**

Client: Gammon – Rizzani de Eccher a J.V.
Project: Singapore LRT Bukit Panjang Line (Singapore)
Year of manufacture: 1997
Number of pieces: 2

**CHARACTERISTICS**

- Capacity: 340 ton
- Max span length: 40 m
- Winch lifting capacity: 40 ton
- Min radius: 60 m
- Total weight of the equipment: 228 ton

**MAIN DIMENSIONS**

- Main girder length: 46.80 m
- Support girder length: 41.40 m
- Weight of main girder: 132 ton
- Weight of support girder: 96 ton
- Total weight: 228 ton

**SPEEDS**

- Lifting: 0.3 ÷ 1.8 m/min
- Travelling: 0.5 ÷ 9.0 m/min
LAUNCHING GIRDER
Model LGS-SS-U-1040-46

EXECUTION
Client: PCL Civil Constructors, Inc.
Project: Ernest F. Lyons Bridge Replacement (Florida – USA)
Year of manufacture: 2005
Number of pieces: 1

CHARACTERISTICS
Capacity: 1040 ton
Max span length: 46.40 m
Max segment weight: 77 ton
Max gradient: 3.50%
Total weight of the equipment: 338 ton

MAIN GIRDERS
Length: 53.34 m
Height: 2.69 m
Width: 1.58 m
Unit weight: 1.70 ton/m x 2

SPEEDS
Self launch: 4 m/min
Manipulators: 0.7 ÷ 8.0 m/min
LAUNCHING GIRDER
Model LGS-SS-U-1135-46

EXECUTION
Client: Edward Kraemer & Sons, Inc.
Project: Susquehanna River Bridge (Pennsylvania – USA)
Year of manufacture: 2005
Number of pieces: 1

CHARACTERISTICS
Capacity: 1138 ton
Max span length: 46.30 m
Max segment weight: 95 ton
Max gradient: 2%
Max cross fall: 8%
Total weight of equipment: 310 ton

MAIN TRUSSES
Length: 47.64 m
Height: 4.69 m
Width: 1.94 m
Unit weight: 1.7 ton/m x 2

SPEEDS
Self launch: 4 m/min
Manipulators: 0.7 ÷ 6.0 m/min
LAUNCHING GIRDER
Model LGS-SS-U-1150-45

EXECUTION
Client: George Harms Construction Co., Inc.
Project: Victory Bridge [New Jersey – USA]
Year of manufacture: 2003
Number of pieces: 1

CHARACTERISTICS
Max span length: 46 m
Capacity: 1160 ton
Min radius: 1.900 m
Total weight of the equipment: 290 ton

MAIN TRUSSES
Length: 47.64 m
Height: 4.66 m
Width: 1.60 m
Unit weight: 1.6 ton/m x 2
EXECUTION
Client: LG Construction
Project: Seo Hae Bridge (Korea)
Year of manufacture: 1996
Number of pieces: 1

CHARACTERISTICS
Max span length: 60 m
Total weight of the equipment: 980 ton

FEEDER CRANE
Lifting capacity: 80 ton
Lifting speed: 1.50 m/min
Weight: 50 ton

CENTRAL BEAM
Length: 144.56 m
Height: 3 m
Width: 2 m
Unit weight: 2.82 ton/m
Weight: 408 ton

SIDE BEAM
Length: 65.30 m
Height: 6 m
Width: 2 m
Unit weight: 1.8 ton/m
Weight: 120 ton x 2
LAUNCHING GIRDER
Model LGS-SSC-0-525-35 (60-60)

EXECUTION
Client: Rizzani de Eccher Spa
Project: Metro Manila LRT Line 2 (Philippines)
Year of manufacture: 1999
Number of pieces: 1

CHARACTERISTICS
Capacity: 525 ton (60/60)
Max span length: 35 (60) m
Winch lifting capacity: 60 ton
Min radius: 175 m
Total weight of the equipment: 108 ton

MAIN TRUSSES
Length: 81.90 m
Height: 3.20 m
Width: 1.10 m
Distance between C/L of trusses: 5 m
Clearance between trusses: 3.50 (3.86) m
Unit weight: 0.66 ton/m x 2

SPEEDS
Lifting:
with load 1.4 m/min
without load 3.5 m/min
Travelling:
with load 6 m/min
without load 10 m/min
LAUNCHING GIRDER
Model LGS-SSC-0-480-37 (60-65)

EXECUTION
Client: S.I.W.P. J.V.
Project: Interchange 93 Northbound Boston (Massachusetts – USA)
Year of manufacture: 1999
Number of pieces: 1

CHARACTERISTICS
Capacity: 480 ton (60/65)
Max span length: 37 (65) m
Winch lifting capacity: 65 ton x 2
Total weight of the equipment: 212 ton

MAIN TRUSS
Length: 117.60 m
Height: 5.65 m
Width: 2.05 m
Distance between C/L of trusses: 6.20 m
Clearance between trusses: 4.15 m
Unit weight: 1 ton/m x 2

SPEEDS
Lifting:
with load 0.1 ÷ 1.0 m/min
without load 0.1 ÷ 3.0 m/min
Travelling:
with load 0.5 ÷ 10.0 m/min
without load 1 ÷ 12.0 m/min

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![Image of LAUNCHING GIRDER Model LGS-SSC-0-480-37 (60-65)](image-url)
LAUNCHING GIRDER
Model LGS-SSC-O-460-36-(60-50)

EXECUTION
Client: NECSO Redondo
Project: Tren Urbano Light Rail Transport San Juan (Puertorico)
Year of manufacture: 1999
Number of pieces: 1

CHARACTERISTICS
Capacity: 460 ton (60/50)
Max span length: 36 (50) m
Winch lifting capacity: 55 ton x 2
Total weight of the equipment: 400 ton

MAIN TRUSSES
Length: 105.84 m
Height: 5.45 m
Width: 2.04 m
Distance between C/L of trusses: 5.80 m
Distance between suspension lines: 2 m
Clearance between trusses: 3.76 m
Unit weight: 0.9 ton/m x 2

SPEEDS
Lifting speed variable:
with load 1.5 m/min
without load 4.5 m/min
Travelling: 0.2 – 14.0 m/min
**EXECUTION**
Client: Freyssinet Middle East  
Project: Al Safooh Transit System (UAE)  
Year of manufacture: 2008  
Number of pieces: 1

