Agro Pulping Machinery (P) Ltd

Global Supplier of Clean Pulp Technology Systems,
Specialty Papers & Engineering Services
About Agro
Clean Pulp Technology, Specialty Papers, Fabrication & Engineering Services

Background

AGRO, a privately owned company established in 1991, has evolved to become the leading manufacturer and supplier of Fiber Preparation, Wet Washing, Continuous Digester and Chemical Recovery Equipment for agro based feedstock, used extensively in paper and pulp industries in countries such as India, Australia, Pakistan, Iran, Nepal, Thailand and Philippines.

AGRO Clean Pulp Technology platform has been developed to improve paper quality by producing cleaner pulp devoid of contaminants. Our Chemical Recovery system is designed to recover chemicals from black liquor generated during the pulping process, thereby eliminating the need to sewer the polluting chemicals. The recovered soda ash pellets can be sold to other industries, thus making it a pollution control system that pays for itself.

Our Expertise

AGRO has vast experience in designing, engineering and manufacturing equipment for several purposes. We have our own Computer Aided Design (CAD) department to translate conceptual innovations to concrete engineering drawings. Our fabrication unit in Chennai, India, allows us to manufacture customized equipment for our domestic and international clients. This unique combination of process expertise, design & engineering capabilities combined with our in house fabrication unit, allows us to breathe life into solutions that have been indigenously devised, and also enables us to move into fresher and newer pastures. We have recently added an automated coater to produce specialty papers like carbonless and thermal paper, adding another dimension to our multi-faceted company. This coating system is also available to conduct research, and develop unique and value added coated products for our customers.

Our Vision

AGRO's vision is to be the leading solutions provider for its clients. We envision AGRO’s Clean Pulp Technology being extended to the Clean Energy platform. Our systems have the potential to produce Bio-Fuels, and our research and development department is actively working to make this a reality.
Products

Fibre Preparation

Agro’s **Fiber Preparation System** prepares the fiber by removing the pith or dust without impacting the fiber quality. Efficient removal of pith/dust, sand, dirt, ash and grit allows for enhanced pulp quality.

**Depither & Pinfeeder**

Main Features

- Bale Breaker
- Depither
- Deduster

Advantages

- Better pith removal
- Less fiber damage
- Removes majority of sand, dirt, ash, grit
- Low power consumption & use of manpower
- Low amounts of dust generation
Wet Washing
The wet washing system is designed to wash raw material like wheat/rice straw that are high in silica and chlorides. The process recovers the water used in the washing process and render fiber with the right consistency into the pulping system.

Main Features
- Twin Turbo Washer
- Aqua Separator
- Screw Press
- Chip Washer

Advantages
- Removes adherent silica
- Eliminates pith, nodes and fines
- Dissolves chlorides and soluble contraries
- Reduces cooking chemicals and bleaching chemicals
- Results in uniform pulp
- Improved performance of paper machine
Pulping

AGRO's **Continuous Digester** replaces the rotary or globe batch units with innovative design that operates at a lower pressure and chemical dosage. The continuous process allows for addressing fluctuations in raw material without compromising pulp quality.

**Main Features**

- Metering Screw Conveyor
- Pin Feeder
- Equalizing Screw Conveyor
- Plug Screw Feeder
- Inlet Chamber
- Digester Shell
- Cold Blow Discharger

**Advantages**

- Indigenously developed incorporating vapor phased digestion
- Can handle a wide range of raw materials, cereal straws, annual grasses and bagasse
- Reduced steam consumption
- Economical use of chemicals due to vapor pressure cooking
- Uniform load on utilities
- Increased flexibility of operation resulting in reduced down time
- Minimal space requirement, low manpower and production cost
- Uniform pulping leading to improved machine performance and utilization of raw materials
Chemical Recovery

Agro's Chemical Recovery Process consists of the following:

- Soda Recovery
- Lime Recovery

Soda Recovery comprises of evaporators and low temperature incinerator systems that operate at a much lower temperature than conventional recovery systems.

Advantages

- Low cost, environmentally friendly technology that can handle low concentration, high silica Black Liquor from any agro based raw materials like Bagasse, Rice / Wheat Straw, Sarkanda etc., or any combination thereof
- Scaling and viscosity problems do not affect the process
- Safe process for Small / Medium Pulp Mills, does not form any smelt
- Flexible, widely applicable technology for Alkali / Neutral Sulfite Black Liquor
- Can be scaled down to 30 - 35 TPD Pulp Mills
- Low gestation period 8 - 10 Months
- ROI in 30 - 40 Months

Low temperature incinerator System

Evaporator
Lime Recovery

The Multi–compartment FluoSolids® Reactor usually consists of a reaction bed and one or more heat exchange beds for heat recovery. In a typical 3 stage unit as illustrated here, hot gases from the main calcining compartment are used to dry and preheat calciner feed. Fuel is directly injected into the reaction compartment, where temperature and atmosphere are closely controlled. Finally, heat is recovered from hot product solids and used to preheat the fluidizing air. Auxiliary vessels, such as Fluid Bed Spray Coolers or Indirect Coolers may be used to further cool product solids for ease of handling.

