Fiber preparation
Pilot plant
Fiber preparation pilot plant
For customer trials, research and development

The ANDRITZ pilot plant was established in 1982 for pulp and paper trials, research and development projects. In 2004 and 2005 major extensions in the stock preparation area were done. Today’s fully equipped pilot plant is not only used for finest research and development work, but is an important medium in elaborating customer-oriented solutions. It is suitable for single machine and system trials. Treatment of many different raw materials, such as secondary fibers, old corrugated containers and virgin fibers, is possible. Future pulp properties and operating characteristics of the ANDRITZ equipment can be confirmed in advance. The optimum plant concept is then evolved on the basis of the test results, ensuring that the required fiber quality and also the lowest possible invest costs are achieved.

Benefits

- Papermakers have the possibility to test their ideas on pilot scale, as well as to simulate field conditions:
  - Testing all different types of pulp
  - System tests for complete recycled and virgin pulp fiber lines
  - Single machine trials – the smallest industrial scale units available are installed in the pilot plant
  - Testing of prototypes
  - Production of pulp for paper machine trials

Available system components

- Pulping: FibreFlow drum, FibreSolve pulper
- Screening: ModuScreen for coarse, fine and headbox screening, fractionation
- Deinking flotation: SelectaFlot
- Removal of heavy particles and dirt specs: AhlCleaner
- Thickening: Disc filter, pulp screw press
- Atmospheric and pressurized dispersing: CompaDis
- Deflaking: DeFlaker
- Refining at low and medium consistency: Papillon and TwinFlo refiner
- Ash removal: RotoWash
- High-consistency bleaching components
- Effluent treatment
- Mobile sludge dewatering unit
- Mobile RejectCompactor
- Agitators: TurboMix

Simplified flow sheet of the ANDRITZ pilot plant
ANDRITZ paper laboratory
Quality boosts with latest measuring technology

ANDRITZ has a fully equipped paper laboratory for fiber analysis and data logging. The experts who are responsible for the various paper technology investigations and analyses have extensive know-how – covering the entire stock preparation process – and can look back on years of experience. As an important component of papermaking technology, the ANDRITZ laboratory can accommodate a wide spectrum of test processes.

The conditioning room, specially built for this purpose, provides optimum conditions for strength analyses and optical evaluations, while physical and chemical investigation processes are performed in the wet laboratory.

Examples of test procedures:
- Strength analyses – porosity, breaking length, tear index, burst ratio, SCT
- Optical analyses – dirt specks, brightness, color location, ERIC
- Physical fiber analyses – fiber length, stickies, Brecht-Holl, Bauer-McNett, Somerville, freeness
- Chemical fiber and effluent analyses – ash content, COD, PCD
- Oxidative and reductive bleaching trials

In line with international practice, our samples can be analyzed according to established international standards, such as ISO, DIN, TAPPI, etc.