**CHARACTERISTICS**
Max span length: 30 m  
Lifting capacity: 300 ton  
Max segment weight: 33 ton  
Max cross-fall: 4%  
Total weight of the equipment: 186 ton

**MAIN TRUSSES**  
Length: 40.40 m  
Height: 2.20 m  
Width: 1 m  
Unit weight: 0.74 ton/m x 2

**SPEEDS**
Transport trolley:  
with load 0.0 ÷ 6.0 m/min  
without load 0.0 ÷ 12.0 m/min  
Self launch: 0.0 ÷ 2.0 m/min
SEGMENTS LOADER
Model SL-95

EXECUTION
Client: Edward Kraemer & Sons, Inc.
Project: Susquehanna River Bridge (Pennsylvania – USA)
Year of manufacture: 2005
Number of pieces: 1

CHARACTERISTICS
Lifting capacity: 95 ton
Max cross fall: 8%
Total weight of the equipment: 108 ton

MAIN DIMENSIONS
Length: 23.38 m
Height: 10 m
Width: 9.58 m

SPEEDS
Lifting: 0.76 m/min
Loader travelling: 2.5 ÷ 10.0 m/min
Trolley travelling: 2.5 ÷ 5.0 m/min
DECK GANTRY CRANE
Model LF-BC-100

EXECUTION
Client: Golden Crossing J.V.
Project: Golden Crossing Bridge (Canada)
Year of manufacture: 2007
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 100 ton
Gauge: 16.9 m
Transversal adjustment: ± 15.1 m
Max cross-fall: ± 3.2%
Max gradient: ± 5%
Min radius: 1000 m
Total weight of the equipment: 133 ton

MAIN DIMENSIONS
Overall length: 44.25 m
Overall height: 12.24 m
Overall width: 33.75 m
Max height to the hook: 43 m

SPEEDS
Lifting:
with load 0.0 ÷ 2.0 m/min
without load 0.0 ÷ 3.5 m/min
Travelling: 2.0 ÷ 4.0 m/min
Self launch: 3.0 m/min
# Lifting Frame

**Model LC-BC-80**

## Execution

**Client:** Bilfinger & Berger  
**Project:** Lagos Osborne Bridge Project (Nigeria)  
**Year of manufacture:** 2009  
**Number of pieces:** 2

## Characteristics

- **Carrying/lifting capacity:** 80 ton  
- **Gauge:** 3.60 m  
- **Span:** 3.188 m  
- **Max cross-fall:** ± 2.5%  
- **Max gradient:** ± 4%  
- **Min radius:** 100 m  
- **Total weight of the equipment:** 41 ton

## Main Dimensions

- **Overall length:** 12.55 m  
- **Overall height:** 6.20 m  
- **Overall width:** 7.30 m  
- **Max height to the hook:** 25 m

## Speeds

- **Lifting:**  
  - with load: 0.375 ÷ 0.75 m/min  
  - without load: 0.75 ÷ 1.5 m/min  
- **Travelling:** 0.65 ÷ 4.09 m/min

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**Diagram:**

- [Diagram 1](#)  
- [Diagram 2](#)

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[Diagram 1](#):  
[Diagram 2](#):
LAUNCHING CARRIER
Model LC-BC-70

EXECUTION
Client: Rizzani de Eccher Spa – Zachry J.V.
Project: Dallas High Five Interchange (Texas – USA)
Year of manufacture: 2002
Number of pieces: 1

CHARACTERISTICS
Carrying/lifting capacity: 63.50 ton
Gauge: 5.70 m
Max cross fall: 8%
Total weight of the equipment: 90 ton

MAIN DIMENSIONS
Overall length: 29.60 m
Overall height: 11.30 m
Overall width: 15.60 m
Max height to the hook: 44.20 m

SPEEDS
Lifting: 0.2 ÷ 1.5 m/min
Carrier travelling: 0.2 ÷ 12.2 m/min
Overhead crane travelling: 0.2 ÷ 9.1 m/min
LIFTING FRAME
Model LC-BC-53

EXECUTION
Client: Rizzani de Eccher USA Ltd
Project: MIC Miami Intermodal Centre (Florida - USA)
Year of manufacture: 2009
Number of pieces: 2

CHARACTERISTICS
Span: 4.78 m
Gauge: 4.866 m
Lifting capacity: 53 ton
Max cross-fall: ± 0%
Max gradient: ± 2%
Min radius: 100 m
Total weight of the equipment: 43 ton
Length: 12.63 m
Height: 6.679 m
Lifting winch stroke: 25 m

SPEEDS
Lifting:
with load 0.375 ÷ 0.75 m/min
without load 0.75 ÷ 1.5 m/min
Travelling: 0.76 ÷ 4.75 m/min
Winch trolley speed: 0.82 m/min
5
LAUNCHING GIRDERs FOR FULL SPAN ERECTION

DEAL EQUIPMENT REPORT
LAUNCHING GIRDER
Model LGB-1600-50

EXECUTION
Client: China Railways Erju Co. Ltd
Project: Hangzhou Bay Bridge (China)
Year of manufacture: 2005
Number of pieces: 1

CHARACTERISTICS
Capacity: 1600 ton
Max span length: 50 m
Winch lifting capacity: 800 ton x 2
Total weight of the equipment: 1268 ton

MAIN GIRDERS
Length: 111.216 m
Height: 3.20 m
Width: 2.20 m
Distance between C/L of trusses: 22 m
Clearance between girders: 19.80 m
Unit weight: 4.3 ton/m x 2

SPEEDS
Lifting:
with load 0.1 ÷ 0.3 m/min
without load 0.1 ÷ 0.72 m/min
STRADDELL CARRIER SYSTEMS FOR FULL SPAN ERECTION
LAUNCHING CARRIER
Model LC-775-30

EXECUTION
Client: VSL – Rizzani de Eccher J.V. Ltd
Project: High Speed Rail Project, Taipei-Kaohsiung (Taiwan)
Year of manufacture: 2001
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 775 ton
Girder span length: 44.20 m
Gauge: 5.60 m
Longitudinal clearance between wheels: 32 m
Total weight of the equipment: carrier 375 ton, support girder 265 ton

MAIN DIMENSIONS
Length: 59.16 m
Height: 11.20 m
Width: 8 m
Height to the hook: 8 m

SPEEDS
Lifting: 0.1 ÷ 0.5 m/min
Carrier travelling:
with load (3% gradient) 0.2 ÷ 50.0 m/min
with load (1.5% gradient) 0.2 ÷ 67.0 m/min
without load 0.2 ÷ 167.0 m/min

