

IntensaMaXX reliably removes contaminants

Trouble-free pulper detrashing operation

A kidney has the task of removing foreign material and purifying the body. Working in much the same way, the new patented IntensaMaXX is the kidney of the TwinPulp pulping system. As a component of stock preparation, it separates up to 80% of contaminants out and thus prevents the much-feared “pulper infarction.”

Like a kidney, the stock preparation can also suffer from colic – namely, when unpleasant contaminants obstruct the detrashing system. Especially pernicious are spinnings that can arise in a matter of seconds due to wires, strings, nets or large films. For the paper manufacturer, that usually means expensive and nerve-wracking maintenance work, since the spinnings have to be carefully removed from the pulper detrashing machine.

The IntensaMaXX offers a promising solution to this problem. As the newest product in the proven Intensa line, it guarantees outstanding pulper detrashing and nearly total malfunction elimination.

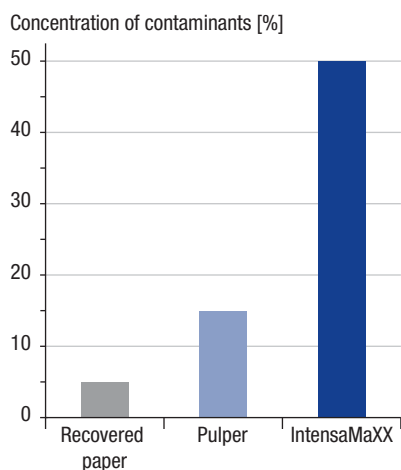
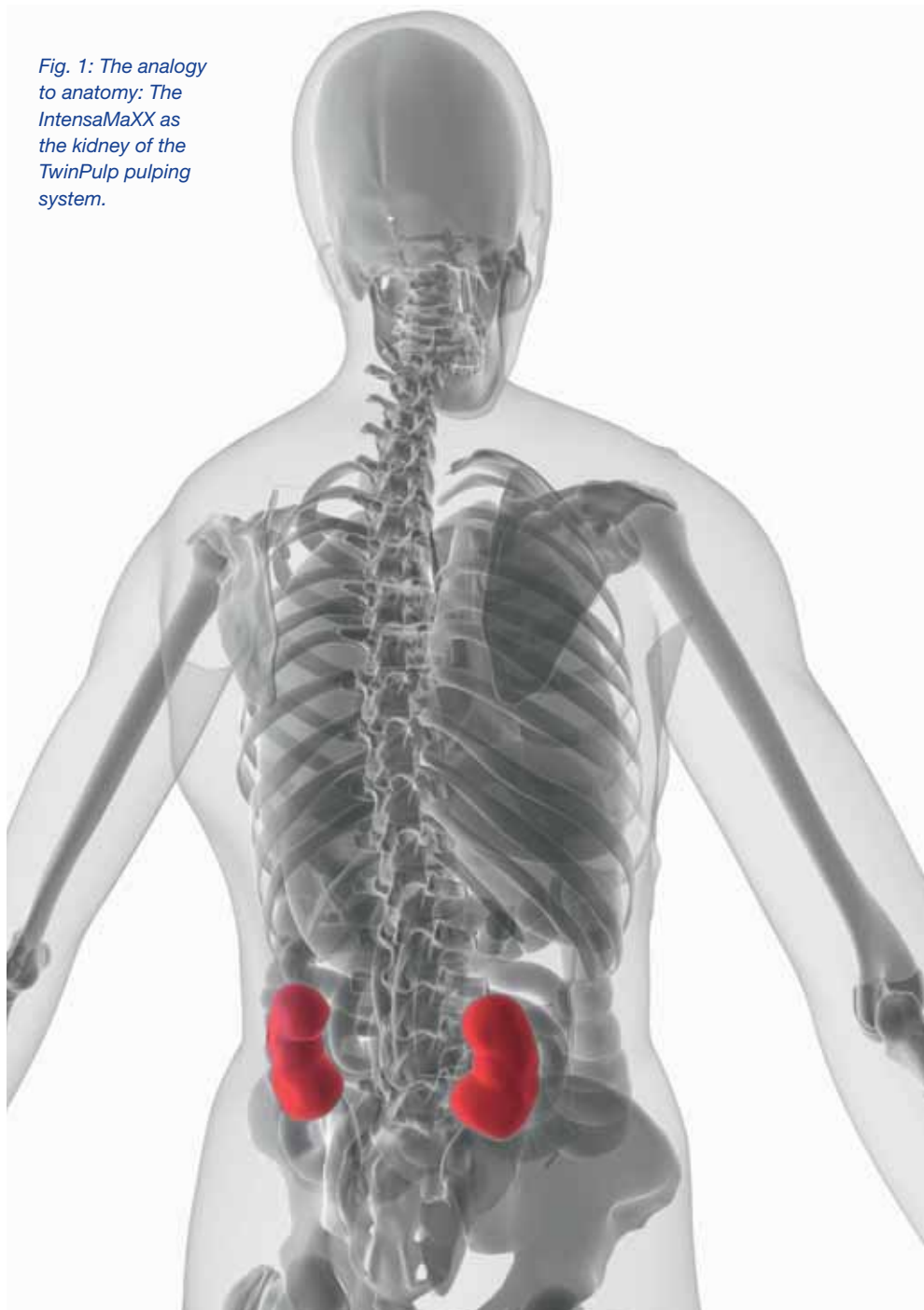


