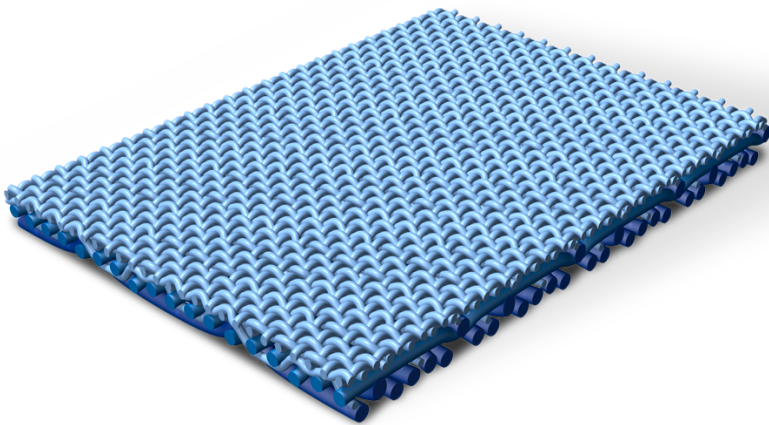


MultiForm IRW

Case study: Forming fabric upgrade leads to significant fiber savings and increased production, with no drop in fabric life



Summary

A recycled white top/gypsum machine in the U.S. Midwest was running coarse triple-layer fabric designs from another manufacturer on all forming positions. Voith, working closely with the mill, was able to show it could bring the mill considerable savings in fiber reduction and increased production by trialing its medium mesh MultiForm IRW and still maintain target fabric life. MultiForm IRW ran well in other mills within this organization, but not yet been tested on critical grades like white top/gypsum board, thus requiring a trial run.

Solution

After reviewing the performance data of the competitor's fabric, weighing the customer's needs and gauging its likely performance, Voith recommended a trial of MultiForm IRW forming fabric on both the base and top ply positions. Based on Voith's calculations, IRW, with its very fine and open paper-making surface, was expected to perform at the levels and lifetime needed by the mill.

Details

As with the full family of MultiForm I products, MultiForm IRW delivers superior performance, allowing for increased production, reduced fiber usage, reduced drive loads and exceptional fabric life. These benefits are possible because of unique IRW features:

- High open area for drainage
- High fiber support for retention and sheet test property enhancements
- High wear volume for fabric life
- High stability

Results

The mill attributes the following results to the installation of MultiForm IRW fabrics:

- Projected annual savings of \$529,865
- Improved basis weight reduction
- Reduced retention aid usage
- Fabric life retained compared to coarser competition triple layer designs previously run
- MultiForm IRW is now the preferred design on all forming positions

Voith's recommendation to install MultiForm IRW helped the gypsum producer save a projected \$529,865 annually.



About MultiForm IRW

MultiForm IRW has proven itself to be the industry leader on critical board & packaging applications linerboard:

- Critical grades (white top, gypsum, liner cover ply, bleached board)
- Low basis weights liner, medium, kraftliner
- High-speed applications – gap formers and hybrid units (Bel Bond, DuoD, SymFormer)
- Recycled applications for improved mechanical retention
- Enhanced sheet test property generation/fiber usage

The full family of MultiForm I products – including MultiForm IRW – are made with unique and proprietary Voith technology. This incorporates elevated levels of both open area and fiber support together with a coarse/robust machine side surface for maximum life potential and stability.

MultiForm IRW features

- For use in critical board & packaging applications where fiber usage, test properties, sheet quality and drainage are prime objectives
- MultiForm IRW is the medium product in the MultiForm I family
- Robust high shed wear surface for maximum wear volume and life potential
- High open area and fiber support combined – improved drainage with excellent mechanical retention for fiber savings and superior test strength/sheet properties

Why partner with Voith?

Papermakers across North America turn to full-line supplier Voith for its expertise in every aspect of the production of paper, boxboard and tissue. From the stock preparation to the winder, Voith offers products, digitalization technology and service capability that improve mill production efficiency and conserve resources.

Voith's full range of fabrics and roll products offers a fabric suitable for every position in the mill regardless of the end product. That makes Voith the one-stop shop for every fabric need that's further backed by more than a century of experience in the industry.

"The finer mesh of IRW delivered exactly what the customer wanted. With the installation of this fabric, there was a marked improvement in the use of retention aid and a boost in sheet strength while simultaneously lowering its basis weight."

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for Generations