STEERING
Min radius on wheels: 250 m
Min radius on bearing tower: 0 m [90°]
LAUNCHING CARRIER
Model LC-740-31.5

EXECUTION
Client: Impresa Pizzarotti & C. Spa
Project: Modena Viaduct - High Speed Railway
Milano-Bologna (Italy)
Year of manufacture: 2001
Number of pieces: 2

CHARACTERISTICS
Carrying capacity: 740 ton
Girder span length: 45 m
Gauge: 3.85 m
Longitudinal clearance between wheels: 33.60 m
Total weight of the equipment:
carrier 325 ton
support girder 220 ton

MAIN DIMENSIONS
Overall length: 57.20 m
Overall height: 10.50 m
Overall width: 5.68 m
Total weight: 325 + 220 ton
Height to the hook: 7 m

SPEEDS
Lifting:
with load 0.2 ÷ 0.8 m/min
without load 0.2 ÷ 1.6 m/min
Carrier travelling: 50.0 ÷ 100.0 m/min

STEERING
Min radius on wheels: 125 m
Min radius on bearing tower: 0 m (90°)
7

MOVABLE SCAFFOLDING SYSTEMS

DEAL EQUIPMENT REPORT
MOVABLE SCAFFOLDING
Model MSS-2x20-12.1

EXECUTION
Client: Consorzio Generoso Cossi Costruzioni Spa – M. Boni & E. Foglia S.A.
Project: Cantine Viaduct (Switzerland)
Year of manufacture: 2003
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 220 ton

DIMENSIONS OF DECK
Span length: 20 m x 2
Top slab width: 12.10 m
Bottom slab width: 3.50 m
Depth: 1.30 m
Weight: 380 ton x 2
MOVABLE SCAFFOLDING
Model MSS-45-15.5

EXECUTION
Client: Doprastav - Dobroproject
Project: Danub Bridge Bratislava (Slovakia)
Year of manufacture: 1979
Number of pieces: 1

CHARACTERISTICS
Span length: 45 m
Deck width: 15.50 m
Deck height: 2.50 m
Total weight of the equipment: 600 ton
8
LAUNCHING GIRDERs FOR BEAM ERECTION

DEAL EQUIPMENT REPORT
LAUNCHING GIRDER
Model LG-120-40

EXECUTION
Client: Austin Bridge & Road
Project: IH30/PGBT Interchange Project (Texas - USA)
Year of manufacture: 2009
Number of pieces: 1

CHARACTERISTICS
Max span length: 40 m
Lifting capacity: 60 ÷ 60 ton
Max cross-fall: ± 0%
Max gradient: ± 6%
Total weight of the equipment: 172 ton

MAIN TRUSSES
Length: 71.40 m
Height: 3.32 m
Centerline distance: 4.40 m
Clearance between trusses: 3.23 m

SPEEDS
Lifting:
with load 0.8 m/min
without load 0.8 m/min
Travelling: 6.0 ÷ 12.0 m/min
LAUNCHING GIRDER
Model LG-215-40

EXECUTION
Client: Freyssinet International & Cie
Project: Mudeirey Bridge (Lebanon)
Year of manufacture: 2007
Number of pieces: 1

CHARACTERISTICS
Max span length: 40 m
Lifting capacity: 215 ton
Max gradient: 4.17%
Total weight of the equipment: 212 ton

MAIN TRUSSES
Length: 91.20 m
Height: 3.55 m
Width: 1.05 m
Centerline distance: 8 m
Clearance between trusses: 6.73 m
Unit weight: 0.55 ton/m x 2

SPEEDS
Lifting:
with load 0.3 m/min
without load 0.9 m/min
Travelling: 6.0 ÷ 12.0 m/min
Self launch: 6.0 m/min
LAUNCHING GIRDER
Model LGB-S5-0-70-30

EXECUTION
Client: CHEC (Thai) Company Ltd
Project: Southern Outer Bangkok Ring Road Project (Thailand)
Year of manufacture: 2006
Number of pieces: 1

CHARACTERISTICS
Max span length: 31 m
Winch lifting capacity: 35 ton x 2
Total weight of equipment: 98 ton (running ways excluded)

MAIN GIRDER
Length: 59 m
Height: 1.77 m
Width: 1.12 m
Unit weight: 0.85 ton/m
Total weight of equipment: 98 ton (running ways excluded)

SPEEDS
Lifting:
with load 0.5 ÷ 2.0 m/min
without load 0.5 ÷ 6.0 m/min
Winch travelling: 0.3 ÷ 10.0 m/min
LAUNCHING GIRDER
Model LGB-SS-O-150-50

EXECUTION
Client: VSL Korea Co.
Project: No 2 Sang Pyung Bridge (Korea)
Year of manufacture: 2004
Number of pieces: 1

CHARACTERISTICS
Lifting capacity: 75 ton x 2
Max span length: 50 m
Total weight of the equipment: 320 ton

MAIN TRUSSES
Length: 106.20 m
Height: 3.55 m
Width: 1.23 m
Distance between C/L of trusses: 4.50 m
Clearance between trusses: 3.27 m
Unit weight: 0.60 ton/m x 2

SPEEDS
Lifting: 0 ÷ 2 m/min
Travelling:
gradient 3% 12 m/min
gradient 6% 8 m/min
SHIFTING BEAMS AND PRE-CAST SLABS GIRDER
Model LGB-SS-0-80-44

EXECUTION
Client: Traylor Bros, Inc.
Project: Galveston Causeway Bridge (Texas – USA)
Year of manufacture: 2003
Number of pieces: 1

CHARACTERISTICS
Lifting capacity: 80 ton
Span length: 33.40 ÷ 45.40 m
Max gradient: 6%
Total weight of the equipment: 56 ton

SERVICE LOADS
Max weight of beams: 80 ton
Max weight of pre-cast slabs: 6.80 ton

MAIN TRUSSES
Length: 47.74 m
Height: 2.30 m
Width: 1.20 m
Unit weight: 0.6 ton/m

SPEEDS
Lifting of beam: 0.3 m/min
Lifting of slab panel: 1.5 m/min
Longitudinal travelling: 8 m/min
Transversal travelling: 8 m/min
SHIFTING BEAMS GIRDER
Model LGB-SS-45-33.6

EXECUTION
Client: GLF Corporation
Project: US 17 Bypass - Wilmington (North Carolina – USA)
Year of manufacture: 2002
Number of pieces: 1

