

Oradoc new headquarters.



PRESS ROLL DEWATERING OPTIMIZATION THROUGH PERFORMING DOCTORING SYSTEMS

In board and tissue production lines, dewatering is one of the main tasks of the forming and pressing sections. Considering that 95% of all water carried by one Kg of board, paper or tissue, after last press nip must be dried by huge amounts of thermal energy, any small increase in the dryness entering the drying section of a paper and board machine - or Yankee and hoods of a tissue machine - can help achieve a fast return on investment.

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This process is crucial in order to remove as much water as possible from the pulp and it is considered a key-factor in energy optimization.

Forming and pressing sections are made up of several press rolls like suction press, blind drilled, grooved and other rotating machinery used for paper process production and have to have, as primary scope, a dryer sheet out of the section under exam. One of the many topics about those press rolls' performance is

the capability to remove water from themselves and keep the roll surface clean and even if modern paper machines guarantee high linear speed and so angular speed for press rolls, the centrifugal forces acting on the water are not sufficient for acceptable water removal. For those reasons, special doctoring systems can be used to reach better performance. Oradoc advanced Dewatering Systems have developed solutions that meet the needs of Tissue and also of the paper and cardboard industry. These systems can be used to optimize rolls dewatering performances, while improving energy consumption, on blind drilled, grooved, suction couch and suction press rolls. Many mills' production departments still deal with old trays leaking water into the felt run before

the nip, trays with very primitive doctors or made in a shape that keeps water inside. An attentive technical survey helps **Oradoc** technicians to design and manufacture trays fitted with a multiple system of doctors that perfectly fit the rolls, improve the press dewatering, deflect splashing and optimize performances. Depending on type of application, the possible installations may be:

- Double OraFlex, flexible blade holders, fixed on OraTwin doctor back; this could be installed with or without save all tray;
- Double OraFlex, flexible blade holders, fixed directly on the save all tray; this installation is typical for Tissue press application.

Following, one of the dewatering installation that proved more efficient and performing, that involves the experience shared with Oradoc most valuable customer.

ORADOC AND SAIGON PAPER

Established in 1997, Saigon Paper is proud to be the leading company in manufacturing tissue paper and industrial paper in Vietnam. With a total production capacity of tissue paper of 43,680 tons/year and a total production capacity of industrial paper of

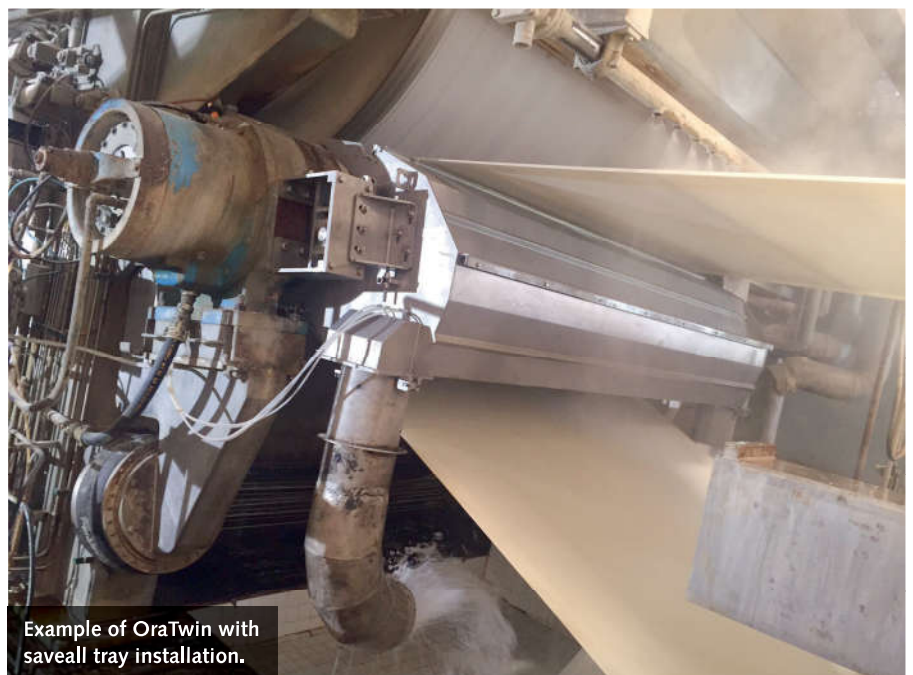


OraTwin with saveall tray installed at Saigon Paper premises.

224,640 tons/year, Saigon Paper successfully offers on the domestic and international markets a wide range of tissue products including napkin paper, facial tissue, pocket tissue, kitchen towels, medical towels and toilet paper with the best quality under brand name Bless You, Saigon. The industrial paper and packing production includes medium, testliner, chipboard and duplex serving

cardboard. Saigon Paper owns two paper mills - My Xuan 1 and 2 at My Xuan A Industrial Park, Tan Thanh District, Ba Ria-Vung Tau; the My Xuan 2 is one of the largest paper mills in Vietnam. After having thoroughly analyzed Saigon Paper's needs, Oradoc installed an OraTwin on the suction press roll of PM6, the backing system specifically conceived to support two OraFlex doctors on the same application, with the possibility to change their behavior according to different doctoring needs. OraTwin is usually applied on various press rolls, where high performing cleaning and dewatering solutions are needed, thus optimizing their working life. The full installation is also equipped with an external saveall tray. When re-started after 17 hours of shutdown, the new system immediately proved

performing: the two blades improved water removal significantly, with an increased dry output. Compared to the dewatering system previously installed, OraTwin fulfilled the customer's expectations. Even the type of blade included in the supply proved to be more durable and robust, the right thickness used avoids it to get easily bent and remains straight along the whole cross direction. ●



Example of OraTwin with saveall tray installation.