

PROJECT REFERENCE LIST

STUDIES

300 admtd/day Nonwood Fibre Market Pulp Mill

Prefeasibility study for a 300 mt/day nonwood market pulp mill including R&D work, process design and equipment selection, developed inputs for material balance, prepared functional specifications for major equipment, supplier investigations and price quotes, capital and operating cost estimating, and financial analysis.

Client: Confidential
Location: Mexico
Materials: Agave tequilana wastes
Products: Market pulp

10 mt/day Demonstration Nonwood Fibre Pulp & Paper Mill

Assisted in client's prefeasibility study for a 10 mt/day demonstration nonwood pulp and fine paper mill based on cereal straw, flax straw, industrial hemp - critiqued client's flow sheets, assisted in finalizing flow sheets, developed inputs for material balance, prepared functional specifications for major equipment, supplier investigations and price quotes.

Client: Confidential
Location: Canada
Materials: Cereal straws, flax straw, industrial hemp
Products: Fine paper

Non-Food/Non-Feed Uses of Agricultural Products - Phase 3

Phase 3 covered possible applications and markets for nonwood plant fibres from agricultural crop residues and fibre crops - prepared section on challenges and opportunities for pulp and paper and reviewed other sections on bast fibre applications in various end-products.

Client: Agricultural and Agri-Food Canada
Location: Canada
Materials: Cereal straws, flax straw, industrial hemp, switch grass, corn stalks
Products: Pulp, paper, paperboard, nonwovens, geotextiles, composites.

Molded Pulp Products

Developed design parameters and equipment selection for a molded pulp project.

Client: Confidential
Location: Canada
Materials: High fibre content sludge
Products: Molded pulp products

Non-Food/Non-Feed Uses of Agricultural Products - Phase 1

As a subcontractor to the prime consultant, prepared two reports giving an expert review and assessment of available technologies and market opportunities within the North American pulp and paper industry and the North American fibreboard industry for potential end-products that could be produced using agricultural residues and fibre crops.

Client: Agricultural and Agri-Food Canada
Location: Canada

Materials: Cereal straws, flax straw, industrial hemp, switch grass, corn stalks
Products: Paper, paperboard, fibreboard, panel board

Nonwood Fibre Market Pulp and/or Fine Paper Mill

Prefeasibility study including market research and R&D for a TCF market pulp and/or integrated pulp and paper mill. The study investigated three project alternatives: a) 60,000 admtd/year flax/hemp market pulp mill; b) integrated pulp and paper complex producing 36,000 admtd/year flax/hemp market pulp and 200,000 mt/year uncoated printing and writing paper; c) integrated pulp and paper complex producing 200,000 mt/year uncoated printing and writing paper.

Client: 3448746 Canada Ltd. (Prairie Pulp and Paper Co.)
Location: Manitoba, Canada
Materials: Cereal straws, flax straw, industrial hemp and purchased deinked market pulp, cotton linters pulp and/or softwood kraft
Products: Flax/hemp market pulp and/or printing & writing paper

485 admtd/day Bamboo Market Pulp Mill

Technical advice to the prime consultant (SNC-Lavalin Cowan, Montreal, Canada) for a technical and commercial study for a 170,000 admtd/year bamboo market pulp mill including development of R&D program and advice on fiber line process design for market pulp production from bamboo.

Client: Far East Pulp and Paper Ltd., Hong Kong
Location: Fengshun, China
Materials: Bamboo (4 primary species)
Products: Bleached market pulp

Corn Stalks Pulp & Fine Paper Mill - Part 2

Pulp mill basic engineering using Hurter/Byrd patented process for corn stalks pulping and complete review of prefeasibility study by prime consultant and development of alternative financial projections of a 200,000 mt/year fine paper mill based on corn stalks

Client: Mells Industries, LLC, Des Moines, Iowa, USA
Location: Iowa, USA
Materials: Corn stalks & purchased deinked market pulp, cotton linters pulp, softwood kraft pulp
Products: Printing & writing paper

Corn Stalks Pulp & Fine Paper Mill - Part 1

Directed research and development work at North Carolina State University (NCSU) and fiber line process design for a prefeasibility study of a 200,000 mt/year fine paper mill based on corn stalks. During the work, Mr. Robert Hurter and Dr. Medwick Byrd of NCSU developed a patented low energy pulping and bleaching process for nonwood plant fiber raw materials (US Patent 6,302,997).

Client: Mells Industries, LLC, Des Moines, Iowa, USA
Location: Iowa, USA
Materials: Corn stalks & purchased deinked market pulp, cotton linters pulp, softwood kraft pulp

Products: Printing & writing paper

300 admt/day Recycled Fibre Market Pulp Mill - Part 3

Business plan and financial scenarios report for 105,000 mt/year deinked recycled fiber market pulp mill.

