

PRESS RELEASE

Demag crane system for first automated paper roll store in Africa

- Mpact Paper orders fully automated roll-shipping store
- Two process cranes provide for fast handling rates
- Gentle transport of rolls by means of vacuum grippers

Wetter, Germany, 10 June 2016

Terex Material Handling has been awarded a contract by the South African Mpact Operations (PTY) Ltd. Company for the delivery of two fully automated process cranes and a warehouse management system. The cranes will be used in the customer's paper-roll shipping store in the modernised and extended paper factory in Felixton, KwaZulu-Natal, South Africa. In the town located to the west of Richards Bay, Mpact produces recycled based papers such as Liner and Fluting for use in corrugated containers. The investment in a new paper-shipping store is an important step in Mpact's growth strategy at the location.

Mpact is modernising its paper factory in Felixton to produce lighter weight papers and meet increasing demand whilst improving energy efficiency. Production capacity will increase to 215,000 tons per year. The automated shipping store with the two cranes accommodates the entire output of the paper machine. The storage capacity amounts to 14,200 t with a fill capacity of 80%. The two identical Demag cranes in the roll store are equipped with vacuum lifting devices to provide for fast and, above all, gentle storage and retrieval of the unwrapped paper rolls. Material can be stacked up to a maximum height of 15.10 metres. The cranes are designed to transport up to 63 rolls per hour. Installation of the cranes is due to start in August 2017. "We are delighted with the confidence placed in us by our customer Mpact. The scope of this project with our automated Demag process cranes is the first ever order for



cranes for a paper roll store in Africa", explains Lutz Dowy, Vice President Sales & Service for the EMEAR region at Terex Material Handling.

Additional information

Mpact Limited, formerly Mondi Packaging South Africa, is one of the largest producers of paper and plastic packaging in the south of Africa. The company, which is based in Melrose Arch, has 24 plants in South Africa, Namibia, Mozambique and Zimbabwe. Mpact has 3,790 employees. The company is a market leader for packaging made of corrugated paper, recycled paper-based cartons and corrugated base papers, PET preforms and styrene trays. The paper division operates paper factories in Felixton, Piet Retief and Springs, which are all certified to ISO 14001 and ISO 9001.

The paper factory in Felixton will have an annual production capacity of 215,000 t of recycled corrugated base papers. Mpact is modernising its paper factory in Felixton to meet rising demand to produce lighter corrugated papers made of recycled paper. "The investment in our group is decisive for the growth opportunities that our markets offer", states Mill Manager Brian Smith and goes on to explain that the investment in the state-of-the-art paper machine technology will boost both the quality of the paper products as well as efficiency and competitiveness. To ensure that the paper rolls are carefully stored and retrieved just in time, Mpact is investing in a new paper-roll shipping store for which Terex Material Handling is supplying two new Demag cranes.

Maximum performance and availability 24/7

Up to 650 tons of paper has to be loaded in the new roll store every day. The rolls, which are configured to meet individual customer specifications, measure between 500 and 2,500 millimetres in width and weigh between 370 and 3,300 kilograms. The store covers a total area of more than 2,700 square metres and can accommodate 14,200 tons of paper when filled to a capacity of 80 per cent. The store is filled and the products are shipped on a 24/7 basis. During periods in which no loading takes place, rolls of paper are combined by the cranes according to scheduled deliveries and staged for the following retrieval operations. Thanks to flexible and variable arrangement of the storage pattern, the distances between the



stacks of paper can be automatically adjusted to match production, i.e. the available storage space is utilised to optimum capacity.

All drives feature variable-speed control by frequency inverters. Lifting and lowering speeds are 80 m/min at full load and 120 m/min with no load. The cross-travel and long-travel drives also feature variable speeds of up to 100 and 120 m/min, respectively.

The use of state-of-the-art inverter systems in all three motion axes contributes towards a considerable reduction in operating costs. The energy generated during the lowering and braking sequences is fed back into the mains network and can be used by other equipment.

The warehouse management system (WMS) is operated on a virtual server and communicates with various systems, such as the process control system, various databases, control of the winder and control of the materials handling equipment, for example. In addition, the WMS co-ordinates the rolls on the conveying system and implements specific storage and retrieval strategies.

About Terex Material Handling

Terex Corporation is one of the world's leading suppliers of crane technology with Demag industrial cranes and crane components. The core competence of the Terex Material Handling business group lies in the development, design and production of technically sophisticated cranes, hoists and components and the provision of services for these products. The business group manufactures in 16 countries on five continents and is present in more than 60 countries, reaching customers in more than 100 countries.

About Terex Corporation

Terex Corporation is a diversified global manufacturer engaged in the mechanical and plant engineering sector. A core activity of Terex Corporation is the provision of reliable, customer-driven solutions for many applications, including the construction, infrastructure, shipping, transportation, quarrying, mining, refining, energy, utility and manufacturing industries. Terex reports in five business segments: Aerial Work Platforms, Construction, Cranes, Material Handling & Port Solutions and Materials Processing. Terex Financial Services offers a wide range of products and services to assist in the acquisition of Terex equipment. Please visit our websites at <u>www.demagcranes.com</u> and <u>www.terex.com</u> for further information.

Images:





Reliable operation 24/7: Demag process cranes equipped with vacuum lifting devices for handling unwrapped paper rolls.



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