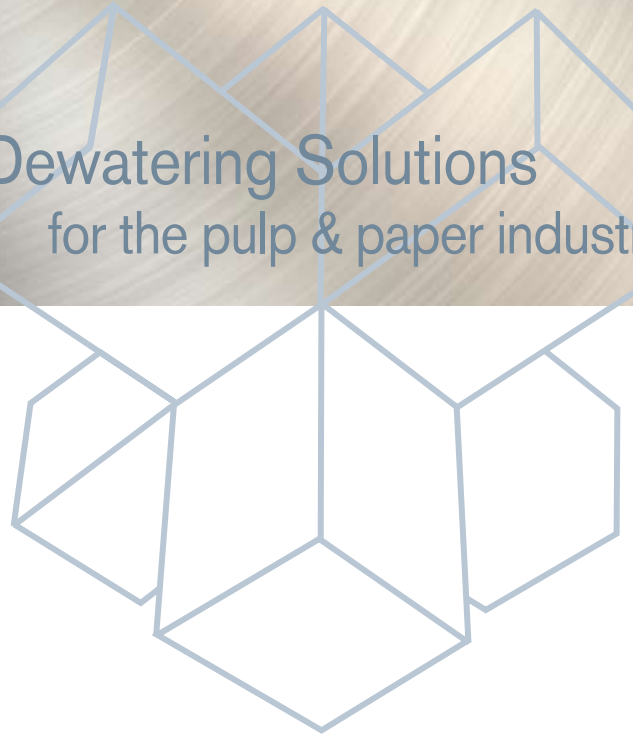




Dewatering Solutions  
for the pulp & paper industry





solutions

experience

innovation

## Who we are...

GL&V Pulp and Paper, a division of the Canadian based company GLV Inc., is a global enterprise in technology and processes for manufacturing of pulp and paper as well as in production and treatment of fresh, process and waste waters.

GL&V Pulp and Paper group provides complete solutions for production of pulp and manufacturing of paper.

The GL&V Pulp and Paper group is one of the largest suppliers of pulp and paper production equipment and a world leader in equipment rebuilds, upgrades and optimization.

The Water Group supplies entire systems for production and management of fresh and process waters as well as for efficient treatment of waste waters and effluents in the pulp and paper industry.

GL&V technology and processes are designed for accomplishing the lowest capital and operating expense combined with the highest feasible total efficiency of the supplied components and process systems.

GL&V is committed to deliver products and services which suit our customer's requirements. The following opportunities are an example of some of the ways we can help our customers reduce their operating costs.

# Dewatering Units

*GL&V units are custom designed to your individual paper and mechanical requirements.*

## Applications

- Forming Board
- Hydrofoil
- Vacufoil®
- TwinVac
- EnerVac™
- Transfer Box
- Suction Box
- Curved Shoes
- Top Formers
- Single HiVac
- Multi-Chamber HiVac
- Uhle Boxes

