AIKAWA FIBER TECHNOLOGIES (AFT) is specialist in improving the performance of existing equipment

AIkawa Fiber Technologies (AFT) is a global supplier with own manufacturing centers all over the world. The company offers performance components and new equipment to optimize screening, refining, stock prep, and machine approach operations. AFT was found through acquisitions of Advanced Fiber Technologies, AFT Finebar and POM Technology in 2006. All Aikawa Group companies share a strong commitment to research and development, and to provide an ever-improving level of customer service.

Improve the performance of existing equipment

AFT identifies areas for performance and cost improvement with your existing equipment and subsequently recommends the right components to deliver the best results.

Cylinders

Screen cylinders represent AFT’s core business. AFT offers the widest selection in the industry and provides cylinders for all brands, models and sizes of screens. Whatever the application, they have the right product. Today, AFT is the world’s largest supplier of screen cylinders.

AFT MacroFlow™ is the most widely used wedgewire screen cylinder in the pulp and paper industry.

MacroFlow2 has the world’s most accurate and precise slot tolerances. Slot width variation is so tight that it improves screening efficiency by 5% and boosts capacity by 10%.

Rotors

AFT is the world’s premier supplier of pulp screen rotors, offering replacement rotors for virtually all screen makes and models. The GHC™ and EP™ rotors incorporate a state-of-the-art design with the latest advances in manufacturing methods to meet a wide range of mill priorities.

AFT offers three types of rotors: The GHC™ rotor, certified EnergySmart™, is a closed-rotor design that is ideally suited for OCC and kraft applications. The EP™ foil-type rotor, which combines an ideal pulse form with minimum power consumption, offers high performance, especially in Deink and TMP applications. AFT RP™ rotors are replacement rotors built to provide a seamless substitute for originally-installed equipment.

FINEBAR® Refiner Plates

AFT FINEBAR® refiner plates and segments are made for virtually all LC disc refiners – and a range of conical refiners. The benefits have been confirmed: higher quality fiber at less energy consumption.

The patented manufacturing technology utilizes precision laser-cutting to create ultra-fine bar patterns with exceptional strength and throughput. In addition to full cones for conicals, FINEBAR® offers full, reduced-diameter and mini-segment designs for disc refiners.

FINEBAR® delivers improved pulp strength, lower specific energy consumption and improved plate life.
Services

SimAudit™ - Optimizing the performance of screen systems

AFT’s process optimization services combine the expertise of AFT’s application engineers with AFT’s propri- etary SimAudit™ simulation program and mill-based process audits.

AFT’s team of highly experienced application engineers have backgrounds ranging from pulp and paper mill operations to working with equipment suppliers and research organizations.

The insights and efforts of these individuals are embodied in AFT’s established and rigorous procedures for assessing and auditing pulp screening and refining systems. The process data obtained is analyzed with SimAudit™, a unique tool designed to assess the current status of a screening or refining operation and to reveal its potential for optimization.

Mechanical Equipment Audit

AFT evaluates the mechanical condition of mill screening equipment and provides a detailed assessment. The evaluation includes the inspection of screen bodies, cylinders and rotors, as well as the determination of wear rates through imprint analysis.

Rechroming

The life of a cylinder can be extended by rechroming it – a process that entails the removal of the old chrome prior to the application of the new. This can be done several times depending on the condition of the cylinder.

An AFT mechanical audit is an easy way to determine the best time to rechrome, as candidate screen cylinders must be taken out of service before the wear reaches the base metal.
Improve your process with new equipment

Sometimes you need more than an engineered component to achieve results. AFT offers a range of equipment for stock preparation and pulp handling, including recycled fiber.

With its POM technology, AFT has been a pioneer in compact wet end systems. Through its parent company Aikawa Group, AFT also supplies machines and complete lines for fiber processing and pulping.

POM Technology

POM’s compact wet end technology is based on a novel approach: simply less.

An important part of AFT’s technology is what they leave out - tanks, silos, wire pits, etc. A much smaller footprint and a simpler solution for retrofit upgrades and new machines.

Air is removed early in the process, reducing the volume significantly – typically three times less than conventional “Big Box” equipment.

An airless system, without wire pits, silos and tanks gives you at least **four important benefits**: stable paper production, a clean sheet, fast start-ups and grade changes, and less energy consumption.

- **POMix™**
- **Flexible Cascade™**
- **POMp™ Entgaser**
- **POMlock™**
- **CycloPipe™**

POM system of a modern 480,000 t/year 2-layer testliner machine
Machines

AFT is a full-scope supplier of recycled fiber systems, including OCC and deinked plants and their process units.

The company can provide complete recycled fiber lines, or the equipment can be used to upgrade existing fiber lines. High emphasis is put on technologies which promote energy savings and end quality properties of the pulp.

With AFT machines you will reach:
- Better efficiency
- Improved cleanliness
- Higher capacity
- Reduced fiber loss
- Better reliability
- Lower energy consumption

Coarse and Fine Screening Equipment

- MaxFlow™: features two stock inlets, thereby promoting even distribution of pulp in the screening zone
- MaxFlow™ Headbox: inflow screens, do not produce pressure pulsations that carry over to the paper machine
- ADS-Separation: „Compound Function Screen“; with a single machine, both coarse and fine screening is accomplished. The accepts can be sent to the final chest with no further screening requirements.

Last stage screens:
- AlphaScreen™: "Compound Function Screen", which defibers paper flakes and continuously removes foreign materials from the stock.
- MaxSaver™: outflow type screen, which is specifically intended to minimize fiber loss in the screening process.