

Heavyweight News from Sarens

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Dear reader,

Sarens is proud to present its heavy lift and special transport achievements throughout the world! Since the previous newsletter, we successfully completed the main scope of the module installations in Koniambo, thereby firmly displaying our capabilities to be the reference in heavy lift and specialized transport project work.

We also welcome our newest member of the Group, Canada Crane Service, located in Nisku Alberta, and are looking forward to actively pursue the heavy lift and specialized transport opportunities in this part of the world.



Enjoy the reading of this sample of our people's capabilities!

Wim Sarens **CEO** Sarens Group





More & even bigger challenges in New Caledonia



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Location : Koniambo - New Caledonia Equipment used : 174 axle lines SPMT's; 2 x LR 1400; Sartower; CC 8800; CC 2800; 2 x LR 1350; 2 x Kobelco 250t; LR 1160; LR 1200; SCX 2500; 2 x LR 1300

Sarens does the organization of heavy module transports, heavy crane hire, module assembly with lifting towers and skidding.

Main works: 15 modules and 2 silos with weights varying between 2.000 and 3.750t. Gantry tower lifting height: 60m some positioned modules were sized 27m x 30m x 60m. Additional modular constructions will be handled in the

future. Sarens currently has 120





Sarens enters China



Location : Qingdao - China Equipment used : 150 axle lines SPMT's

The modules for the Koniambo project were loaded-in at Qingdao (different shipments) and transported to the Koniambo site - New Caledonia. The modules weighed between 2.000 and 3.750t

Sarens' Rigging International to the Rescue

Location : Port of New Orleans – Louisiana, USA Equipment Used : LR 1400; Slide Shoe System; 8 axle lines SPMT's

Sarens Group Member Rigging International was called upon to perform emergency repairs to a Port of New Orleans container crane damaged when it collided with the superstructure of a ship berthed at one of the busiest container terminals along the Mississippi River. Known for their ability to quickly respond to emergency situations, the Sarens' Rigging International team mobilized to site within days, completing the necessary repairs and returning the crane to

full production ahead of schedule. In support of the response the Sarens Slide Shoe System was used to reposition the crane for disassembly of the boom. With the container crane relocated, an LR 1400 along with several other support cranes, were used to remove the boom which was then placed on SPMT's for transport to a covered facility where the damaged boom underwent the necessary repairs. After successfully repairing the boom the crane was reassembled, tested, and returned to the terminal operators where it could resume cargo handling operations.





Rigging in the Sunshine State

Location : San Clemente – California, USA Equipment Used : 32 axle lines SPMT's; Outside Lift System (OLS); Elevated Runway System; Hydraulic Lifter; Temporary Lifting Device (TLD)

Sarens' Rigging International recently returned to the San Onofre Nuclear Generating Station to perform a steam generator replacement project at Unit 3. The construction team transported and lifted a total of four (two in & two out) steam generators weighing 650t each. A custom Temporary Lifting Device mounted on top of the plants Polar Crane removed the two old steam generators from their position inside containment. The old steam generators were then down-ended onto an Elevated Runway System, transferred out of containment to the Outside Lift System, lifted off the Elevated Runway System and then placed onto SPMT's for transport to a temporary storage area located on the



plant site. For the placement of the two new steam generators, the same equipment was utilized in reverse fashion to complete the final installation.





Erection of C-3 splitter



Location : Dahej Gurrat – India Equipment used : SCT (Sarens Climbing Tower); CC 8800; CC 2800

Sarens Asia has been executing the heavy lift contract of the Dahej Gurrat. For the 3 heaviest lifts the SCT lifting tower was used in combination with the CC8800. The top lift of this project was the erection of Asia's / India's biggest cracker weighing 1.390t with a length of about 125m which required the SCT lifting tower to be used in a top guyed height of 139m.

This complete heavy lifting project has been a success due to the detailed engineering by both Sarens HO and Sarens Asia and the fully committed international site team of Dutch, Belgian, Korean, German, British, Thai and Indian Sarens employees



Projects in Poland



Location : Świebodzin - west side of Poland Equipment used : AC700 – second solution

At the end of 2010 Sarens Polska assembled the largest statue of Christ worldwide. The monument is much larger than the similar one in Rio, Brazil. The weight of the body including hands was 24t, requiring the change of cranes from GMK7450 to AC700 (currently the largest telescopic crane in Poland). The operation was performed under difficult conditions in an area subject to high winds.

The lifting operation was broadcasted live on two Polish stations.



Transport & load-out in Mexico

Location : Tampico - Mexico Equipment used : 36 axle Lines SPMT's





Location : Wierzchowice - Poland Equipment used : LR1400; AC250

Sarens Polska lifted 4 modules of a gas block from 100 to 140t. This job was executed in the south of Poland for a Czech company. Special solutions for slings and spreaders were used to make the tailing operation possible.



Load-out of 2 vessels (each



Location : Manzanillo - Mexico Equipment used : Modular trailers; 14 axle lines SPMT's; 300t Crawler cranes; 500t Telescopic cranes; Sarlift

Transport and assembly of 632 beams (200t, 28m long) for a railway viaduct of about 12km.



Special spreaders in Lithuania



Location : Elektrenai - Lithuania Equipment used : CC2800; AC650

Sarens Polska used special spreaders for the lifting of modules from 100t to 220t.

