Metsä Greaseproof Papers GmbH Düren saves water and energy at the mill

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INTRODUCTION:

Baking and cooking papers play a growing role in the circular economy as chefs, bakeries, and cafeterias seek to provide healthy menus while cutting down on wasted food, energy, and water use for clean-up.

"High-performance SAGA papers from Metsä Greaseproof Papers in Düren, Germany are a clear win for sustainability for our customers...and at the mill," says Michael Barth, Vice President Operations GPP and mill manager.

Barth adds, "We use PEFC and FSC certified fiber from our parent company and outside suppliers. Our customized pulp and papermaking equipment achieves unmatched sheet properties for greaseproof papers – and we continuously look for ways to improve our production efficiency. What's more, our products are recyclable, biodegradable, and compostable - contributing to a reduced carbon footprint for the entire process."

SAGA for baking and cooking--a true proof of success

SAGA greaseproof baking and cooking papers are used by cooking professionals to make millions of meals per year. By lining baking trays in bakeries and GN (Gastro-Norm) metal pans in institutional kitchens with SAGA paper, our professional customers rarely waste a single loaf of bread, pastry or food. Equally important, they save water, energy, and time because of easy clean-up. Easy freezing is another advantage. The same is true for at-home chefs.

Sustainability gains at the mill

Innovative process changes to one of the paper machines at Düren mill have boosted up-time, especially important with frequent grade changes. The mill's product mix is made up of several grades of baking and cooking papers. Baking, cooking and wrapping papers each have unique characteristics and requirements.

"In the past, we got the air out of our stock preparation system with a massive and costly decculator. A simple change to the POM system from AFT allowed us to reduce energy costs and much more," according to Tim Godesberg, maintenance manager at Metsä Greaseproof Papers Düren. Heated process water can now be utilized in the production process and not lost to the wastewater plant.

Figure 2: Comments Tim Godesberg, maintenance manager, "Greaseproof paper requires a lot of refining. We aim for no pinholes on the sheet surface. We must have an excellent network of fibers, then only a little silicon on both sides. Customized Finebar refiner segments help us meet our quality targets and use less energy."



Figure 1: Michael Barth, Vice President Operations Greaseproof Papers and mill manager (left) and Tim Godesberg of Metsä Greaseproof Papers GmbH Düren, produce the SAGA brand of greaseproof baking and cooking papers. They excel at achieving sustainability targets like water and energy savings. So do their cooking and baking customers. Add flexibility, productivity and less waste to the success, and you see the potential of a truly circular economy.



About Metsä Greaseproof Papers, Düren

- PM5 paper machine making grease-resistant papers
- Global sales to over 60 countries,
- PEFC and FSC certified fibers from sister company in Finland, supplemented with PEFC/FSC pulp from other sources

Mill history with AFT

- Mechanical turnkey retrofit POM system, cleaning plant, engineering, installation, and start-up, combining with existing piping and equipment.
- POMp430 Degasser & Flexible Cascade cleaning system
- Spare POMp degasser, including basic engineering
- Finebar refiner plates, custom-designed for small units
- AFT cylinders and rotors for the headbox screen

As Godesberg puts it, "When you minimize circulation in stock preparation, you also reduce the amount of chemicals you need. You also have better control over fiber and your ability to improve performance in the sheet. Combined with optimized refining, we reach our targets for very smooth surfaces. The smoother the sheet, the better the product functionality for our customers. Installing the initial POM unit effectively impacted the mills production processes. "

Rapid ROI

Says Uwe Sonntag, AFT representative with Petax GmbH, "Everything about the AFT POM systems is small, except for the savings and increased output. Small investment. Small footprint. Reduction of time to change grades. Lower chemical usage. Less energy consumption. When we deliver a rapid ROI, and ongoing efficiency, we know we are making a difference that's highly valued."

The right team

Godesberg stresses the importance of finding the right partners for projects, both short and long term. "What is good service? First of all, it's equipment that requires little service. Second, when you need help you can be assured it is achievable right away." Working together, Petax and AFT provide the fast response and knowledge on matters. "Our relationship is all about making our process more efficient, meeting and exceeding customer expectations."

Continues Barth, "Flexibility of ideas is what the best relationships are about. Sometimes figuring out how to overcome small bottlenecks opens the way for much bigger advances. That's our criteria for a lasting relationship. Our team excels because we have a clear vision. This allows everyone to seek targets with precision. With AFT, we have the confidence to keep or modify existing equipment while upgrading with strategic high-performance new equipment. Our decade-long relationship is based on truly cooperative decision making."

Concludes Godesberg, "AFT will support us in the upcoming projects, even outside the scope of what they supply, as they understand us well and our commitment to innovations and quality."



Figure 3: Notes Tim Godesberg, "Our management team seeks return on investment. AFT provided this with their POM system, allowing for easier grade changes and consistent quality."

AFT is a global supplier specialized in stock preparation, screening, refining and paper machine approach flow systems. With over 100 years of experience, they offer solutions tailored to the customer's furnish, mill process, and end product being produced in order to optimize the return on investment. For more on AFT technologies, visit https://aft-global.com