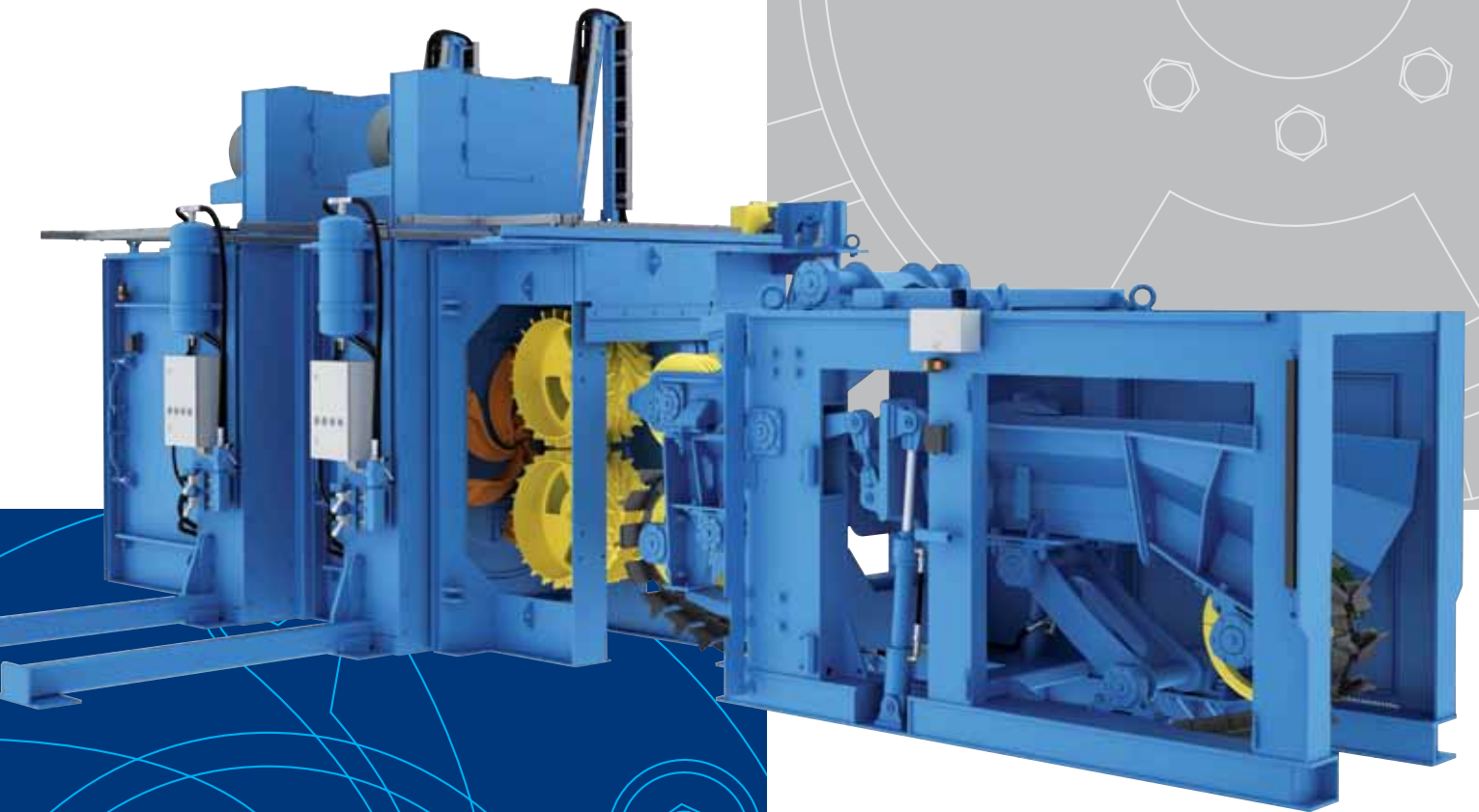


Fixed Rotor Debarkers for High Speed Production Lines



VK5000-Series **VK8000-Series**

Single-Rotor Debarking

Double-Rotor Debarking

Butt-End Reducing
together with Debarking



debarker specialist

Modern Debarking Technology –

VK5000 and VK8000-series debarkers

New generation VK debarkers are designed according to modern production needs. VK5000 frame module is meant for small and medium size logs whereas the VK8000 frame module is used primarily for medium size and larger logs.