Menzel Ledjmet Est



Location : Menzel Ledjmet Est - Algeria Equipment used : TC 2800; AC 350

Working in the middle of nowhere is always a challenge. But when it comes to Heavy Lift Cranes under the South-Algerian sun, the challenges are getting bigger. Thanks to a well-organized and perfectly supervised lift, Sarens recently installed this Debutanizer aiming at treating Natural Gas directly after extraction. Proudly standing, it now waits for commissioning, surrounded by the Sahara.







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South Deep Twin Shafts



Location : Carltonville – South Africa Equipment used : CC2800; AC650; LTM1400; LTM 1030

Sarens South Africa performed the cranage and rigging for a job for Gold Fields, a gold mining company. Our client manufactured and assembled the head gear.

The heaviest lift were the back legs of 183,5t, the knuckles weighing in at 110t and the horizontal tie-in beams weighing 56t.

Together with our client Sarens assembled the new steel head gear to the first floor. We will be returning in April for the second phase which will complete the total of 3 floors.

Sub-station **Platform Load-in**



Location : Barrow-in-Furness - UK Equipment used : 24 axle lines SPMT's

Sarens Uk Ltd recently performed the side-on-load-in of a 450t platform using 24 axles SPMT, supplying the barge management and linkspan bridge. The platform was driven into position on site and set down onto concrete blocks using the SPMT's integral hydraulic suspension.





WIND PROJECTS



Location : Collgar Windfarm - Merredin - Australia Equipment used : LR 1350; SCX 2800; CC 2800; LTM 1160; LTM 1130; GMK 4075

Sarens Australia is undertaking its largest project to date; a wind farm near Merredin, Western Australia. Stage one of the project consists of 111 x V90 Vestas turbines spread over a 20 x 10 km site. The turbines are being erected in two stages. The first stage, base (76t) and middle (43,5t) tower sections, are being installed by an LR1350 and SCX 2800 with main boom while the main crane, a CC 2800, completes the wind turbines. The nacelle and hub are lifted in one piece and is the heaviest lift at 93t which is mounted on top of the 80m high towers. Currently there are 16 Sarens Australia team members who have installed over 33 turbines and counting.





New bridge in Sydney



Location : Sydney – Australia Equipment used : 2 x 12 axle lines SPMT's

Sarens Australia moved the first complete 400t rail bridge in Bankstown, a suburb of Sydney. The move was completed in 2 hours. NSW State Rail showed keen interest in the project and are looking to further improve the time to Location : Dunkerque - France Equipment used : 2 x CC 2800; 2 x SENNEBOGEN 5500

Vestas awarded Sarens the contract for the logistics of their off shore project "THANET 300 MW", situated near Ramsgate (UK). Sarens is in charge of offloading all wind components as well as the pre-assembly on the quay before they are positioned in the UK.

> Location : Bukowsko - Poland Equipment used : CC2400; TC2800; AC200; Sennebogen 863HD; AC100

Sarens Polska executed for Martifer Energia Sp the assembly of 9 x 2MW wind turbines on a tower of 78m high. The hilly site was difficult to get at due to winter conditions (- 25° Celsius).



change rail bridge structures.







Location : Mekele - Ethiopia Equipment used : 2 x TM1095 RT 540; RT 530; AC 50; 2 x Sarbas

Our "Sarbas"-team worked together with staff from our local branch in South Africa to build a wind park (120 windmills – 120 MW).

The advantage of the Sarbas system with regard to a normal crane is that this system is especially designed by Sarens to work in extreme circumstances. Standing still the system can sustain winds of 300km/hour. The assembly is modular and the Sarbas can drive to the new position.





Replacement of a railway bridge



Location : Cenon - France Equipment used : 2 x 10 axle lines SPMT's; **Bracing System**

Eiren

During a timeframe of three and a half hours, a temporary bridge was removed and new bridge parts were positioned. . Total weight was 400t.

Altogether lift, turn and place

ocation : Hohensaaten - Germany

Equipment used : 2x 10 axle lines SPMT's; Support system; 4x Climbing system CS250t; twin barge Jozef & Rosa;

4x Winch 20t; Ballast system; 6x load out ramps

The bridge was jacked up from its supports (1m high) to a height of 5m using the Sarens Climbing system. As soon as the bridge reached the exact height, the SPMT's (with the steel supports) were positioned under the bridge. After positioning and fastening of the supports, the bridge was driven onto the barge. While positioning the barge above the bridge foundations using the winches, the bridge was turned 90 degrees on the barge by driving the SPMT's in "circle drive".

Afterwards the bridge was lowered on to its final position.





Location : Kinderdijk – the Netherlands Equipment used : 2 x 150t Sarlift: 12 axle lines SPMT's; AC500; LTM1500

Sarens transported a hydraulic hammer (221t) from the manufacturing hall to a test location. In order to transport the hammer by SPMT's, it was jacked up by a Sarlift. At the final destination 2 cranes lifted the hammer on to a temporary construction for testing.

Cyprus revisited



L.SMIT.Z

Location : Powerplant Vasilikos – Cyprus Equipment used : 4 Strand Jacks HSL1000; Sarskid 300; 10 axle lines SPMT's; 300t crane





For the second time Sarens installed 8 boiler-units (weight: 125 to 175t) in the "Vasilikos" power plant. The boiler-unit first had to be lifted using a 300t crane and a combination of "Stretch - SPMT - Gantry - 2 Strand Jacks 100t" on top of the skidding beams that were installed on a 6m higher level. From this position the boiler-unit was lifted 28m from horizontal to vertical position using 2 Strand Jacks 100t and a special tailframe placed on the Sarskidsystem.

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Colophon

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