

Elevate your forming
performance for light-weight
Board & Packaging applications
MultiForm IR





MultiForm IR is a new generation of Triple Layer SSB (Sheet Support Binder) for the light-weight Board & Packaging market. This new design is engineered to generate a wider range of paper-making benefits compared to earlier generations of Triple Layer SSB products. This gives the paper-maker greater overall performance and reduced total operating cost.

MultiForm IR combines a paper-making surface with both industry high open area and fiber support for designs in this market segment. This is critical for achieving optimal Drainage, Retention, and Sheet Quality within a single design. MultiForm IR combines these superior paper-side properties with a robust machine-side surface, including industry high wear volumes, ensuring record Life Potential. MultiForm IR is designed to meet the full range of performance demands and offer greater customer value.

Improved performance on Light-Weight Board & Packaging applications

Unique MD Warp Concept

MultiForm IR, engineered specifically for light weight Board & Packaging applications is the latest development in Voith's family of I-Series forming fabric designs. As with all I-Series products, MultiForm IR is based on the patented 3:2 ratio machine direction (MD) yarn system. This unique MD ratio allows for greater variation of yarn diameters and densities in the fabric's top-to-bottom surfaces, thus generating fabric layers better engineered for their separate functions.

The fabric's top surface is primarily responsible for controlling Drainage, Retention, and sheet quality properties such as Formation, Porosity, and Smoothness. MultiForm IR offers both industry high open area and fiber support compared to other designs for this application. This combination offers the paper-maker greater operational flexibility in optimizing performance. This is especially important with today's increasing demands on furnish, sheet quality, and production. Customers need fabric designs that address total performance – MultiForm IR is uniquely engineered to do this.

The fabric's machine-side surface dictates Wear, Stability, and Guide Sensitivity. MultiForm IR offers the customer industry high wear volumes, and has set Record Fabric Life on many applications. On machine Stability is excellent – MultiForm IR has shown itself to be superior at holding tension, maintaining CD width, and running with reduced Power Ridging over competitive Triple Layer SSB designs. Guide sensitivity with MultiForm IR is excellent – customers that historically have had to man the Manual Guide Roll for grade changes and stock-on / stock-off situations have eliminated this need. Reduced Drive Loads have also been documented with MultiForm IR.

MultiForm IR combines the paper-making surface of a finer Graphic's product with the coarser machine-side surface of a true Board & Packaging Triple Layer SSB design. Customers no longer have to choose between retention / sheet quality and durability – MultiForm IR offers it all.



Your benefits with MultiForm IR

Drainage

MultiForm IR has industry high open areas, which can offer both formation and couch solids benefits. For applications where extra fan pump capacity exists, MultiForm IR allows for higher headbox flows, giving both cleaner headbox operation and improved sheet Formation.

Fiber Support

MultiForm IR offers improved mechanical Retention through higher fiber support. Reduced retention aid usage will then further positively impacts sheet Formation. The fine paper-making surface will minimize or even eliminate fiber carry and bleed, especially important on cover ply units where bleed can result in sheet streaks and breaks.

Wear volumes

MultiForm IR has industry-high wear volumes to ensure ensuring increased fabric life.

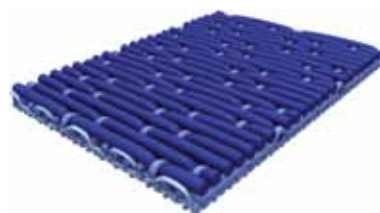
Fabric stability

MultiForm IR features excellent overall fabric stability. Elevated levels of MD stability ensure quick length stabilization within hours of fabric startup and that operating tensions are maintained throughout fabric life.

Drainage and sheet profile benefits are realized. Width stability is excellent, and power ridging at the driven roll(s) is minimized compared to competitive designs. Edges are flat with MultiForm IR.



Fine 2-shed paper side



Stable and durable 8-shed wear side



3



4

- 1 Suitable for demanding paper machines
- 2 MultiForm IR fabric
- 3 Suitable for many board and packaging applications
- 4 MultiForm IR fabric for high quality bleached paper applications

Guide sensitivity

MultiForm IR has shown excellent guide stability on demanding applications and has eliminated the need for a man to be placed at the manual guide roll for grade changes and stock-on / stock-off conditions.

Drive Loads

MultiForm IR has run with reduced Drive Loads compared to competitive Triple Layer SSB designs.

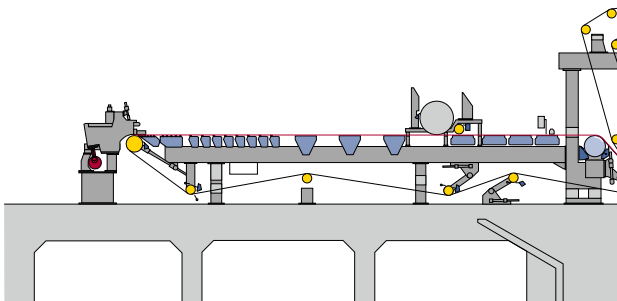
The combination of improved drainage, stability, and unique wear surface properties give MultiForm IR unique performance in this area.

MultiForm IR offers improved performance

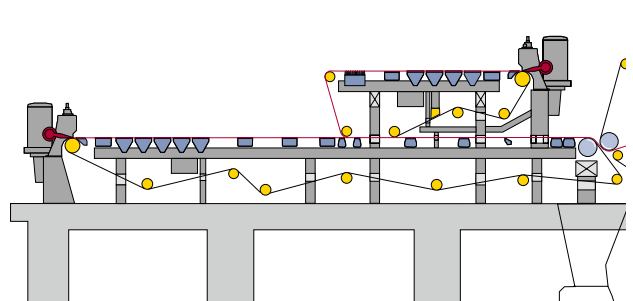
- Formation
- Retention
- Sheet Smoothness
- Drainage / Couch Solids
- Guide Sensitivity
- Wear / Fabric Life
- Stability

MultiForm IR – Paper Grades and Applications

- Sackraft
- Light-weight Liner
- Bleached Board / Coated Board / Food Board
- Open Draw formers (Draw critical)
- MiniTop / MultiTable applications (cover ply)



Fourdrinier machine



MultiLayer machine



Process competence

Process competence means providing solutions from one single source. We work together with our customers to improve the production and quality of paper.

The overall concept of Voith Paper stands for: Supply of high-quality products combined with excellent service and support from one single source. The optimal fine-tuning of the products is achieved by Voith as a complete supplier and focusing on long-term partnerships. This results in excellent machine performance and high paper quality. The expertise, process competence and the continuing service is key to many successful applications worldwide.

Process competence

- + Application Engineers for support
- + Deep process knowledge and experience
- + Onsite measurements
- + Paper Technology Center
- + Pilot paper machines
- + Research and Development Center
- + Full line supplier knowledge and resources

Headquarters

Voith Paper Holding GmbH & Co. KG
St. Poeltener Str. 43
89522 Heidenheim, Germany

paper@voith.com
www.voith.com/paper

Regional Contacts

Asia
Voith Paper in Kunshan, China
Tel: +86 512 577 61 858

Europe
Voith Paper in Heidenheim, Germany
Tel: +49 7321 37 7490

North America
Voith Paper in Wilson (NC), USA
Tel: +1 252 291 3800

South America
Voith Paper in São Paulo, Brazil
Tel: +55 11 3944 4089

VOITH
Engineered Reliability