## Design Variations

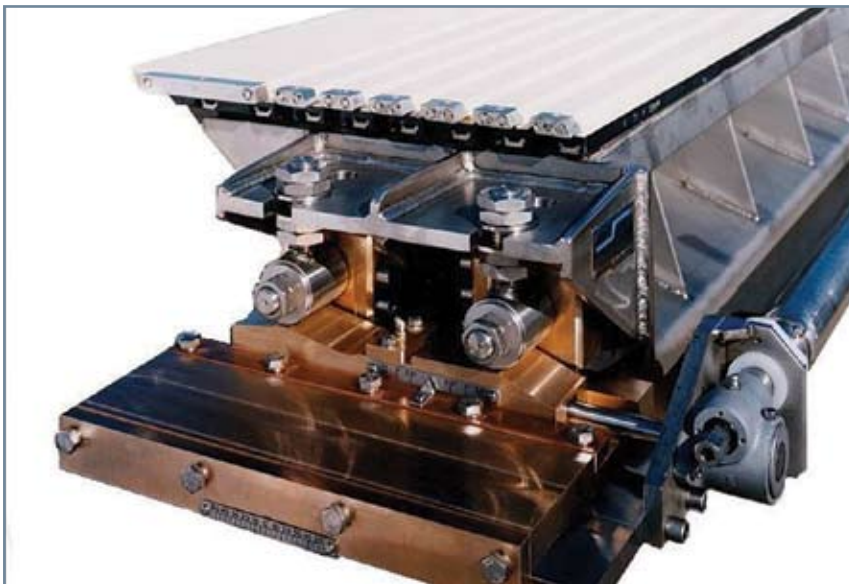
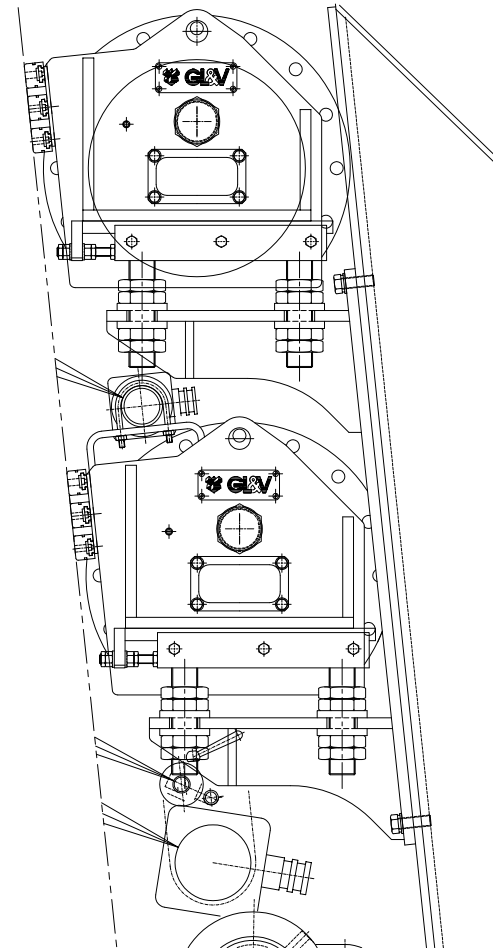
**Vari-Board**—forming board mechanism—providing angular adjustment

**Vari-Form**—forming board trailing blade—variable adjustment

**Vari-Foil**—hydrofoil blade—variable adjustment

**Vari-Pitch**—hydrofoil blade—alternate blade pitch adjustment (lift/lower)

GL&V equipment is fabricated in 316SS material, stress relieved, bead blasted, fitted and aligned with FRP T/bar as required.



# Premium Ceramics

GL&V offers the Superloc™ unique ceramic blade design, suited to all applications:

- no piano keying
- maximum life
- stability and strength

## Premium Ceramics

GL&V manufactures and supplies a number of ceramic material options in various profiles to suit the paper-maker's requirements for blades, spares and covers.

