

ROTAMAT® Screw Press RoS 3 – an international success in paper industry applications

Wood and paper industry is deemed to be one of the biggest industry markets with the highest levels of turnover. The down sides of its success are the need for huge production and storage facilities and frequently no less significant are the problems caused for the surrounding environment. Particularly a high water demand and more stringent environmental standards require ever increasing efforts when it comes to wastewater treatment and clarification, which is also reflected in the high amounts of sludge generated.

For easy and cost-effective disposal of these sludge volumes, the best possible dewatering solutions are of special interest. But it is also economic efficiency that counts, in addition to the actual dewatering results achieved by the applied technology.

It shows that the HUBER ROTAMAT® Screw Press RoS 3 is among the internationally leading suppliers when it comes to dewatering secondary sludge (biological surplus sludge) and primary sludge (fibrous sludge). References all over the world give proof of our thoughtfully designed, easy to operate and highly reliably products.

KCPM - KIEVSKIY CARDBOARD AND PAPER MILL, Kiev (Ukraine)

Site:	Ukraine (installed in 2002)
Machines:	3 x 2 RoS 3 machines installed in parallel
Application:	Dewatering of primary sludge (fibrous sludge)
Throughput:	50 - 60 m ³ /h total throughput
Inlet DS:	1.8 - 3.6 %
Final DS:	32.8 - 49.5 %

In 2002 already, six ROTAMAT® Screw Press units for sludge dewatering could be sold to the Ukraine via local sales partners. These machines were installed successfully in one of the country's biggest paper factories. Preliminary tests with a mobile containerised RoS 3 unit were the basis for this sales success. KIEVSKIY CARDBOARD AND PAPER MILL was convinced of the excellent operating results but equally important for them was the operating reliability and economic efficiency of the complete dewatering system.

The special arrangement of the installation (three of two parallel units) guarantees the continuous treatment of the generated sludge without quality or quantity losses even during maintenance or in the event of unexpected failure of a machine. In order not to unnecessarily waste energy and operating media particularly in phases with low throughput, each of the ROTAMAT® Screw Press units can be switched on and off individually to permit quick reaction to varying inflows.

TRAKIA PAPIR, Pazardzhik (Bulgaria)

Site:	Bulgaria (installed in 2006)
Machines:	2 RoS 3 units installed in parallel
Application:	Primary sludge dewatering (fibrous sludge)
Throughput:	15 - 35 m ³ /h total throughput
Inlet DS:	1.5 - 3.0 %
Final DS:	44.1 - 46.9 %

TRAKIA PAPIR belongs to the DUROPACK Group and, with almost 70% market share, is the leading manufacturer of cardboard packages in Bulgaria. Until 2006, the fibrous sludges generated during paper processing were treated in almost 30 year old vacuum presses. Due to their old



3 x 2 ROTAMAT® Screw Press RoS 3 units installed in parallel (Ukraine)

age and technical principles in general the customer was not satisfied anymore with the dewatering results achieved (about 30% final DS). The use of two ROTAMAT® Screw Press RoS 3 units significantly increased dewatering efficiency and drastically reduced the amount of sludge generated so that the costs for sludge disposal could be cut by one third. HUBER machines also excel with their low operating and maintenance costs as their special design reduces energy and operating media demand. Furthermore, their susceptibility to wear is reduced compared to vacuum presses.

INTERNATIONAL PAPER, VCP Três Lagoas (Brasilien)

Site:	Brazil (installed in 2008)
Machines:	4 x 2 RoS 3 units installed in parallel
Application:	Primary sludge dewatering (fibre and drinking water sludge)
Throughput:	100 - 103 m³/h total throughput
Inlet DS:	2.5 - 2.7 %
Final DS:	> 40.0 %

Our successful cooperation over years with INTERNATIONAL PAPER, the worldwide biggest paper processing company, brought us the biggest individual order ever received for paper sludge dewatering. In 2005, we already had sold and installed four ROTAMAT® Screw Press RoS 3 units for sludge treatment in one of their many manufacturing bases in Brazil. These machines have been operating without any problems to date. Impressed by their performance and excellent operating results combined with



2 ROTAMAT® Screw Press RoS 3 units installed in parallel (Bulgaria)

high economic efficiency and cost-effectiveness, INTERNATIONAL PAPER ordered another eight ROTAMAT® Screw Press RoS 3 units for their production site VCP TRÊS LAGOAS. These machines are used to dewater a mix of fibre-containing primary sludge and chemical sludge from the precipitation stage of the factory's water treatment system. They were delivered, installed and commissioned in summer 2008. Due to our extensive experience over many years with such kinds of applications the required dewatering results and polymer consumption did not represent a problem and were even better than demanded. The well-proven functional principle of the ROTAMAT® Screw Press RoS 3 shows excellent functionality, especially with regard to the dewatering results achieved with the precipitation sludge admixed to the fibrous sludge. Moreover, the enclosed system minimizes the potential for environmental contamination with chemical sludge.

Andreas Böhm
Business Unit Industry



4 x 2 ROTAMAT® Screw Press RoS 3 units installed in parallel (Brazil)