CHARACTERISTICS
Span length: 33.60 m
Max longitudinal slope: 6%
Transversal slope: 2%
Total weight of the equipment: 31 ton

SERVICE LOADS
Max weight of beams: 76 ton
Max weight of pre-cast slabs: 6.80 ton

MAIN TRUSSES
Length: 37.30 m
Height: 2.16 m
Width: 1.21 m
Unit weight: 0.20 ton/m

SPEEDS
Transversal travelling speed:
with load 2.2 m/min
without load 4.6 m/min
LAUNCHING GIRDER
Model LGB-120-45

EXECUTION
Client: Granit
Project: Delcevo Bridge (Macedonia)
Year of manufacture: 1995
Number of pieces: 1

CHARACTERISTICS
Max span length: 45 m
Winch lifting capacity: 60 ton x 2
Total weight of the equipment: 150 ton

MAIN TRUSSES
Length: 96 m
Height: 3 m
Width: 1.15 m
Distance between C/L of trusses: 4 m
Clearance between trusses: 2.75 m
Unit weight: 0.4 ton/m x 2

SPEEDS
Lifting: 1 m/min
Travelling:
with load 7 m/min
without load 14 m/min
**LAUNCHING GIRDER**  
**Model LGB-220-65**

**EXECUTION**  
Client: Consortium Con.Tur  
Project: Tarsus – Mersin Motorway (Turkey)  
Year of manufacture: 1993  
Number of pieces: 1

**CHARACTERISTICS**  
Max span length: 65 m  
Winch lifting capacity: 110 ton x 2  
Total weight of the equipment: 235 ton

**MAIN TRUSSES**  
Length: 134.30 m  
Height: 4.20 m  
Width: 1.15 m  
Distance between C/L of trusses: 5.60 m  
Clearance between trusses: 4 m  
Unit weight: 0.7 ton/m x 2

**SPEEDS**  
Lifting: 0.9 m/min  
Travelling:  
with load 7 m/min  
without load 14 m/min
**LAUNCHING GIRDER**

**Model LGS-0-20-20.5**

**EXECUTION**

**Client:** PKC J.V.

**Project:** Tunnel Project C11A1 Boston (Massachusetts – USA)

**Year of manufacture:** 1998

**Number of pieces:** 2

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**CHARACTERISTICS**

- Max span length: 20.50 m
- Winch lifting capacity: 10 ton x 2
- Total weight of the equipment: 24 ton x 2

**MAIN BEAMS**

- Length: 43 m
- Height: 0.54 m
- Width of single beam: 0.45 m
- Distance between C/L of beams: 1.70 m
- Unit weight: 0.2 ton/m x 2

**SPEEDS**

- Lifting: 4 m/min
- Travelling: 10 m/min
LAUNCHING GIRDER
Model LGB-140-45

EXECUTION
Client: Joannou - Paraskevaides
Project: Limassol – Paphos Motorway (Cyprus)
Year of manufacture: 1981
Number of pieces: 1

CHARACTERISTICS
Max span length: 45 m
Winch lifting capacity: 70 ton x 2
Total weight of the equipment: 180 ton

MAIN TRUSSES
Length: 97.20 m
Height: 2.20 m
Width: 0.78 m
Unit weight: 0.45 ton/m x 2
Distance between C/L of trusses: 4 m
Clearance between trusses: 2.92 m

SPEEDS
Lifting: 1 m/min
Travelling:
with load 7 m/min
without load 14 m/min
LAUNCHING GIRDER
Model Pile Driver Launching Truss

EXECUTION
Client: Flatiron – United a J.V.
Project: Washington Bypass (North Carolina – USA)
Year of manufacture: 2007
Number of pieces: 2

CHARACTERISTICS
Max span length: 37.10 m
Lifting capacity:
- front winch: 55 ton
- rear winch: 40 ton
- service hoist: 5 ton
Max gradient: 6%
Max pile length: 38.10 m
Total weight of the equipment: 670 ton

MAIN TRUSSES
Length: 140.40 m
Height: 6 m
Width: 2 m
Distance between C/L of trusses: 6 m
Clearance between trusses: 4.75 m
Unit weight: 1.10 ton/m x 2
Max gradient: 6%

SPEEDS
Lifting: 0.2 ÷ 1.4 m/min
Travelling: 0.5 ÷ 9.0 m/min
Self launch speed: 0.5 ÷ 5.0 m/min
SHORT LINE MOULDS

DEAL EQUIPMENT REPORT
MOULD
Model SL-C-2.04-10.5

EXECUTION
Client: VFR Ltd VSL – Freyssinet – Rizzani de Eccher Spa a J.V.
Project: Dubai Metro Project – Red Line (UAE)
Year of manufacture: 2006
Number of pieces: 5

CHARACTERISTICS
Total weight of the equipment: 56 ton

DIMENSIONS OF SEGMENTS
Length: 4 m
Width: 10.50 m
Bottom width: 3.64 m
Depth: 2.04 m
Weight: 58 ton
MOULD
Model SL-V- 5.8-10.3

EXECUTION
Client: SNC Lavalin Serco – Rizzani de Eccher Spa a J.V.
Project: Vancouver Sky Train LRT Canada Line (Canada)
Year of manufacture: 2006
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 72.50 ton

DIMENSIONS OF SEGMENTS
Length: 2.80 m
Top slab width (variable): 8.45 ÷ 10.30 m
Bottom slab width: 5.10 m
Depth (variable): 2.60 ÷ 5.80 m
Weight: 68 ÷ 44 ton
MOULD
Model SL-V-4.96-17.9

EXECUTION
Client: Kiewit - Flatiron General Partnerariat
Project: Port Mann Bridge Road (Canada)
Year of manufacture: 2009
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 112 ton

DIMENSIONS OF SEGMENTS
Length: 2.0 ÷ 3.10 m
Depth: 3.0 ÷ 4.959 m
Top slab width: 17.90 m
Bottom slab width: 6.10 m
Max weight: 84 ton
MOULD
Model SL-C-3.4-10.3

EXECUTION
Client: SNC Lavalin Inc.
Project: Vancouver Sky Train LRT Canada Line (Canada)
Year of manufacture: 2006
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 52 ton

DIMENSIONS OF SEGMENTS
Length: 3.60 m
Top slab width: 10.30 m
Bottom slab width: 5.10 m
Depth: 3.40 m
Weight: 65 ton
MOULD
Model SL-C-2.1-4.2