- Alumina Oxide
- Silicon Nitride
- Silicon Carbide

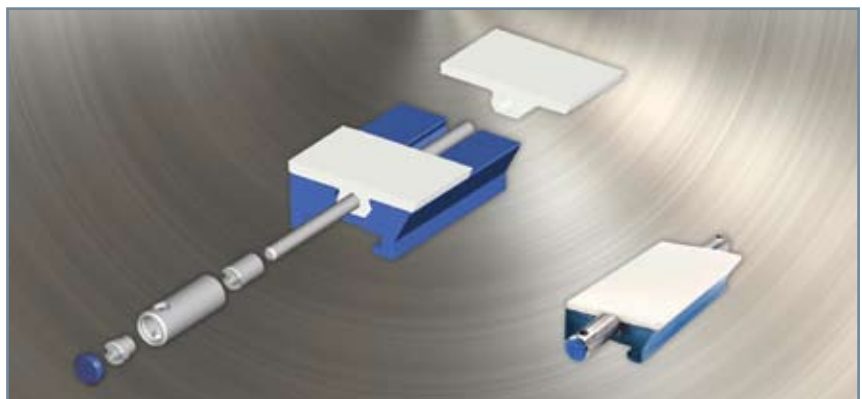
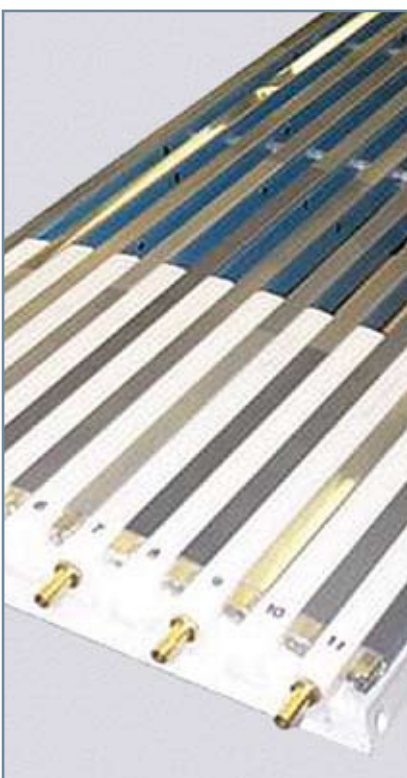
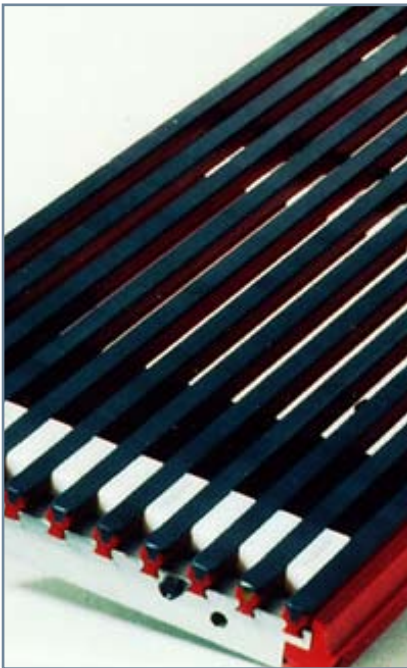
## Unique Blade Assembly

GL&V offers the Superloc™ unique ceramic blade design.

- **No piano keying**—due to the double fixing arrangement, a stainless steel

tension rods holds all tiles firmly together under operating conditions as well as being bonded (under temperature and pressure) to the fiberglass base.

- **Maximum life**—full width precision ground ceramic faces
- **Stability and strength**—pultruded fiberglass base section incorporating XMD full length glass strand.
- **Material selection**—ceramic material selected to match operating conditions with minimal wear (consideration of pressure, temperature and speed).



*Our polyethylene materials have been formulated and developed to give optimum wear and durability across a wide range of operating conditions.*

## Polyethylene Materials

GL&V polyethylene materials, whether virgin or filled, have been formulated and developed to give optimum wear and durability across a wide range of operating conditions.

- **PP1000**—standard UHMW virgin grade polyethylene suitable for all wet end duties—standard BLUE, other colors available.
- **RX5415**—UHMW polyethylene, plus inorganic ceramic powder filler—specially formulated to give a higher abrasion resistance—RED.
- **EVO2® Polyethylene Alloy**—a formulation of UHMW polyethylene alloyed at the molecular level for the greatest durability (up to four times the life of PP1000), suitable for all dewatering and press section duties. The ideal combination providing a low friction coefficient, excellent surface hardness and finish—BLACK on WHITE.

