Valmet Technology and Service AB is specialised in solutions for the areas pulping and screening, stock preparation and approach flow of paper machines.

Valmet Technology and Service AB, which is based in Finland, offers smart solutions and services for stock preparation in the paper industry. They offer products and services for stock preparation processes, which are based on innovative thinking and new product solutions. With new technology and technical solutions, the pulp production economy can be improved and new, more economical raw materials can be utilised. The product portfolio further covers all kinds of cleaner plants, for heavy as well as light weight reject, deaeration systems, disc filters for fibre recovering and thickening, as well as refiners, drum thickeners, bow screens, etc. The company aims to find process solutions that have the best pay-back for the investment. All team members have more than 20 years of experience regarding different paper mill processes.

### Pulping Systems

**TamPulper™ R**

Pulping and coarse screening for waste paper in one step.

- Process for difficult recycled waste paper grades
- Low energy consumption and high pulp quality
- Low total investment as the system is simple and has less equipment/auxiliaries than a conventional system.
- Continuous and compact system
- Low maintenance costs of equipment because heavy rejects will be removed in early stage of the process => not recirculated in the system. This essentially reduces the wearing of equipment.

**TamPulper™ B**

Advanced new bale and broke pulping

- New pulper techniques with an effective special rotor for bale and broke pulping
- Power consumption of the TamPulper rotor is the same or lower than with a conventional rotor. In spite of that, stronger agitation than with a traditional rotor will be reached.
- Compact hutch due to a better mix intensity
- Existing pulper can be rebuilt by a new TamPulper rotor and a stronger agitation and higher production can be reached.

**TamPulper™ R und B**

Modification of existing machines / systems

A replacement or supplementation with TamPulping products helps you to reach a better pulping result, lower loss of fibers and lower wearing.
Fine Screening

A complete selection of new fine screens has been developed. They are applicable in fine screening e.g. for recycled fibres, mechanical pulp, broke screening and machine screen applications. The rotor design allows more flexible process and the screen hardware can be more compact.

A new generation of multi stage screening in addition to single stage screens is available. Together both screen types offer a complementary series, which gives a high flexibility to build different screen rooms with lower energy consumption and with lower investment.

Cleaner Plants

Twister®

Cleaning performance at a new level and at the same time less energy consumption! The Twister® is the latest development in separation technology and the only cleaner on the market that achieves such a high efficiency at 2% feed consistency.

Due to its innovative design and state-of-the-art technology it is a high-performance cleaner with high consistency results and low energy consumption.

Characteristics:

- Up to 2% feed consistency operation with comparable cleaning performance as conventional cleaners at 1%.
- Superior cleaning performance over entire operating consistency range
- Up to 50% lower applied energy
- Considerably lower reject rates than with conventional cleaners
- Celleco Twin Wall design

Cleanpac® 700, 700 HQ, 700 LD, 700 HQLD

This is the most modern cleaner of this product line. It provides an exceptional high level of separation efficiency not only for heavy reject, but also for light weight reject and air.

The cleaners, which are arranged in a satellite assembly, can be adapted easily to the respective throughput.

Tripac™ 90 / Cleanpac® 270 - for fine dirt particles

The Tripac™ 90 / Cleanpac® 270 units are used very effectively for cleaning bleached pulp, in recycled fiber stock preparation plants and - with minor modifications - also as fractionator of TMP.
**Fibermizer®**
The Fibermizer® is the final stage of a cleaner plant and is used for the recovery of fibres and fillers.

**CRC - Continuous Reject Control for Centrifugal Cleaners**
The CRC system eliminates plugging problems and recovers valuable fibre at Cleanpac®- and Albia®-cleaners.

**Albia®**
The Albia® FRB is used as a thick stock cleaner or as a final stage cleaner. The FRB enables fibre losses to be minimized.

**Slidepac®**
The SlidePac® represents the latest generation of cleaners for efficient separation of light weight contaminants, such as hot melts, wax, as well as stickies and plastic particles. The accepts are thickened, which can lead to savings at downstream dewatering units.

**Reject Treatment**

**ATREX® Technology for Pigment Dispersing, Reject Treatment and Disintegration**
The ATREX® grinding and mixing system has already been applied to numerous processes. By regulating the parameters of these processes, a new environmentally sound process to treat the reject flow from the centrifugal cleaners and screens has been developed.