A modular construction allows step by step investment as the need changes. The first stage of the investment can be a single rotor machine. The machine can be extended by adding a reducing rotor and/or a second debarking rotor when higher speeds or clean chip quality is needed. A complete 3-rotor machine has a combination of two debarking rotors and a butt reducing rotor.

Basic and Heavy Duty equipment category of feedroll modules

VK5000 and VK8000-series debarkers have a standardised feedroll module design either with one or two pairs of rolls. The critical components of power transmission can be selected in Basic or Heavy Duty (HD) equipment category. The HD-version uses extra strong components as standard, for example gear boxes, drive shafts, cylinders, cranks and feedroll pole shafts. Also the hydraulic

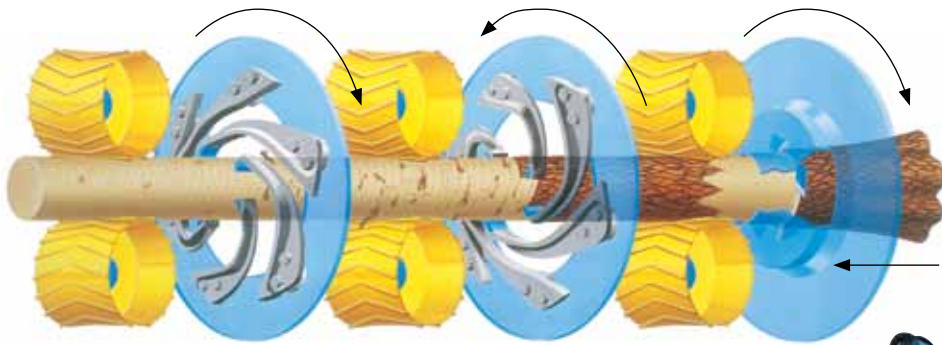
tensioning of the feedrolls is selected according to the feed speed. A more simple closed circuit hydraulic system (Basic-version) is used for lower feed speeds whereas the active hydraulic system with a powerpack is the best solution for high speed lines (HD-version).

VK-Combi construction

A VK-Combi debarker is all you need for a modern high production sawline. The construction of a VK-Combi machine consist of one or two debarking rotor(s), centring infeed conveyor and feedroll modules equipped with safety doors. A fully automatic butt reducing module can also be added to the machine.

One machine can debark as much as 1 000 000 m³ logs in one year. Thanks to the counter rotating rotors (double-rotor debarking) the debarker enables production of clean sawmill chips in all conditions independent of tree species.

The debarking rotor can be equipped with (A) pneumatic remote controlled tool pressure or (B) hydraulic tool pressure:



VK8000HD-COMBI-3R

- 1 Infeed conveyor, VK72
- 2 Frame module, 8000HD
- 3 Reducing rotor, RE
- 4 Debarking rotor 1, 5056 (clockwise rotating)
- 5 Debarking rotor 2, 5056 (counter-rotating)



One line, One debarker

A) Debarking rotor with pneumatic remote controlled tool pressure

- The "Air Seal" construction of the rotor enables remote control of tool pressure during operation
- A log can be left in the machine when the rotor is running – automatic opening of debarking tools when the feed stops
- Pneumatic tool pressure – effective management of compressed air secures timely control of air to the debarking tools
- Rotor with double-row ball bearing to secure smooth rotation – minimum stress guarantees a long life-time for the air seal
- Strong debarking tools are manufactured from wear resistant steel – the tool bodies are of a welded construction. Replaceable tool tips have carbide wearing surfaces
- Strong tool shaft is fastened at both ends with a double-row bearing – thereby reducing the stress applied to the tool shaft

B) Debarking rotor with hydraulic tool pressure

- The tool pressure is created by stretching the rubber spring hydraulically – the pressure level is controlled by a separate pump unit