EXECUTION
Client: SNC Lavalin Serco – Rizzani de Eccher Spa a J.V.
Project: Vancouver Sky Train LRT Canada Line (Canada)
Year of manufacture: 2005
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 21 ton

DIMENSIONS OF SEGMENTS
Length: 3 m
Top slab width: 4.20 m
Bottom slab width: 1.90 m
Depth: 2.70 m
Weight: 18 ton

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>3 m</td>
</tr>
<tr>
<td>Top slab</td>
<td>4.20 m</td>
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<tr>
<td>Bottom slab</td>
<td>1.90 m</td>
</tr>
<tr>
<td>Depth</td>
<td>2.70 m</td>
</tr>
<tr>
<td>Weight</td>
<td>18 ton</td>
</tr>
</tbody>
</table>
MOULD
Model SL-C-3.0-18.3

EXECUTION
Client: Kiewit - Flatiron General Partnerariat
Project: Port Mann Bridge Road (Canada)
Year of manufacture: 2009
Number of pieces: 3

CHARACTERISTICS
Total weight of the equipment: 58 ton

DIMENSIONS OF SEGMENTS
Length: 3.50 m
Depth: 3 m
Top slab width: 17.72 + 18.30 m
Bottom slab width: 6.50 m
Max weight: 87 ton
MOULD
Model SL-C-1.876-7.95

EXECUTION
Client: Freyssinet Middle East
Project: Al Safooh Transit System (UAE)
Year of manufacture: 2008
Number of pieces: 8

CHARACTERISTICS
Total weight of the equipment: 27 ton

DIMENSIONS OF SEGMENTS
Length: 3.30 m
Depth: 1.876 m
Top slab width: 9.75 m
Bottom slab width: 2.09 m
Weight: 30 ton
MOULD
Model SL-C-2.1-8.45

EXECUTION
Client: SNC Lavalin Serco – Rizzani de Eccher Spa a J.V.
Project: Vancouver Sky Train LRT Canada Line (Canada)
Year of manufacture: 2005
Number of pieces: 3

CHARACTERISTICS
Total weight of the equipment: 27 ton

DIMENSIONS OF SEGMENTS
Length: 3 m
Top slab width: 8.45 m
Bottom slab width: 2.70 m
Depth: 2.70 m
Weight: 26 ton
MOULD
Model SL-C-2.4-10.0

EXECUTION
Client: Rizzani de Eccher Spa
Project: Docklands Light Railways Extension (London – U.K.)
Year of manufacture: 2003
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 36 ton

DIMENSIONS OF SEGMENTS
Length: 3.10 m
Depth: 2.89 m
Top slab width: 10.03 m
Bottom slab width: 3.64 m
Weight: 37 ton
MOULD
Model SL-V-24.4-5.5

EXECUTION
Client: Granite Construction Co.
Project: Hathaway Bridge (Florida – USA)
Year of manufacture: 2001
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 230 ton

DIMENSIONS OF SEGMENTS
Length: 4.09 m
Depth (variable): 5.48 ÷ 3.54 m
Top slab width: 24.40 m
Bottom slab width (variable): 8.45 ÷ 10.39 m
Weight: 180 ton
MOULD
Model SL-C-2.30-3.50

EXECUTION
Client: Rizzani de Eccher Spa
Project: Metro Manila LRT Line 2 (Philippines)
Year of manufacture: 1999
Number of pieces: 3

CHARACTERISTICS
Total weight of the equipment: 17.50 ton

DIMENSIONS OF SEGMENTS
Length (variable): 3.0 + 3.90 m
Depth: 2.30 m
Top slab width: 3.50 m
Bottom slab width: 1.40 m
Weight: 24 ton
MOULD
Model SL-C-2.66-5.14

EXECUTION
Client: SAR – SC Infrastructure Inc./Agra Monenco Inc./Rizzani de Eccher Spa a J.V.
Project: Vancouver Sky Train LRT Millennium Line (British Columbia - Canada)
Year of manufacture: 1999
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 22 ton

DIMENSIONS OF SEGMENTS
Length: 3.20 m
Depth: 2.66 m
Top slab width: 5.14 m
Bottom slab width: 2 m
Weight: 20 ton
MOULD
Model SL-C-2.66-7.69

EXECUTION
Client: SAR – SC Infrastructure Inc./Agra Monenco Inc./Rizzani de Eccher Spa a J.V.
Project: Vancouver Sky Train LRT Millennium Line
(British Columbia - Canada)
Year of manufacture: 1999
Number of pieces: 14

CHARACTERISTICS
Total weight of the equipment: 30 ton

DIMENSIONS OF SEGMENTS
Length: 3.20 m
Depth: 2.66 m
Top slab width: 7.69 m
Bottom slab width: 3.20 m
Weight: 25 ton
EXECUTION
Client: Gammon - Rizzani de Eccher Spa a J.V.
Project: Singapore LRT Bukit Panjang Line (Singapore)
Year of manufacture: 1997
Number of pieces: 9

Mould
Model SL-C-2.16-6.50

CHARACTERISTICS
Total weight of the equipment: 35 ton

DIMENSIONS OF SEGMENTS
Length: 3.10 m
Depth: 2.16 m
Top slab width: 6.49 m
Bottom slab width: 3.30 m
Weight: 30 ton
MOULD
Model SL-C-2.16-3.90

EXECUTION
Client: Gammon - Rizzani de Eccher Spa a J.V.
Project: Singapore LRT Bukit Panjang Line (Singapore)
Year of manufacture: 1997
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 20 ton

DIMENSIONS OF SEGMENTS
Length: 3.10 m
Depth: 2.16 m
Top slab width: 3.84 m
Bottom slab width: 2.10 m
Weight: 20 ton
MOULD
Model SL-C-2.20-16.50

EXECUTION
Client: Ashkrit Concrete
Project: South Ayalon Interchange (Israel)
Year of manufacture: 1993
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 45 ton

DIMENSIONS OF SEGMENTS
Length (variable): 2.20 ÷ 2.90 m
Depth: 2.20 m
Top slab width: 16.50 m
Bottom slab width: 6 m
MOULD
Model SL-C-1.80-8.25

EXECUTION
Client: Ashkrit Concrete
Project: South Ayalon Interchange (Israel)
Year of manufacture: 1993
Number of pieces: 1

CHARACTERISTICS
Total weight of the equipment: 20 ton

DIMENSIONS OF SEGMENTS
Length: 3.50 m
Depth: 1.80 m
Top slab width: 8.25 m
Bottom slab width: 3.20 m
MOULD
Model SL-V-3.50-12.80

