



# DEDICATED TO INFRASTRUCTURE

Royal Wagenborg offers full services in heavy transport and lifting to the infrastructure business. From transport of heavy components by road, inland water or sea up to foundation setting, engineering and thorough project management. Our experienced employees can handle any challenge in transport and lifting. Discover how our services can be a solution for you.

#### **ENGINEERING & PREPARATION**



**HEAVY TRANSPORT** 



**ASSEMBLY & INSTALLATION** 



**HEAVY LIFTING** 



**MARITIME SERVICES** 



**HSEQ** 







# ENGINEERING & PROJECT MANAGEMENT

Construction of bridges is often a logistic challenge, which involves heavy and oversized components, such as bridge decks. Transporting and foundation setting of these components requires specific expertise. Our experienced project managers and engineers always find the most optimum implementation method, taking account of your operating processes and timeframe. With constant attention to practical and safe implementation. This, combined with a clear communication style and efficient project management, results in a fine project result for you as a customer.

- Transport & lifting engineering
- Route surveys
- Lifting studies
- 3D engineering
- Project management













#### **REFERENCES**

- Blauwe Klap Assen, NL Load: balance towers, car bridges, bicycle bridges, balances up to 65 tonnes Equipment: barge, inland vessel, trailers and mobile cranes up to 500 tonnes.
- Green Connection Rotterdam, NL Load: bridge parts of 200x12x10 m. Over 600 tonnes.
   Equipment: 2x sheerlegs, 2x 6-axle SPMTs, 2 sets 2x 16-axle conventional trailer, 2x 500 tonnes mobile crane, 500 tonnes crawler
- 3. Akkerwinde bridge Sneek, NL Load: 32x12x16 m. Deck / wooden arches: 150 / 2x300 tonnes Equipment: 2 sets of 2x12-axle lines SPMTs, 4x250 tonnes climbing jacks, mobile cranes 250 - 650 tonnes.
- Jan Wils bridge Amsterdam, NL Load: 220 tonnes
   Equipment: Barge, mobile cranes and jacking equipment
- Kruisvaartbrug, Utrecht, NL Load: 45 tonnes
   Equipment: Inland barge, 130 and 500 tonnes mobile crane, conventional trailer
- 6. Lock Twentekanaal, Eefde, NL Load: 45 tonnes

Photo left: Lock Eefde, NL





# **HEAVY LIFTING**

In infrastructure construction projects, heavy and oversized components need to be lifted. Royal Wagenborg is able to carry out such lifting projects safely and well organized. From a simple hoisting job with one hydraulic crane to a complicated project with a range of equipment - Wagenborg guarantees the flexibility and choice in vertical transport you are looking for.

- Mobile cranes up to 700 tons lifting capacity
- Crawler cranes up to 750 tons lifting capacity
- 300 tonnes sheerleg
- Flexible configuration options
- Engineering
- Project management













#### **REFERENCES**

1. Lage Erfbrug, Rotterdam, NL Load: 2 x 125 tonnes Equipment: Barge, inland vessel, 500 and 650 tonnes mobile crane

2. Behelfsbrücke - Bochum, D Load: Bridge: 340 tonnes and temporary bridge: 54 tonnes. Equipment: LR1750 crawler crane with 260 tonnes counterweight

3. Voorsterbrug - Zwolle, NL Load: 42 beams of 42 x 2 x 1,5 m, 110 t. Equipment: Several trailers and 500 t crawler crane

**4. RORO bridge - Emden, D Load**: 45 x 25 m., 210 tonnes **Equipment**: 300 tonnes sheerleg, barge

 Friesenbrücke - Papenburg, D Load: 75 tonnes
 Equipment: 300 tonnes sheerleg

6. Akkerwinde brug - Sneek, NL Load: bridge deck: 150 tonnes wooden arches: 300 tonnes in total Equipment: 2 sets of 2x12-axle lines SPMTs, 4x250 tonnes climbing jacks, mobile cranes 250 - 650 tonnes.

Photo left: Behelfsbrücke - Bochum, D





### **HEAVY TRANSPORT**

In the infrastructure industry heavy components, prefabricated modules and structural elements are being constructed at large scales. Royal Wagenborg is able to take care of transporting these heavy units with our modular trailers. Our transport specialists take care of project preparation, engineering, project management and realization.