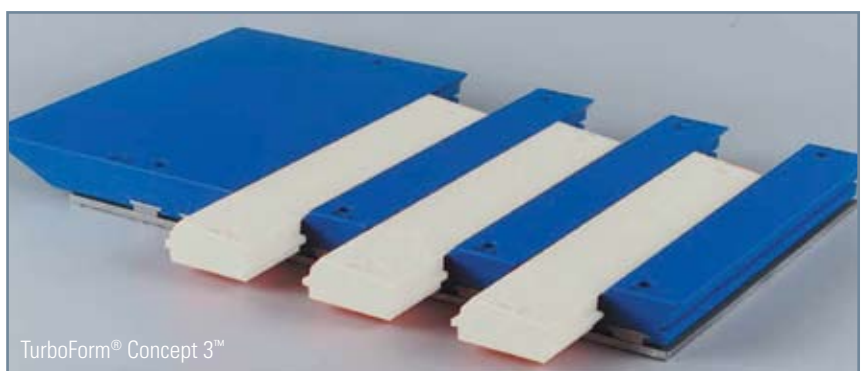
## TurboForm® Concept 3™ Forming Board System

Significantly improves sheet formation.

**Fiber Activity System**—whether manufactured in EVO2 polyethylene alloy or conventional polyethylene materials, the GL&V TurboForm Concept 3

forming board system is the perfect answer to poor sheet formation.

By increasing early table activity, combined with controlled water drainage this system will provide an alternative to the traditional forming board technology for slower paper or pulp machines.



# Engineering

*GL&V uses their expertise to prepare and advise on the optimum table layout, incorporating existing equipment where suitable.*

*GL&V will work closely with production and engineering personnel to bring about unique solutions to overcome process inefficiencies.*

*GL&V offers a complete range of blade and cover materials to suit the various positions on the large diversity of machine configurations.*

## Application

GL&V's dewatering team is able to assist the papermaker to optimize the performance of their paper machine. Whether the priority is to increase production capacity or improve quality GL&V is able to assess the potential and offer a suitable proposal.

## Options

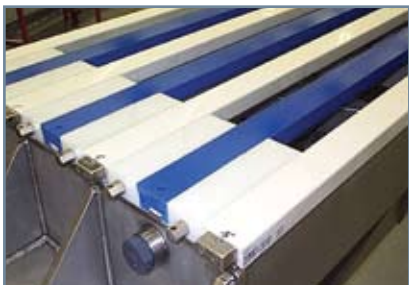
GL&V uses their expertise to prepare and advise on the optimum table layout, incorporating existing equipment where suitable. Virtual drainage examples and appropriate vacuum schedules are frequently submitted to support the project.

## Project

GL&V has worked closely in the past with production and engineering personnel from many mills to bring about unique solutions to overcome process inefficiencies.

## Solutions

GL&V offers a complete range of blade and cover materials, whether polyethylene or ceramic, to suit the various positions on the large diversity of machine configurations.



# Doctoring Systems and Steam Showers

## Doctoring Systems

GL&V has a full range of doctoring products for all sections of the paper machine, wet end through dry end.

Doctoring components include: blade holders, doctor blades, bearings, pneumatic loading tubes, turnbuckles and oscillators.

Many components are interchangeable with other doctor suppliers.

Our custom designed couch roll dewatering double doctors prevent rewetting and offer a dryer, stronger sheet into the press section. Benefits reported by our customers include:

- Reduction in steam consumption.
- Reduction in sheet breaks at press.
- Less hole plugging on drilled rolls.
- Improved moisture profile.
- Improved pick up felt life.

## Steam Showers—a faster more efficient operation...guaranteed

In today's global marketplace, companies are striving to achieve more output in the pursuit to become a low-cost producer.

The Bi-Flo™ Steam Shower is a sophisticated innovation to help the paper machine operate faster and more

efficiently, and manufacture higher quality products. Industry producers who make everything from tissue paper to corrugated cardboard are getting proven results using the Bi-Flo Steam Shower.

No other steam shower combines such flexibility in C.D. (Cross Direction) moisture profile control with high production values...at a price you can afford. Application benefits include:

- 6% to 12% additional production

*Our custom designed dewatering double doctors prevent rewetting and offer a dryer, stronger sheet into the press section.*

- 30% to 60% improvement in C.D. moisture variations
- Reduction of rejects
- Higher reel moisture targets
- Increased machine efficiency
- Steam savings

