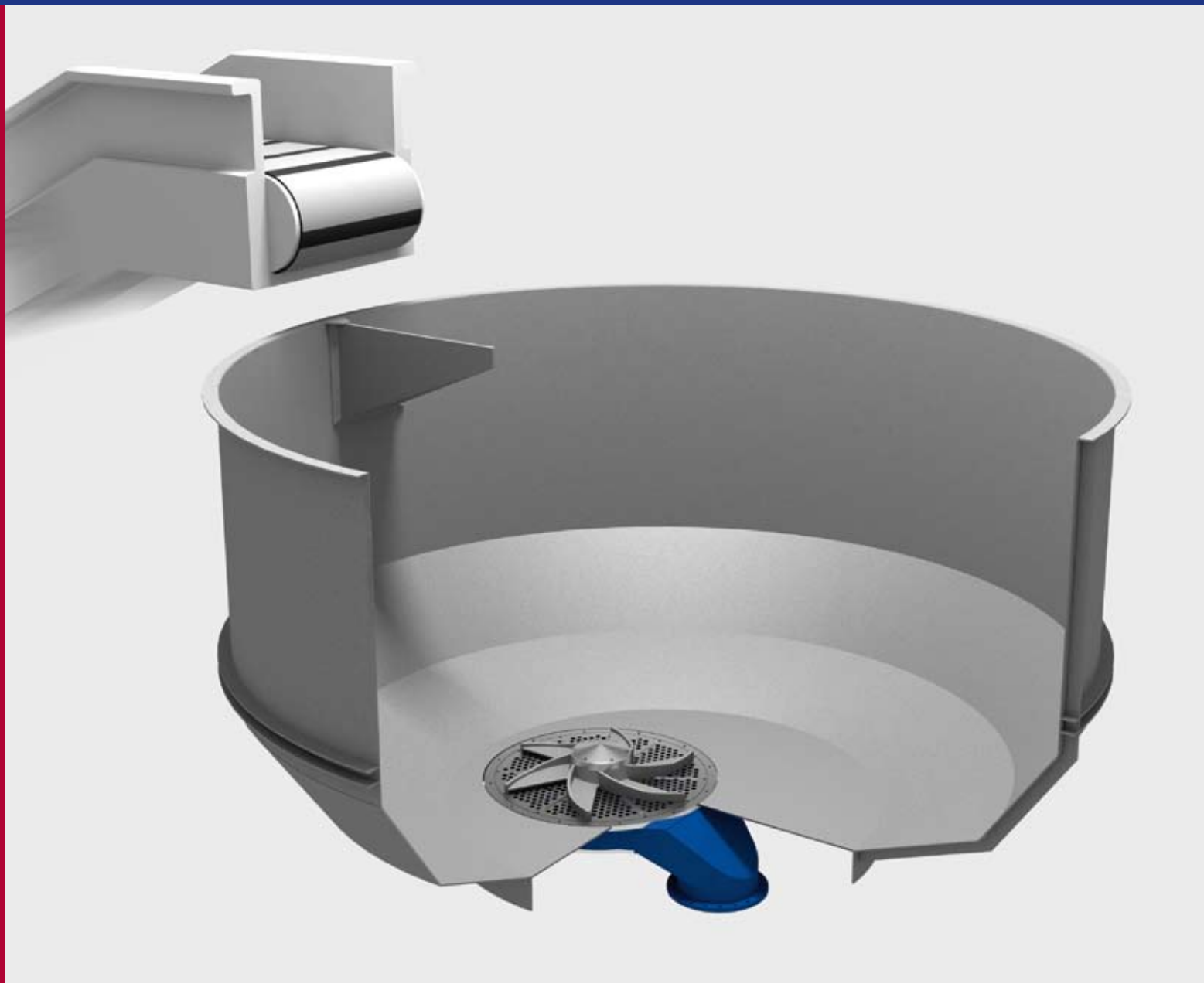

IntensaPulper IP-V with double break bottom tank and eccentric rotor.

IntensaPulper now for recovered paper

Up to 25% energy savings without sacrificing quality

With the new IntensaPulper concept, Voith Paper has taken another step forward in saving papermaking costs. The IntensaPulper is more efficient than conventional pulpers, not only for virgin fiber furnish, but now for recovered paper as well. Furthermore, nearly all LC pulpers can be retrofitted with Intensa technology.

Up to 25% energy savings not only sounds fantastic – it is nothing short of revolutionary. Official recognition of this feat came in October 2007 when Voith Paper was awarded one of the three coveted Palmes de l'Innovation at the ATIP trade fair in Grenoble, France for the IntensaPulper design. To achieve these enormous savings without sacrificing quality, Voith Paper implemented some radical design changes in the IntensaPulper IP-V for virgin fiber furnish. These include eccentric arrangement of the rotor in the pulper tank and double break bottom tank geometry for flow-optimized transition from the pulper floor to the cylindrical tank wall. The sum effect of these measures is not only extremely intensive and faster mixing, but also less energy consumption.

IntensaPulper IP-V in operation.

Savings for virgin fiber pulping

To put energy savings into perspective, a virgin fiber capacity of 100 tons/day processed using the new Intensa concept under design conditions saves approximately 175,000 kWh per year or up to 25% of the pulping energy formerly required. Thanks to systematic application of this concept, the same technology can now be used for LC pulping of recovered paper furnish. For pulping recovered paper, the IntensaPulper flow characteristics had to be modified even more radically.

The decisive difference lies in the number and arrangement of the tank's stock deflectors. Since every flow deflection causes energy losses, the IntensaPulper IP-R for recovered paper furnish only has one deflector in the pulper tank instead of the four or six tank baffles normally used. This specially shaped deflector is designed to minimize energy losses while effectively directing the flow of stock. The rotor has also been technologically improved, resulting in more effective defibering and energy-saving agitation even at high stock consistencies. Intensa technology is now used very successfully in Japan for pulping recovered paper, and additional customers in Asia and Europe have already ordered an IntensaPulper IP-R for pulping recovered brown grades.

Advantages of the Intensa concept

All papermakers can benefit from the proven advantages of energy saving and optimal agitation, because Intensa technology can be retrofitted to conventional LC pulpers as well. An "IntensaTechnology" upgrade kit, comprised of a rotor exchange or rebuild and flow deflector modification, soon pays for itself with a very fast ROI – thanks to impressive quality improvements and energy savings.

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