Client: Richmond Trading Inc.
Location: Saint John, NB, Canada
Materials: Sorted mixed office wastepaper (MOW)
Products: DIP market pulp

300 admt/day Recycled Fibre Market Pulp Mill - Part 2

Fiber raw material study for 105,000 mt/year deinked recycled fiber market pulp mill from office wastepaper.

Client: Richmond Trading Inc.
Location: Saint John, NB, Canada
Materials: Sorted mixed office wastepaper (MOW)
Products: DIP market pulp

260 mt/day Newsprint Mill

Process selection, capital cost estimates and operating cost estimates for 85,000 mt/year newsprint mill.

Client: Jang Publishing Group
National Management Consultants
Location: Pakistan
Materials: Wastepaper, purchased pulp
Products: Newsprint

230 admt/day Bleached Bagasse Market Pulp Mill

Preliminary review of project documentation for 80,000 mt/year bleached bagasse market pulp mill.

Client: Paradigm Technologies Inc., Saint John, NB, Canada
Location: South East Asia
Materials: Sugarcane bagasse
Products: Bleached market pulp

Neswprint, Linerboard and/or Fine Paper Mill

Market study, prefeasibility study for three project alternatives (newsprint, linerboard, printing & writing paper) and detailed study for 90,000 mt/year newsprint mill.

Client: National Industrialization Company (NIC)
Location: Saudi Arabia
Materials: Wood, wastepaper, purchased pulp
Products: Newsprint, linerboard and/or printing & writing paper

Environmental Assessment Study

Environmental assessment for detailed feasibility study to expand and rehabilitate 65,000 mt/year bleached hardwood kraft pulp mill and add 140,000 mt/year paper machine.

Client: World Alliance Merchant Finance Co., Cambridge, MA, USA

Mill: Brown & Root Forest Products, Houston, TX, USA
Location: Bokoza S.A.
Location: Vranov nad Toplou, Republic of Slovakia
Materials: Beech, purchased softwood kraft
Products: Coated paper (C2S free-sheet)

300 admt/day Recycled Fibre Market Pulp Mill - Part 1

Project review prefeasibility study for 300 mt/day deinked recycled fiber market pulp mill from office wastepaper.

Client: Richmond Trading Inc.
Location: Saint John, NB, Canada
Materials: Sorted mixed office wastepaper (MOW)
Products: DIP market pulp

150 admt/day Bleached Sisal Market Pulp Mill

Detailed techno-economic feasibility study for 150 mt/day bleached sisal market pulp mill based on a TCF process for bleaching nonwood pulps developed by HurterConsult - process proven in laboratory and pilot plant trials. Process uses currently available and proven technology to minimize technical risk.

Client: Tanzania Sisal Authority
Location: Tanzania
Materials: Sisal
Products: TCF bleached market pulp

285 mt/day Kraft Paper & Paperboard Mill

Project identification prefeasibility study for 100,000 mt/year kraft paper and paperboard mill.

Client: A. H. Zamil Group of Companies
Location: Saudi Arabia
Materials: Wastepaper, purchased pulp
Products: Kraft paper, paperboard

Mill Expansion & Rehabilitation

Project identification prefeasibility study for expansion and rehabilitation of existing 65,000 mt/year bleached hardwood kraft market pulp mill and the addition of 140,000 mt/year paper machine.

Client: World Alliance Merchant Finance Co., Cambridge, MA, USA
Mill: Bokoza S.A.
Location: Vranov nad Toplou, Republic of Slovakia
Materials: Beech, purchased softwood kraft
Products: Coated paper (C2S free-sheet)

120 mt/day Sack Kraft & Fine Paper Mill

Detailed techno-economic feasibility study for 40,000 mt/year paper mill for production of sack kraft and writing and printing paper.

Client: Pakistan Papersack Corporation Ltd., Karachi
Location: Muzaffargarh, Pakistan
Materials: Purchased pulp, wastepaper
Products: Sack kraft, printing & writing paper

Flax Pulp Market Survey Update

Update of market survey on flax pulp production, consumption and pricing in Western Europe.

Client: Arbokem Incorporated, Vancouver, BC, Canada
Location: Western Europe
Materials: Flax
Products: Market pulp

Pakistan Pulp & Paper Industry Sector Study

Pulp and paper industry sector study to assess the size of Pakistan's market, local production capability, and potential for increasing Canadian pulp & paper exports to Pakistan. Study also investigated the potential for Canadian equipment suppliers to establish joint venture manufacturing facilities with local fabricators.

Client: Canadian High Commission, Islamabad, Pakistan
Location: Pakistan

300 mt/day Bagasse Pulp & Fine Paper Mill

Preliminary engineering, flow sheets, layouts, mill description, capital and operating cost estimates, financial analysis for detailed feasibility study of 300 mt/day printing and writing paper mill.