Fig. 2: Typical portion of contaminants in preparation of recovered paper.

Fig. 1: The analogy to anatomy: The IntensaMaXX as the kidney of the TwinPulp pulping system.



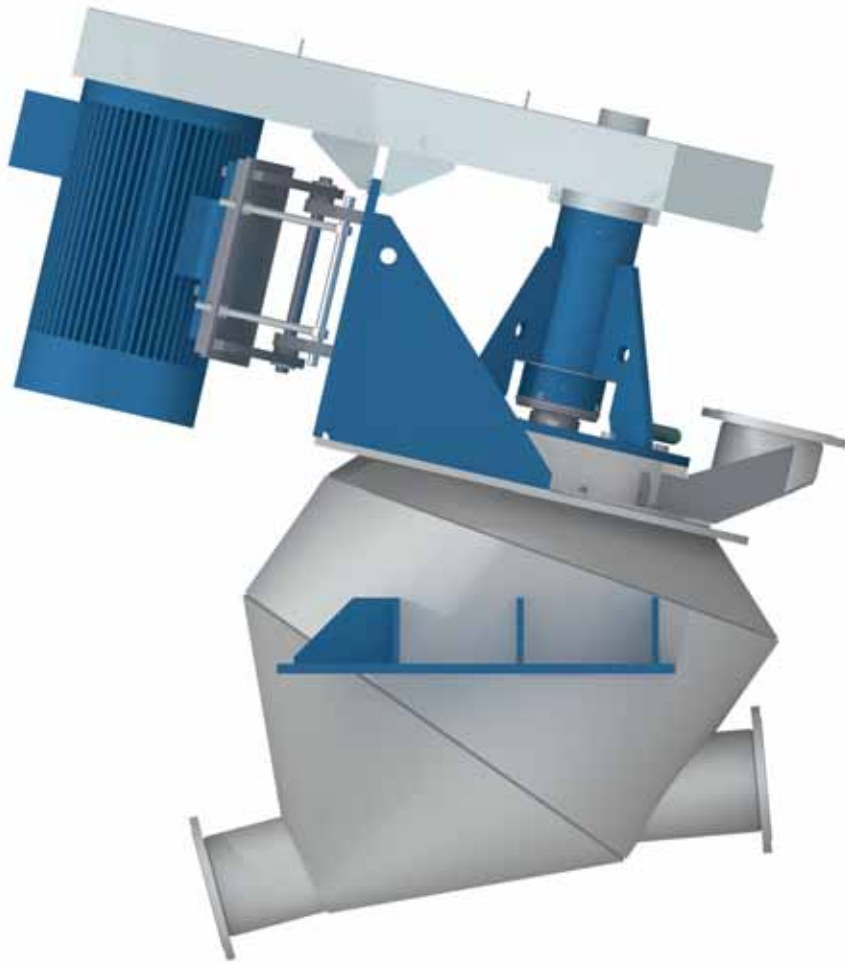


Fig. 3: Three-dimensional model of the IntensaMaXX.

The eccentricity already seen in the IntensaPulpers IP-R and IP-V is even more strongly pronounced with the IntensaMaXX. The particular orientation of the rotor-screen unit in the asymmetrically shaped tank ensures that no vortices form in the IntensaMaXX. Development of spinnings is thus successfully counteracted.