EXECUTION
Client: Rizzani de Eccher Spa
Project: Caltanissetta – Gela Expressway (Italy)
Year of manufacture: 1992
Number of pieces: 3

CHARACTERISTICS
Total weight of equipment: 60 ton

DIMENSIONS OF SEGMENTS
Length: 2.92 m
Depth (variable): 3.50 ÷ 2.30 m
Top slab width: 12.80 m
Bottom slab width (variable): 4.24 ÷ 5.0 m
Weight: 65 ÷ 61 ton
MOULD
Model SL-V-5.40-11.00

EXECUTION
Client: Rizzani de Eccher Spa
Project: Messina – Palermo Motorway (Italy)
Year of manufacture: 1991
Number of pieces: 2

CHARACTERISTICS
Total weight of the equipment: 75 ton

DIMENSIONS OF SEGMENTS
Length: 2.60 ÷ 3.04 m
Depth (variable): 5.40 ÷ 2.50 m
Top slab width: 11 m
Bottom slab width: 5.40 m
10
LONG LINE MOULDS
MOULD  
Model LL-C-4.0-10.65

EXECUTION  
Client: Bilfinger & Berger  
Project: Lagos Osborne Bridge Project (Nigeria)  
Year of manufacture: 2009  
Number of pieces: 1

CHARACTERISTICS  
Total weight of the equipment: 184 ton

DIMENSIONS OF SEGMENTS  
Length: 1.40 ÷ 3.60 m  
Depth: 4 m  
Top slab width: 10.65 m  
Bottom slab width: 5.78 m  
Weight: 80 ton
MOULD
Model LL-C-2.04-10.18-32.0

EXECUTION
Client: VFR Ltd VSL – Freyssinet – Rizzani de Eccher Spa a J.V.
Project: Dubai Metro Project – Red Line (UAE)
Year of manufacture: 2006
Number of pieces: 10

CHARACTERISTICS
Total weight of the equipment: 72 ton

DIMENSIONS OF SEGMENTS
Length: 4 m
Width: 10.18 m
Bottom width: 8.17 m
Depth: 2.04 m
Weight: 58 ton
MOULD
Model LL-V-4.5-8.5

EXECUTION
Client: Saudi Binladin Group
Project: Improvement of Jamarat Area and Bridge in Mina (Saudi Arabia)
Year of manufacture: 2005
Number of pieces: 4

CHARACTERISTICS
Total weight of the equipment: 130 ton

DIMENSIONS OF SEGMENTS
Length: 1.50 ÷ 3.0 m
Top slab width: 8.50 m
Bottom slab width (variable): 3.0 ÷ 4.19 m
Depth (variable): 4.50 ÷ 2.0 m
Weight: 50.0 ÷ 36.40 ton
**MOULD**
Model LL-V-8.5-25.0

**EXECUTION**
Client: KFM - Kiewit/Flatiron/Manson a J.V.
Project: The San Francisco Oakland Bay Bridge (California – USA)
Year of manufacture: 2002
Number of pieces: 2

**CHARACTERISTICS**
Total weight of the equipment: 750 ton

**DIMENSIONS OF SEGMENTS**
Length: 8 m
Top slab width: 25.07 m
Bottom slab width: 8.50 m
Depth (variable): 8.55 ÷ 5.55 m
Weight: 700 ÷ 500 ton
MOULD
Model LL-C-2.30-8.10

EXECUTION
Client: Rizzani de Eccher Spa
Project: Metro Manila LRT Line 2 (Philippines)
Year of manufacture: 1999
Number of pieces: 4

CHARACTERISTICS
Total weight of the equipment: 16.50 ton

DIMENSIONS OF SEGMENTS
Length (variable): 5.30 ÷ 8.10 m
Depth: 2.30 m
Top slab width: 3.50 m
Bottom slab width: 1.40 m
Max weight: 50 ton
TRANSPORTER
Model TE-1600-17

EXECUTION
Client: China Railways Erju Co. Ltd
Project: Hangzhou Bay Bridge (China)
Year of manufacture: 2005
Number of pieces: 1 full set

CHARACTERISTICS
- Carrying capacity: 1500 ton
- Max gradient: 2%
- Max cross-fall: 2%
- Length of semi-trolley: 28.85 m
- Height: 2.24 m
- Gauge of semi-trolley: 5 m
- Number of wheels: 640
- Inflation pressure: 8.50 bar
- Total weight of the equipment: 520 ton

SPEEDS
- Travelling:
  - with load 0.1 ÷ 33.3 m/min
  - without load 0.1 ÷ 66.6 m/min

STEERING
- Max steering angle: 15°
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STRADDLE CARRIERS

DEAL EQUIPMENT REPORT
MOBILE LIFT
Model ML-50

EXECUTION
Client: China Railways Erju Co. Ltd
Project: Hangzhou Bay Bridge (China)
Year of manufacture: 2005
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 50 ton
Gauge: 23 m
Clearance between wheels: 21.50 m
Height to the hook: 12 m
Max longitudinal slope: 2%
Tyres working pressure: 9.50 bar
Total weight of the equipment: 70.40 ton
Transverse travelling of the hook: ± 9 m

SPEEDS
Lifting:
with load 0.1 ÷ 2.0 m/min
without load 0.1 ÷ 4.0 m/min
Travelling:
with load 0.2 ÷ 20.0 m/min
without load 0.2 ÷ 40.0 m/min
Transverse travelling: 0.2 ÷ 7.0 m/min

STEERING
Max steering angle: 90°
MOBILE LIFT
Model ML-800-A

EXECUTION
Client: China Railways Erju Co. Ltd
Project: Hangzhou Bay Bridge (China)
Year of manufacture: 2005
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 800 ton
Gauge: 23 m
Clearance between wheels: 19.19 m
Height to the hook: 9.10 m
Max longitudinal slope: 2%
Tyres working pressure: 9.50 bar
Total weight of the equipment:
net 330 ton
with wheels filled 344 ton

SPEEDS
Lifting:
with load 0.1 ÷ 0.5 m/min
without load 0.1 ÷ 1.0 m/min
Travelling:
with load 0.1 ÷ 12.0 m/min
without load 0.1 ÷ 24.0 m/min

