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## Voith Paper

## Combisorter™ CSM Performance Checks – Lower Housing







## Combisorter<sup>™</sup> CSM **Performance Checks – Lower Housing**

The Combisorter is a coarse tailing screen that effectively removes heavy and lightweight contamination from recycled furnishes and provides significant deflaking to recover fiber that would otherwise be rejected from the system in the form of flakes.



section and an upper washing, screening, dewatering and conveying section.

The disk rotor blade in the lower section clears the extraction plate of debris, preventing contaminants from plugging the extraction holes and, in combination with the surfaces of the stationary extraction plate, provides the attritionzone necessary for the deflaking of undefibered furnish.

The disk rotor also contributes to a rotational flow (together with the tangential flow of stock into the inlet chamber) that produces a vortex and, with it, a radial pressure gradient in the lower housing.



Example - Decline in performance due to wear

raises the operating pressure in the lower chamber. This is required for higher throughput rates.

Centrifugal forces created from the vortex in the lower housing will cause heavyweight particles to move outwards and rotate along the inlet chamber walls. A heavy rejects outlet is connected tangentially to the lower housing. An intermittently operated junk trap arrangement, connected to this outlet, regularly discharges heavyweight particles from the machine to minimize internal wear.

If not routinely inspected, the wear resistant lining (basalt tile) of the lower housing will over abrade and heavyweight particles will wear through the stainless steel exterior of the housing. Loss of production and increased fiber loss will result.

check for signs of wear, abrasion or wash-out

At least every six months check to determine if the machined surface that accepts the extraction plate is washed out or damaged.

**Basalt tile and grouting - Monitor inside chamber** walls for signs of wash-out or abrasion

## At least every six months check to determine if the Basalt Tile wear lining and grouting is in place and free



Worn basalte tile and missing grouting



Worn machined surface for mounting extraction plate arrangement

of excessive wear. Excessive wear will abrade through to the stainless steel housing causing leakage of the machine's contents.