Contaminants do not impair operational reliability

The IntensaMaXX is a component of the TwinPulp system that removes contaminants from the paper. While recovered paper fibers are dissolved in the pulper, indissoluble contaminants accumulate in it until they reach a concentration of ca. 15%. For comparison: At about 5%, the raw material fed in at the start of stock preparation has a noticeably lower impurity content.

The accumulation of contaminants in the pulper can substantially impair its capacity. As the TwinPulp diagram shows, a portion of the accumulated contaminants is for this reason continuously pumped out of the pulper (1) into the IntensaMaXX (2). Here they further accumulate while the purified partial stream (3) flows back to the IntensaPulper. Starting at a contaminant concentration of ca. 50%, the washing water washes the fibers out of the IntensaMaXX and back into the pulper; afterward, the contaminants are routed to the drum screen (5). From there, excess water goes back into the pulper while the largely fiber-free,

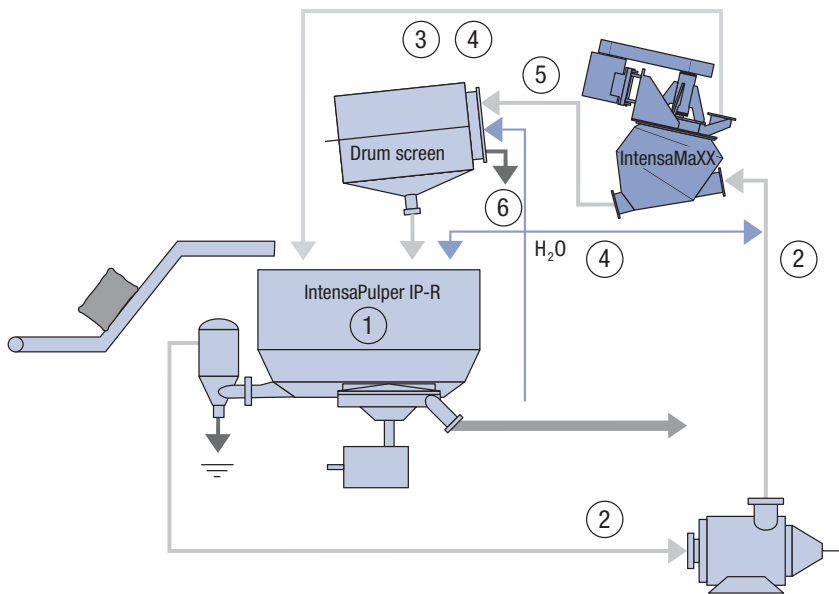


Fig. 4: IntensaMaXX in the TwinPulp system, the continuous LC pulping system for recovered paper grades containing contaminants.

pre-dewatered contaminants (6) are further dewatered in the reject press.

The asymmetrical tank form of the IntensaMaXX ensures smooth operation during the entire pulper detrashing process. Stoppages due to spinnings are a thing of the past, even at the highest concentrations of contaminants. Through the downward discharge of contaminants, heavy parts are particularly well managed: They are reliably discharged at intervals without endangering operational reliability.

Clean pulpers and fiber-free rejects at Varel

At Varel, the German paper and board mill, an IntensaMaXX has been reliably detrashing the recovered paper pulp for two board machines since December 2010. There, two pulpers of the AP type pulp mixed recovered paper and supermarket OCC with a total capacity of 600 metric tons/day. The IntensaMaXX is responsible for the detrashing of the two pulpers simultaneously “through process sequencing.” The result has convinced the customer: The pulpers are cleaner than ever and the rejects fiber-free.

Thanks to its impressive performance in contaminant removal and operational reliability, in the future the IntensaMaXX will be preferably used by Voith Paper in all new systems. Together with the IntensaPulper IP-R, it forms a high-performance unit in the

TwinPulp pulping system. A retrofit is also possible in existing systems.

On Focus: IntensaMaXX

ProRunability **+++**

Section: stock preparation
Paper grade: all recovered paper grades

Contact



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Fig. 5: IntensaMaXX successfully used in practice for stock preparation at the Varel GmbH & Co. KG paper and board mill, Germany.



Fig. 6: Normal contaminants, which the IntensaMaXX separates and which are removed from the downstream drum screen.

Fig. 7: Strange contaminants often have to be removed from pulping systems.