Client: Group Inc., Montreal, Canada
Location: Kous, Egypt
Materials: Sugarcane bagasse, purchased woodpulp
Products: Printing & writing paper

Hand Made Specialty Papermaking

Report assessing the technical issues of developing a cottage industry in Kenya for production of handmade specialty papers using local nonwood raw materials.

Client: African Project Development Facility, Nairobi
Location: Kenya

Mill Expansion & Modernization

Technical study for expansion and modernization of existing pulp and paper mill to increase the capacity of the pulp mill, wastepaper pulping system and paper machine; including consideration of the impact of the expansion on existing services and utilities.

Client: Papeleras y Cartones S.A.
Location: Medellin, Colombia
Materials: Cypress, pine, eucalyptus
Products: Bag paper, kraft paperboard

120 admt/day Bleached Sisal Market Pulp Mill

Detailed techno-economic feasibility study for 120 mt/day bleached sisal market pulp mill.

Client: Celulosa Dominicana
Location: Monte Cristi Province, Dominican Republic
Materials: Sisal

Products: Bleached market pulp

Pakistan Printing & Writing Paper Sector Study

Comprehensive sector study of the writing and printing paper industry in Pakistan covering local markets, raw materials, imports, and review and analysis of ten producing mills. The study also developed criteria for NDFC to use in evaluating and analyzing future writing and printing paper projects proposed for Pakistan.

Client: National Development Finance Corp., Karachi, Pakistan
Location: Pakistan
Materials: Wheat & rice straw, kahi grass, sugarcane bagasse, cotton wastes, cotton linters, pine, eucalyptus, wastepaper, imported pulp
Products: Printing & writing paper

300 mt/day Bagasse Pulp & Fine Paper Mill

Comprehensive technical evaluation of a printing and writing paper mill under consideration for financing.

Client: National Development Finance Corp., Karachi, Pakistan
Location: Pakistan
Materials: Sugarcane bagasse, purchased woodpulp
Products: Printing & writing paper

Bagasse Market Pulp Mill Alternatives

Capital cost estimates and financial analysis for 170, 300 & 435 mt/day bagasse market pulp mills.

Client: Rothwells Limited, Perth, Australia
Location: Australia
Materials: Sugarcane bagasse
Products: Bleached market pulp

Flax Pulp Market Survey

Market survey on flax pulp production, consumption and pricing in Western Europe.

Client: Arbokem Incorporated, Vancouver, BC, Canada
Location: Western Europe
Materials: Flax
Products: Market pulp

Pulp Mill Addition Feasibility Study

Detailed feasibility study for addition of 11 mt/day pulp mill to existing 15 mt/day printing and writing paper mill.

Client: Conapel S.A., Guatemala City, Guatemala
Location: Ocosito, Guatemala
Materials: Sugarcane bagasse, wastepaper, lemon grass
Products: Printing & writing paper

120 mt/day Nonwood Printing & Writing Paper Mill

Detailed techno-economic feasibility study for 120 mt/day printing and writing paper mill.

Client: Pakland Paper Limited, Karachi, Pakistan
Location: Thatta, Pakistan
Materials: Sugarcane bagasse, wheat straw, rice straw, purchased softwood pulp
Products: Printing & writing paper

150 mt/day Kraft Paper Machine Addition

Detailed techno-economic feasibility study for addition to existing facilities of 50,000 mt/year kraft paper machine to produce sack kraft, linerboard and corrugating medium.

Client: Societe Nationale Tunisienne de Cellulose
Location: Kasserine, Tunisia
Materials: Wastepaper, imported woodpulp, esparto grass
Products: Sack kraft, linerboard, corrugating medium

42 mt/day Superfine Paper Mill

Detailed techno-economic feasibility study for 42 mt/day superfine paper mill for producing cigarette paper, tipping paper, plug wrap paper, copy tissue, bible paper and airmail paper.

Client: International General Contractors & Engineers, Cairo, Egypt
Location: 6th October City, Egypt
Materials: Purchased woodpulp, esparto grass pulp, flax
Products: Specialty fine papers

18 mt/day Tissue Mill

Detailed techno-economic feasibility study for 18 mt/day tissue mill.

Client: Bank Tuniso-Koweitienne de Developpement Tunisie
Location: Tunis, Tunisia
Materials: Purchased woodpulp
Products: Tissue paper

Mill Rehabilitation Plan

Two (2) technical review studies of Khulna Newsprint Mills rehabilitation program.

Client: Canadian International Development Agency (CIDA), Hull, Quebec, Canada
Location: Khulna Newsprint Mills, Khulna, Bangladesh
Materials: Tropical hardwoods
Products: Newsprint