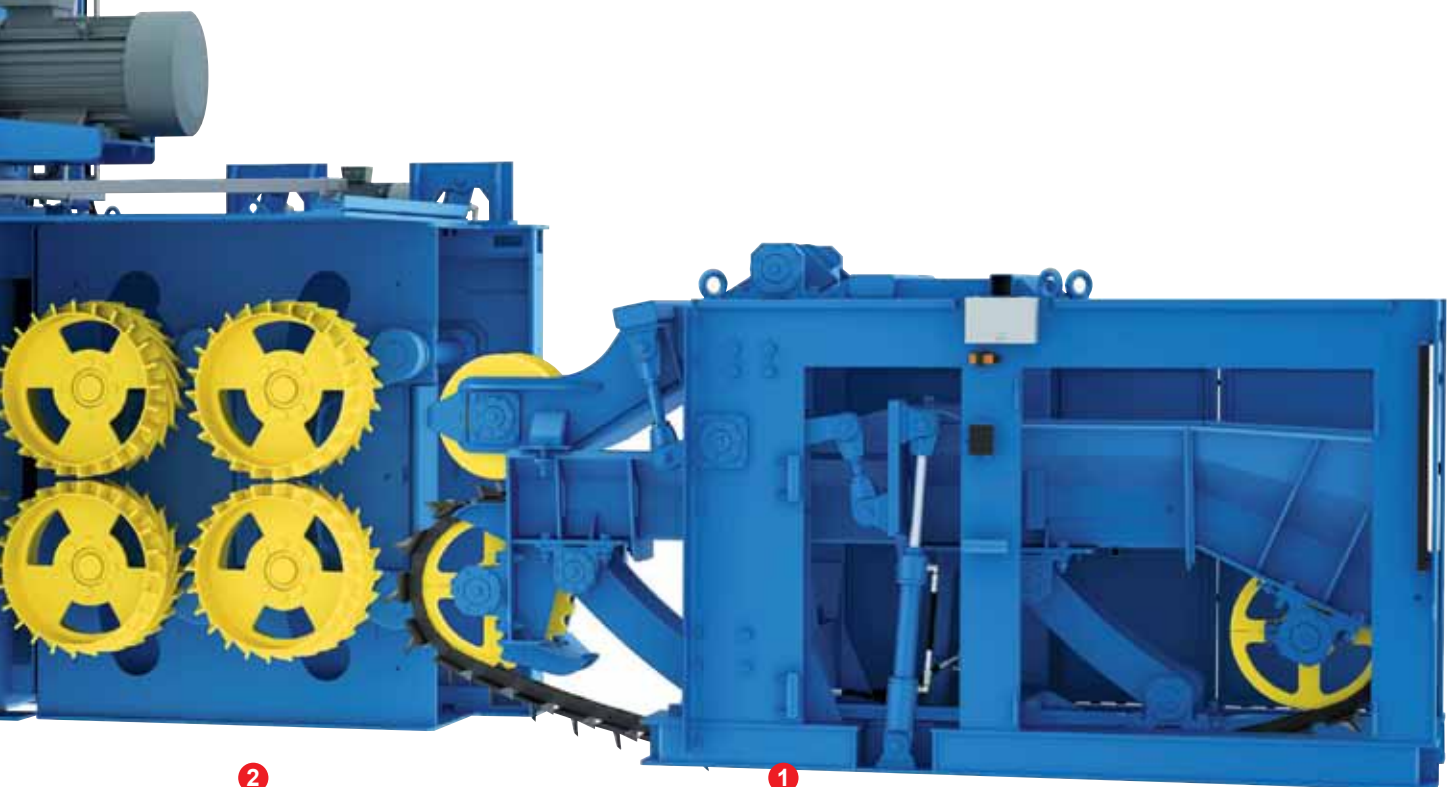
- Debarking tools are installed on the outfeed side of the rotor – the tool arm is designed for ease of opening
- Tool arms are manufactured of forged steel – replaceable tool tips
- A special rotor model (32SX) with flexible tool arms is aimed for birch plywood plants. This ensures gentle debarking and excellent debarking quality – minimal fibre loss

Double-rotor debarking

- Counter-rotating rotors – very clean chips from high speed lines
- Optimum maintenance – service of one rotor and tool change can be carried out without production stops as the second rotor will continue to run
- Debarking in two stages minimizes fibre loss

Butt-end reducing together with debarking

- Reducing improves recovery – optimum log centring increases the output by maximizing the log diameter for the saw
- Reducing at debarking speed – no interruption in the process
- Fully automatic system – no operator
- Reducing tools with fixed settings – diameter of RE-ring to be selected according to the setting of the sawline
- Change of RE-ring quick and easy with a hydraulic changeover device