STEERING
Max steering angle: 90°
STRADDLE CARRIER
Model SC-720-32

EXECUTION
Client: KFM - Kiewit/Flatiron/Manson a J.V.
Project: The San Francisco Oakland Bay Bridge (California – USA)
Year of manufacture: 2002
Number of pieces: 1

CHARACTERISTICS
Carrying/lifting capacity: 720 ton
Girder span length: 41 m
Gauge: 5 m
Longitudinal clearance between wheels: 32.50 m
Max gradient: 2.5%
Total weight of the equipment: 495 ton

MAIN DIMENSIONS
Length: 53.20 m
Height: 17 m
Width: 9.65 m
Height to the hook: 11 m

SPEEDS
Lifting:
with load: 0.1 ÷ 1.0 m/min
without load: 0.1 ÷ 2.0 m/min
Carrier longitudinal travelling:
with load (0% gradient): 5.0 ÷ 33.0 m/min
with load (2.5% gradient): 5.0 ÷ 22.0 m/min
without load: 5.0 ÷ 67.0 m/min
Carrier transversal travelling: 5 m/min

STEERING RADIUS
Min steering radius: 60 m
TRANSPORTER
Model LB-40

EXECUTION
Client: Gammon – Rizzani de Eccher Spa a J.V.
Project: Singapore LRT Bukit Panjang Line (Singapore)
Year of manufacture: 1996
Number of pieces: 2

CHARACTERISTICS
Capacity: 40 ton
Gauge: 3.40 m
Total weight of the equipment: 15 ton

SPEEDS
Travelling:
with load 83 m/min
without load 183 m/min

STEERING
Automatic system
**STRADDLE CARRIER**
**Model SC-100-9.6**

**EXECUTION**
Client: Pizzarotti & C. Spa [Romania]
Year of manufacture: 2008
Number of pieces: 1

**CHARACTERISTICS**
Carrying/lifting capacity: 100 ton
Gauge: 9.60 m
Height to the hook: 6.23 m
Max gradient: 5%
Total weight of the equipment: 73 ton

**MAIN DIMENSIONS**
Overall length: 36.03 m
Overall height: 9.45 m
Overall width: 11.22 m

**SPEEDS**
Lifting: 0.0 ÷ 1.5 m/min
Travelling:
with load 30 m/min
without load 68 m/min
STRADDELL CARRIER
Model SC-115-167.8

EXECUTION
Client: Kiewit - Flatiron General Partnerariat
Project: Port Mann Bridge Road (Canada)
Year of manufacture: 2009
Number of pieces: 1

CHARACTERISTICS
Lifting capacity: 115 ton
Max cross-fall: ± 0%
Max gradient: ± 2%
Min radius: 150 m
Total weight of the equipment: 66.62 ton
Height: 14.80 m
Gauge: 16.80 m
Clearance inside width: 15.20 m
Number of wheels: 8

SPEEDS
Lifting: 2 m/min
Travelling:
with load 60 m/min
without load 117 m/min
Lifting trolley transversal speed: 5 m/min
STRADDLE CARRIER
Model SC-90-6.6

EXECUTION
Client: Bilfinger & Berger
Project: Lagos Osborne Bridge Project (Nigeria)
Year of manufacture: 2010
Number of pieces: 1

CHARACTERISTICS
Carrying/lifting capacity: 90 ton
Gauge: 6.60 m
Max gradient: 6%
Height to the hook: 6 m
Total weight of the equipment: 48 ton

MAIN DIMENSIONS
Overall length: 10.90 m
Overall height: 7.70 m
Overall width: 8.60 m

SPEEDS
Lifting: 0.0 ÷ 0.4 m/min
Travelling:
with load 41 m/min
without load 83 m/min
**STRADDLE CARRIER**

**Model LC-85-5.6**

**EXECUTION**
- **Client:** GLF Construction Corporation
- **Project:** Sea Breeze Bridge (Florida – USA)
- **Year of manufacture:** 1996
- **Number of pieces:** 1

**CHARACTERISTICS**
- **Capacity:** 85 ton
- **Gauge:** 5.60 m
- **Height to the hook:** 4.80 m
- **Total weight of the equipment:** 25 ton

**SPEEDS**
- **Lifting:** 1 m/min
- **Travelling:** 100 m/min
STRADDLE CARRIER
Model SC-110-15

EXECUTION
Client: Strait Crossing a J.V.
Project: Confederation Bridge (Canada)
Year of manufacture: 1995
Number of pieces: 1

CHARACTERISTICS
Capacity: 110 ton
Gauge: 15 m
Height to the hook: 11.50 m
Total weight of equipment: 111 ton

SPEEDS
Lifting: 1 m/min
Travelling: 60 m/min
GANTRY CRANES
HOIST MACHINE HM 800
Model GC-800-56

EXECUTION
Client: China Railways Erju Co. Ltd
Project: Hangzhou Bay Bridge (China)
Year of manufacture: 2005
Number of pieces: 2

CHARACTERISTICS
Lifting/carrying capacity: 800 ton
Gauge: 56 m
Height to the hook: 28 m
Total weight of the equipment: 550 ton

SPEEDS
Lifting:
with load 0.1 ÷ 0.5 m/min
without load 0.1 ÷ 1.0 m/min
Transverse travelling:
with load 0.1 ÷ 1.0 m/min
without load 0.1 ÷ 2.0 m/min
GANTRY CRANE
Model GC-75+75-32

EXECUTION
Client: KFM – Kiewit/Flatiron/Manson a J.V.
Project: The San Francisco Oakland Bay Bridge
[California – USA]
Year of manufacture: 2002
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 75 + 75 ton
Gauge: 32 m
Height to the hook: 25 m
Total weight of the equipment: 225 ton

SPEEDS
Lifting:
with load 0.2 + 1.5 m/min
without load 0.2 + 5.0 m/min
Travelling:
with load 0.2 + 15.0 m/min
without load 0.2 + 30.0 m/min
HEAVY LIFTER
Model GC-450-19

EXECUTION
Client: VSL – Rizzani de Eccher Spa J.V. Ltd
Project: High Speed Rail Project, Taipei-Kaohsiung (Taiwan)
Year of manufacture: 2001
Number of pieces: 2

CHARACTERISTICS
Carrying/lifting capacity: 450 ton
Gauge: 19 m
Height to the hook: 4.57 m
Stroke: 1.14 m
Lifting system: step by step by hydraulic jacks having 500 mm stroke
Total weight of the equipment: 87 ton