Lime Mud Calcinator
Specialty Paper

Agro produces coated specialty paper such as carbonless and thermal paper. AGRO’s Carbonless Paper is a multi-layer paper system that is coated to transfer images from one ply to subsequent plies, with the application of pressure, without using carbon paper.

Carbonless paper can be used to create multi-part forms for the following types of documents:

- Production Orders
- Expense Reports
- Medical Forms
- Packing Slips
- Delivery Slips
- Purchase Requisitions
- ..........and much more

Agro’s brand of carbonless paper provides a clean and professional image for any multi-part document. Impressions produced are sharp, clean and legible.

AGRO’s Thermal Paper can withstand extreme conditions, high speed printing, and provides accurate tracking.

Thermal Paper has a wide variety of applications such as:

- Point-of-sale (POS) receipts and coupons
- Entertainment, transit and parking tickets;
- Lottery and gaming tickets
Services - A commitment to Excellence in Fabrication & Engineering Services

AGRO's in house fabrication unit is ISO 9001: 2008 certified. It is fully equipped with top of the line equipment that allows us to fabricate engineering products catered to diverse industries. Some of the Key Equipment in our fabrication unit is listed below:

- 60 Feet Lathe
- 15 Feet Lathe
- 8 Feet Lathe
- 6 Feet Lathe
- Hydraulic Drilling Machine
- Radial Drilling Machine
- Milling Machines
- Welding Facilities
- Shaping Equipment
- Overhead Crane System

Project & Consulting Services

With highly qualified professionals, a dedicated CAD department, and a wealth of experience, AGRO is the partner of choice for the following Engineering services:

- Engineering & Design - Engineering Application Software Development
- Environmental Studies - Energy Conservation and Environmental Impact Assessment
- Plant Improvement - Preparation of Operation and Service Manuals, Training and Assistance in Personnel Selection
- Pre-investment studies - Surveys & Investigative Studies, Techno-Economic Feasibility, Site Selection, Selection of Process Collaborator
- Project Start up and Commissioning - Procurement, Inspection, Construction Supervision and Management, Detailed Project Reports including Cost Estimates
Clients - A spotlight on our diverse clients

Australia  Fibertech Pty Ltd,
  • Screw Press

Iran  Debel Neopan Co,
  • Particle Board Depither

Nepal  Everest Paper Mills,
  • Wet washing System
  • Screw Press

Pakistan  Premier Paper Mills,
  • Pulp Mill Equipment

Philippines  Bison India,
  • Particle Board Depither

Thailand  Panjapol Paper Industries,
  • Pulp Mill Engineering

India  ABC Paper Mills, Hoshiarpur
  • Centrifugal Deduster

Abhishek Industries Ltd., Barnala
  • Wet Washing System

Arvi Wood Industries, Nagpur
  • Particle Board Depither

Bindal Papers Ltd, Muzaffarnagar
  • Chemical Recovery

Banwari Paper Mills Ltd., Kashipur
  • Pulp Mill Equipment
Century Pulp & Papers Ltd., Lalkua

- Wet Washing System
- Chip Washing System

DeeCee Fiber Board

- Particle Board Depither

Delta Paper Mills Ltd., Vendra

- Wet Washing System
- Continuous Digester System

K.R. Pulp & Papers Ltd., Shahajahanpur

- Largest Chemical Recovery Equipment commissioned by AGRO

Mohit Paper Mills Ltd., Bijnor

- Low Temperature Incinerator System

Murli Agro Products, Nagpur

- Pulp Mill Equipment

Mukerian Papers Ltd, Hoshiarpur

- Wet Washing System
- Continuous Digester System

Naini Papers Ltd, Kashipur

- Wet Washing System
- Centrifugal Deduster

National Boards Ltd., Bangalore

- Chip Washing System

Ruchira Papers Ltd, Kala Amb

- Horizontal Belt Washer
Satia Industries Ltd., Muktsar
- Wet washing System
- Continuous Digester System – 2 systems for 100 TPD Bleached Bagasse Mill
- Centrifugal Deduster

Shreyans Industries Ltd., Ahmedgarh
- Wet washing System
- Continuous Digester System
- Low Temperature Incinerator System

Shree Shyam Pulp & Board Mills Ltd., Kashipur
- Pulp Mill Equipment

Shree Rishabh Papers Ltd., Banah
- Wet washing System
- Continuous Digester System
- Low Temperature Incinerator System

Sikka Papers Ltd., Muzaffarnagar
- Pulp Mill Equipment

Siddheshwari Paper Udyog Ltd., Kashipur
- Low Temperature Incinerator System

Vilsons Particle Board Industries, Kolhapur
- Particle Board Depither

Western Bio Systems, Pune
- Particle Board Depither
Contact Us

Agro Pulping Machinery (P) Ltd.

14, SIDCO Industrial Estate
Ambattur, Chennai 600 098
Tamil Nadu, India.

Tele Phone: 91 - 44 - 2624 6510
Tele Fax 91 - 44 – 2625 1271

E-Mail: info@agropulping.com