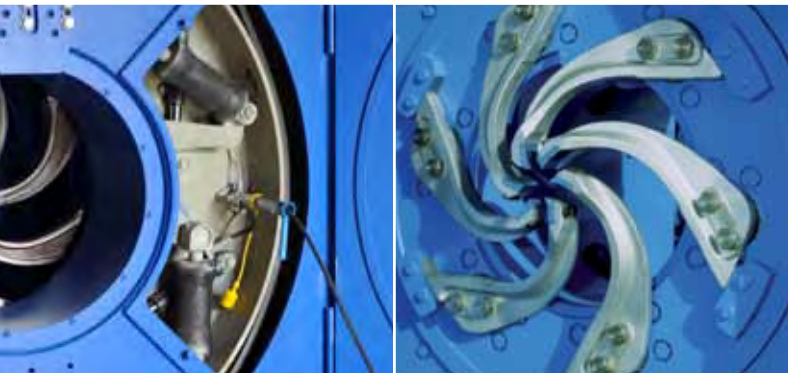
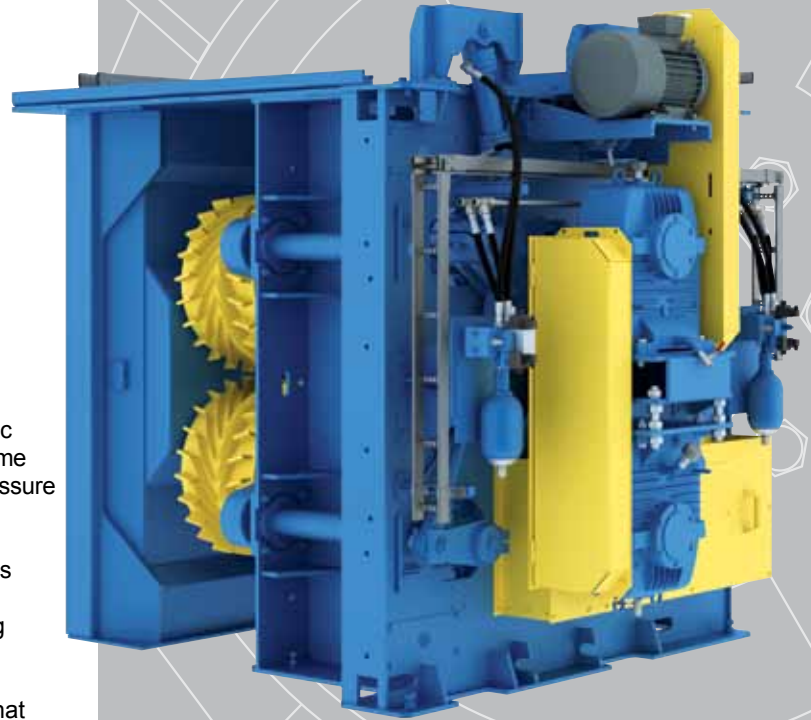


Automatically centring infeed conveyor

- The automatic vertical and sideways centring VK infeed conveyor guides the logs smoothly between the feedrolls – minimal fibre loss
- The conveyor is equipped with guard doors on both sides, giving additional safety (HD-version)

Hydraulic tensioning of feedrolls

- Fully adjustable hydraulic pressure depending on log size and debarking conditions
- In a Basic category each pair of feedrolls has its own hydraulic pressure circuit with a pressure accumulator – the pressure level is adjusted by a separate pump unit depending on the log size
- The HD-version is equipped with an active hydraulic system where all feedrolls are connected to the same hydraulic circuit and powerpack – the hydraulic pressure level can be chosen from a remote control panel
- A dual pressure system helps to minimize wood loss – when a log enters the machine the feedrolls are pressed with a lower pressure level and a higher working pressure begins only when the log has pushed the feedrolls to open (HD-version)
- To make the log feeding even more gentle, the pressure system can optionally be equipped so that the feedrolls stay open in the same position as the previous log – guarantees lowest possible stress on the machine parts and minimal fibre loss (HD-version).



Feedrolls with replaceable inserts (FibreMax)

- Three insert models available for different conditions: flat teeth, sharpened teeth and spiked.
- Eases the maintenance work on feedrolls – no special skills required
- No cutting effect on the log – less fibre damage
- Better grip for frozen logs with spiked inserts – minimal fibre loss

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