This reject flow, which contains valuable minerals and fibres, can amount from 1 up to even 4% of the total tonnage of the paper production line, and is in many cases hauled to the landfill. With the ATREX® system, most of the valuable minerals and fibers can be recovered and reused in the process.
Disc Filters and Thickeners

Hedemora® VDF™

The Hedemora® VDF™ filter is designed for processing paper machine white water into high quality filtrate, while at the same time recovering the fibres. It is also designed for thickening low to medium freeness pulp, especially where high discharge consistency is required.

The Hedemora® VDF™ filter is available in three different diameters: 3.66, 5.2 and 6.2 m.

Centerdisc® CDP & Centerdisc® CDI

The Centerdisc® CDP and CDI filters are primarily designed for fiber recovery from white water and broke thickening at low to medium grinding degree as well as high stock consistencies.

WellDrain® / WellBag™

„Simple but efficient increased capacity“

The new WellDrain® disc filter sectors feature a unique corrugated stainless steel mesh. As a result of the corrugation, the surface area is increased by approx. 30% and enables a capacity increase of up to 25%.

WellBag™ presents a new design of sectors for vacuum disc filters. The unique corrugation of the mesh of the filter surface creates an increase of 29% in the surface area of the sector, which enables capacity increases of 10 to 25%. The corrugation also facilitates removal of the filter cake.
Valmet offers an extensive portfolio with products and services for rebuild, which increases the performance of your existing disc filters significantly.

The perfect interaction between product, construction and assembling guarantees minimal downtime during the installation.

Your advantages are:

- Higher capacity
- Better filtrate quality
- Higher outlet consistency
- Lower maintenance costs
- Short payback time due to low investment costs

Bow Screens and Gravity Deckery

Bow Screens TS and S

The Hedemora® TS Bow Screen is a simple and effective unit capable of separating fiber as small as 100 microns in length from a water suspension. Police filter, thickener, felt hair remover, ash remover.

The Hedemora® S Bow Screen is a simple and effective unit capable of recovering fibers and other particles as small as 250 microns in length from a water suspension. Police filter, thickener, felt hair remover, ash remover.

GDX™

Valmet open cylinder gravity deckers are used in dewatering pulp, for example, in broke thickening or recycle pulp thickening. The GDX™ is a slusher type thickener based on co-current flow, with the drum rotating in the direction of pulp flow.

The most important advantages:

- Reliable operating
- No down pipes
- Minor maintenance
- Manage high inlet feed consistency

Protection Screens

DualXcluder® Tramp Material Separator

Heavy debris (i.e. wires, nuts, bolts, etc.) can cause damage to equipment in a mill. A DualXcluder® Tramp Material Separator in the pulp feed line gives efficient protection against damage caused by heavy debris in pulp suspensions at consistencies up to 6%. The incoming pulp passes through a slotted screen, with 1.5 - 6 mm slots, that separates the heavy debris. The debris is removed through the outlet opening in the lower part of the separator.
Refiners and Refiner Plates

**DD® 6000 Refiner**

The DD® 6000 is the latest refiner series on the market with the best performing results and lowest operating costs.

The mechanical load decreases up to 15%, due to a lower no load power. The improved rotor centering causes a longer plate life as well as up to 60% more splined teeth lowers, the mechanical wear.

The splined hub and rotor are both reversible.

**DD® 4600 / 4500 / 4000 Refiner**

The DD® 4500/3500 upgrade package offered only by Valmet (OEM for all Beloit-Jones products) for your Beloit-Jones DD® 4000 and DD® 3000 refiners will improve the refining performance and the plate life, which causes lower energy consumption, less seal water consumption as well as lower maintenance cost and lower downtime by improving the controllability.

**Refiner Rebuilds**

Valmet is the original equipment manufacturer for the DD® refiners. You reach an improvement of the performance and the life-time, a reduction of the energy consumption and lower maintenance and operating costs.

**Refiner Plates**

Valmet has more than 160 years of refining experience and supplies refiner plates to all major low consistency refiner manufacturers (Beloit Jones, Twin Flo, Conflo, etc). Working with the Rebuild and Refiner Groups we are able to supply complete refining solutions, not just refiner plates.

**Deflakers**

**DF-6000TM Deflaker**

The deflaker is used for deflaking of remaining flakes. The DF-6000TM convinces by its simple and robust construction.

**Deculator Deaeration Systems**

**Cleanvac® - Deaeration System**

The Celleco® Cleanvac® deaeration system provides efficient pulp deaeration, which leads to improved formation and wire drainage and to lower pressure fluctuations and less foaming.