SPEEDS
Lifting: 0.20 m/min (hydraulic jack)
Travelling: 5 m/min
GANTRY CRANE
Model GC-100-20.5

EXECUTION
Client: Rizzani de Eccher CCC a J.V.
Project: Cuscatlan Bridge (El Salvador)
Year of manufacture: 1997
Number of pieces: 1

CHARACTERISTICS
Capacity: 100 ton
Winch lifting capacity: 96 ton
Gauge: 20.50 m
Height to the hook: 14.27 m
Total weight of the equipment: 75 ton

SPEEDS
Lifting:
with load 0.76 m/min
without load 1.52 m/min
Travelling:
with load 11.60 m/min
without load 23.20 m/min
Winch trolley travelling: 10 m/min
GANTRY CRANE
Model GC-40-28

EXECUTION
Client: Gammon - Rizzani de Eccher Spa a J.V.
Project: Singapore LRT Bukit Panjang Line (Singapore)
Year of manufacture: 1996
Number of pieces: 2

CHARACTERISTICS
Capacity: 40 ton
Gauge: 28 m
Height to the hook: 9 m
Total weight of the equipment: 43 ton

SPEEDS
Lifting:
with load 0.17 m/min
without load 1.72 m/min
Travelling:
with load 15.50 m/min
without load 31 m/min
Winch trolley travelling: 15 m/min
GANTRY CRANE
Model GC-100-27.5

EXECUTION
Client: Rizzani de Eccher Spa
Projects: Messina – Palermo Motorway (Italy)
Caltanissetta – Gela Expressway (Italy)
Year of manufacture: 1990
Number of pieces: 1

CHARACTERISTICS
Capacity: 100 ton
Gauge: 27.50 m
Height to the hook: 14.50 m
Total weight of the equipment: 103 ton

SPEEDS
Lifting: 2.10 m/min
Travelling:
with load 15.50 m/min
without load 31 m/min
Winch trolley travelling: 10.10 m/min
GANTRY CRANE
Model GC-80-25

EXECUTION
Client: Prefabbricati Gran Sasso
Project: Roma – L’Aquila – Teramo Motorway (Italy)
Year of manufacture: 1990
Number of pieces: 1

CHARACTERISTICS
Capacity: 80 ton
Gauge: 25 m
Height to the hook: 14.50 m
Total weight of the equipment: 82 ton

SPEEDS
Lifting: 2.10 m/min
Travelling:
with load 15.50 m/min
without load 31 m/min
Winch trolley travelling: 10.10 m/min
GANTRY CRANE  
Model GC-75-19

EXECUTION
Client: Rizzani de Eccher Spa
Project: S.S. 38 dello Stelvio Expressway (Italy)
Year of manufacture: 1990
Number of pieces: 1

CHARACTERISTICS
Capacity: 75 ton
Gauge: 19 m
Height to the hook: 14.50 m
Total weight of the equipment: 39 ton

SPEEDS
Lifting: 1.60 m/min
Travelling: 22.60 m/min
Winch trolley travelling: 10.10 m/min
GANTRY CRANE
Model GC-70-16

EXECUTION
Client: Rizzani de Eccher Spa
Project: Roma – L’Aquila – Teramo Motorway (Italy)
Year of manufacture: 1989
Number of pieces: 1

CHARACTERISTICS
Capacity: 70 ton
Gauge: 16 m
Height to the hook: 14.50 m
Total weight of the equipment: 37 ton

SPEEDS
Lifting: 1.30 m/min
Travelling:
with load 11.30 m/min
without load 22.60 m/min
Winch trolley travelling: 13.70 m/min
HOPPERS

DEAL EQUIPMENT REPORT
**HOPPER 240**

**EXECUTION**
Client: Terminal Rinfuse Italia Spa (Italy)
Year of manufacture: 2011
Number of pieces: 1

**CHARACTERISTICS**
- Max hopper capacity: 240 cubic meter
- Working capacity: 110 cubic meter
- Unloading capacity: 1000 ton/h
- Gauge: 28.40 m
- Span: 12 m
- Clearance between wheels: 10 m
- Total weight of the equipment: 210 ton

**MAIN DIMENSIONS**
- Overall length: 14.892 m
- Overall height: 20.944 m
- Overall width: 32.57 m

**SPEEDS**
- Travelling: 0 ÷ 15 m/min

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![Image of Hopper 240](image_url)

![Diagram of Hopper 240](diagram_url)
HOPPER 54

EXECUTION
Client: ASPM – Monfalcone (Italy)
Year of manufacture: 2003
Number of pieces: 1

CHARACTERISTICS
Hopper capacity: 54 cubic meter
Unloading capacity: 240 cm/h
Gauge: 7 m
Clearance between wheels: 6.20 m
Total weight of the equipment: 70 ton

MAIN DIMENSIONS
Length: 7.10 m
Height: 13 m
Width: 7 m

SPEEDS
Travelling: 0.2 ÷ 20.0 m/min

STEERING
Min steering radius: 33 m
CABLE REEL

EXECUTION
Client: Saipem – Sonsub Division (Korea)
Year of manufacture: 2010
Number of pieces: 1

CHARACTERISTICS
Reel overall width: 3.30÷6.70 m
Cable diameter: 3.30÷6.70 m
Lever winder trolley stroke: 5.90 m
Max reel weight including cable: 450 ton
Total weight of the equipment [reel not included]: 144 ton

MAIN DIMENSIONS
Overall length: 7.750 m
Overall height: 6.895 m
Overall width: 16.100 m

SPEEDS
Maximum drum rotation speed: 2.70 rpm
Linear cable speed: 6÷20 m/min
MANIPULATOR AND STRESSING PLATFORMS

EXECUTION
Client: J. H. Reid
Project: Route 36 (New Jersey - USA)
Year of manufacture: 2008
Number of pieces: 1 manipulator & 2 stressing platforms

CHARACTERISTICS
Carrying/lifting capacity: 77 ton
Max gradient: 6.50%
Max cross-fall: 5.70%
Total weight: 5.10 ton

MANIPULATOR MAIN DIMENSIONS
Overall length: 2.65 m
Overall height: 2.395 m
Overall width: 7.514 m

STRESSING PLATFORM CHARACTERISTICS
Distance between clamps: 9.40 m
Lower platform width: 4.569 ÷ 6.569 m
Maximum load on stressing platform: 1.30 ton

STRESSING PLATFORM MAIN DIMENSIONS
Overall length: 2.26 m
Overall height: 4.915 m
Overall width: 9.720 m
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