- Modular trailers
- 100 tons girder bridge
- SPMTs (Self Propelled Modular Trailers)













#### REFERENCES

1. Blalobrug - Zwolle, NL Load: 21 x 7,5 x 7 m, 100 tonnes Equipment: 2 x 6-axle SPMTs, 2 x 200 tonnes mobile cranes

2. Railway bridge Gevelsberg, D Load: 2 x 145 tonnes Equipment: 6-axle SPMT 4-file, 200 and 250 tonnes mobile cranes and jacking equipment

 Kruisvaartbrug Utrecht, NL Load: 45 tonnes
 Equipment: Inland barge, 130 and 500 tonnes mobile crane, conventional trailer

 Railway viaduct Vught, NL Load: 2.300 tonnes Equipment: 96-axle SPMT's

5. Railway bridge Viersen, D Load: 2 concrete decks 940 and 960 tonnes Equipment: 40 axle lines SPMT, support

structure, jacking equipment

6. Brücke Johannapark - Leipzig, D Load: 15 tonnes Equipment: 3-axle low loader

Photo left: Kruisvaartbrug - Utrecht, NL





### MARITIME SERVICES

Wagenborg specializes in transport by water. With our experienced people, we have an answer for every maritime logistics challenge. With our tugs up to 71 ton BP, pontoons with a deadweight of 20,000 DWT, a 300 tonnes sheerleg and mutlipurpose dry cargo vessel in a range from 2.000 - 23.000 DWT we have acquired an excellent international reputation in special transports, such as bridge components.

- 170 multipurpose vessels
- 1.700 23.000 DWT
- Ice classed vessels
- Geared non geared vessels
- 11 pontoons (inland and seagoing)
- 660 20.000 DWT
- Tugs up to 71 tonnes BP
- 300 tonnes sheerleg













#### REFERENCES

- 1. Friesenbrücke Weener, D
  Scope: Salvage and transport of bridge
  Equipment: 300 tonnes sheerleg and tug
- 2. Hilter Schleusen-Brücke, D
  Load: 43 m in length and 2 x 100 tonnes
  Equipment: 300 tonnes sheerleg,
  Wagenborg Barge 6 and mobile crane
- Swing bridge, Simpson Bay, SX Load: 450 tonnes
   Equipment: Sheerlegs, seagoing vessel, skidding and jacking equipment
- 4. SchillerstraBen-Brücke Münster, D Load: 51 m in length and 208 tonnes. Equipment: Wagenborg Barge 3, tug, 700 and 750 tonnes mobile crane
- 5. Dalsfjord bridge Dale, N Load: 11 bridge parts, total 2.500 tonnes Equipment: Waterstroom, Wagenborg Barge 5
- 6. Centrale As Burgum, NL Load: 2 bridge parts: 200 and 260 tonnes Equipment: 300 tonnes sheerleg and tug

Photo left: Swing bridge, SX





# **ASSEMBLY & INSTALLATION**

In addition to the heavy transport and lifting work, Royal Wagenborg has several pieces of equipment for handling, offloading and positioning of heavy components. Especially with loads weighing several hundreds of tons, it is essential to have an absolute guarantee concerning weight and center of gravity. Wagenborg's electronic weighing systems is exactly designed for this purpose. Our lifting gantry systems, jacking systems and skidding systems are ideally suited for maneuvering heavy components in narrow places.

- Jacking system
- Weighing system
- Skidding system
- 500 tonnes hydraulic lifting gantry













#### REFERENCES

- Trogbrücke Emden, D Load: 550 tonnes
   Equipment: 2x 6-axle SPMTs double connected, jacking system
- 2. Akkerwinde brug Sneek, NL Load: bridge deck: 150 tonnes wooden arches: 300 tonnes in total Equipment: 2 sets of 2x 12 axle lines SPMTs, 4x250 tonnes climbing jacks, mobile cranes 250 - 650 tonnes.
- 3. Lage Erfbrug Rotterdam, NL Load: 2 x 125 tonnes Equipment: Barge, inland vessel, 500 and 650 tonnes mobile crane
- 4. Jan Schaefer brug Amsterdam, NL Load: 2 x 200 tonnes Equipment: Wagenborg Barge 1, tugs
- Catharinabrug Leiden, NL Load: bridge foundations 7 tonnes Equipment: 80 tonnes mobile crane.
- 6. Green Connection Rotterdam, NL Load: bridge parts of 200x12x10 m. Over 600 tonnes.
  Equipment: 2x sheerlegs, 2x 6-axle SPMTs, 2x 16-axle conventional trailer, 2x 500 tonnes mobile crane, 500 tonnes

Photo left: Akkerwinde brug - Sneek, NL

crawler crane.





## **ROYAL WAGENBORG & HSEQ**

As one of the oldest and largest logistic companies in the Netherlands, Royal Wagenborg has always been a pioneer and today, the company continues to be at the forefront of developments. Wagenborg undoubtedly forges its own path, offering a unique range of logistic services dedicated to the power industry. Wagenborg was established in 1898 and employs 3,000 people. As a family owned and managed company we consider family values and social responsibility to our employees, customers, environment and other stakeholders important and do not compromise on this subject.

- ISO 9001 certified
- ISO 14001 certified
- VCA-P certified
- AEO certified
- STC certified
- OHSAS 18001 certified





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