

SCA Helios Project

Pulp and Paper



Case Study: SCA Helios Project

SCA, a hygiene and printing paper production company, has recently invested approximately SEK 7.8 billion (approximately USD 962.2 million) to increase the production capacity of the Östrand pulp factory in Sweden. This new plant is today the leader in resource management, generating surplus energy that is sold in the form of green electricity. Customers are offered both total chlorine-free (TCF) and elemental chlorine-free (ECF) pulp that has been produced with raw materials from sustainable forestry.

It is one of the largest industrial investments to have been made in Sweden and the largest ever in Norrland (northern Sweden). SCA Östrand has doubled its production capacity from 430,000 to 900,000 metric tons and features the largest production line for bleached softwood kraft pulp in the world.

» Each subproject was extensive and involved major logistical challenges. «

Under the project Helios, named after the sun god in Greek mythology, Timrå and Norrland received a pulp mill that will create growth, employment and welfare in Norrland for future generations.

The investment comprised eight different subprojects. Each subproject was extensive and involved major logistical challenges. Valmet Technologies AB was one of the main suppliers of technologies and equipment for the SCA Helios pulp mill and awarded deugro (Finland) Oy the contract to execute the transportation of parts of the cooking and evaporation plant.



Client
Valmet
Technologies AB



Project Owner
SCA



Investment
USD 962.2
million



Cargo
30,000 FRT;
294,000 MT;
Max. heavy lift
405 MT



**Origin and
Project
Location**
From China to
Sweden



**Tandem lift operation of a
150 MT ImpBin section by
the vessel's gears**



A 405 MT digester section being lifted by vessel gears in Port Tunadal

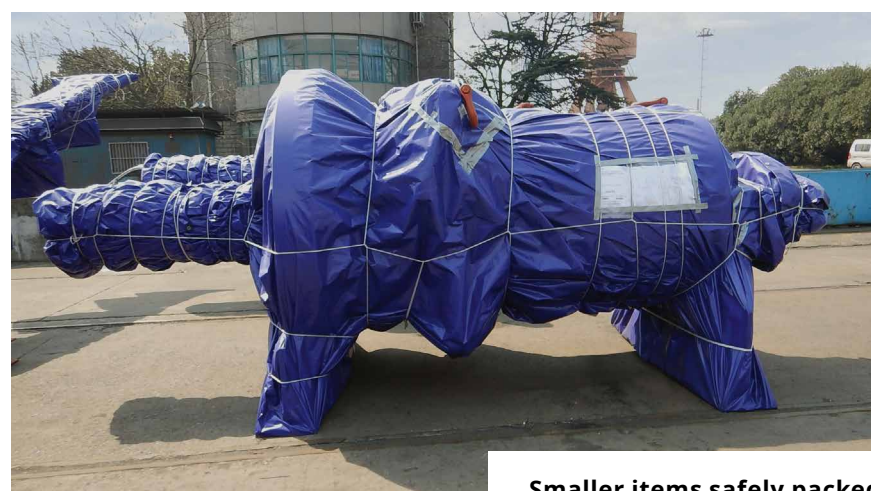
Project Execution

deugro (Finland) Oy executed one of the most challenging projects that the company has ever completed in Sweden, delivering 30,000 freight tons of project cargo, including heavy lifts of up to 405 metric tons, to SCA Östrand's pulp mill site in northern Sweden. deugro's scope within this project was delivery from Shanghai, China to the job site in Östrand, Sweden.

The SCA Helios Project in Östrand was an excellent example of teamwork. deugro Finland had the lead on the project and control tower, with close support from deugro (Sweden) AB for local operations on-site. With assistance from dteq Transport Engineering Solutions, a company of the deugro group, for site surveys and lifting

arrangements, and deugro (China) Co., Ltd. for local operations and coordination, the execution of the project was an astounding success.

deugro's Breakbulk & Heavy Lift Chartering Division assisted the project team with their expertise, and all parts were shipped by chartered heavy lift vessels.



Smaller items safely packed and waiting for loading in Shanghai, China

Even though the majority of the cargo was not stackable due to the dimensions, deugro aimed to optimize costs for the ocean transportation by shipping the cargo in three separate shipments.

The main challenge was presented by the maximum length over all (LOA) of 140 meters and draft

restrictions of 7.4 meters at the Östrand jetty. Due to the cargo's dimensions and weight, only certain types of vessels could berth at the jetty, and special permission had to be applied for with the port authorities. Only the first two voyages were allowed to call at this jetty directly. Because the third and last shipment required a heavy lift of 405 metric tons, it needed to call at another port. After careful evaluation of all surrounding ports in the greater area of Östrand, deugro chose the commercial Port of Sundsvall to be the best port to discharge the cargo. During discharge, smaller items were reloaded onto trucks and heavier items were reloaded onto the barge directly.

Due to an unpredictable vessel delay in Norway, deugro's project team faced a major obstacle on the last leg of the transportation project. The final delivery to the

jetty at the mill site was planned to be executed with a tug and barge combination, which was already waiting at the Port of Sundsvall. However, as the timeline was tight and the barge already had its next loading scheduled, both the tug and barge couldn't wait any longer. As a result, the deugro team had to think outside the box and explore other options in order to finish the project successfully.

Needless to say, it was a challenge to find a replacement at such short notice. The few barges that could meet the requirements of heavy cargo with a diameter of almost

15 meters were occupied in other projects and time was running out. In the end, deugro's management decided on a transloading operation, from quay onto the barge, which involved a roll-on/roll-off solution using a Self-Propelled Modular Transporter (SPMT). Once it arrived at the Östrand jetty, the cargo was then rolled off onto the SPMT's final resting place. Thanks to this creative, on-the-fly solution, the team managed to overcome challenges and deliver the cargo to the site on time.

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deugro Scandinavia

Since the opening of deugro (Finland) Oy in October 2015, we have successfully established deugro as one of the leading project freight forwarders in Finland. In January 2017, deugro expanded to Sweden and opened an office in Stockholm to serve local customers and support other deugro offices with their Sweden-related projects.

Today, these two deugro offices operate under deugro Scandinavia, covering both Finland and Sweden and also serving other countries in the region, such as Norway and the Baltic countries. deugro Scandinavia has an extensive team consisting of experienced project professionals focused on heavy lift, among others.

Over the course of just two years, deugro has taken a place as one of the main project logistics specialists in Scandinavia, serving clients in the energy, pulp and paper, ports and cranes, as well as other heavy industry sectors.

A 150 MT ImpBin section being lifted onto SPMT axles at the jetty in Östrand, Sweden



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