

PROJECT REFERENCE LIST

DESIGN ENGINEERING PROJECTS

100 mt/day Molded Products

Preliminary design of a 100 mt/day wastepaper line for molded egg and fruit trays, prepared basic specification, reviewed vendor proposals, report to client.

Client: Confidential
Project: 100 mt/day wastepaper line
Materials: Grade #6 wastepaper
Products: Molded trays

Kraft Pulp Mill Liquor Balance

Preparation of kraft pulp mill liquor balance for existing pulp mill and proposed expanded facilities including additional pulping capacity, oxygen delignification and a chemical recovery system.

Client: Babcock & Wilcox Industries, Cambridge, Ontario, Canada
Project: Severo Ceske Papirny Mill Expansion
Location: Steti, Czechoslovakia
Materials: Pine, fir, alder, oak

Bamboo Pulp & Offset Printing Paper Mill

Conceptual & basic process engineering, process flow sheets, preliminary equipment layouts and equipment specifications for 100 mt/day offset printing paper mill and 150 mt/day pulp mill; for CIC Inc. initial proposal and subsequent proposal revisions. Work included five technical/marketing trips to China, assistance in equipment selection, and assistance in contract negotiations.

Client: Canadian Industrial Consortium Inc., Montreal, Quebec, Canada
Project: Fujian Shaowu Bamboo Pulp & Fine Paper
Location: People's Republic of China
Materials: Bamboo, purchased pulp
Products: Offset printing paper, market pulp
Award: CIC Inc. awarded a contract of about \$40 million for the supply of equipment, machinery and services to the project

Bamboo Pulp & Offset Printing Paper Mill

Conceptual & basic process engineering, process flow sheets, preliminary equipment layouts and equipment specifications for 100 mt/day offset printing paper mill and 150 mt/day pulp mill; for CIC Inc. initial proposal and subsequent proposal revisions. Work included five technical/marketing trips to China, assistance in equipment selection, and assistance in contract negotiations.

Client: Canadian Industrial Consortium Inc., Montreal, Quebec, Canada
Project: Sichuan Ya'an Bamboo Pulp & Fine Paper Mill
Location: People's Republic of China
Materials: Bamboo, Masson pine, spruce
Products: Offset printing paper, market pulp
Award: CIC Inc. awarded a contract of about \$35 million for the supply of equipment, machinery and services to the project

Bamboo/Pine Pulp & Kraft Linerboard Mill

Conceptual and basic process engineering, process flow sheets, preliminary equipment layouts and equipment specifications for 120 mt/day kraft linerboard mill and 150 mt/day pulp mill; for CIC Inc. initial proposal and subsequent proposal revisions. Work included five technical/marketing trips to China, assistance in equipment selection, and assistance in contract negotiations.

Client: Canadian Industrial Consortium Inc., Montreal, Quebec, Canada
Project: Fujian Jian'Ou Kraft Linerboard Mill
Location: People's Republic of China
Materials: Bamboo, Masson pine
Products: Linerboard, market pulp

Bamboo Pulp & Offset Printing Paper Mill

Conceptual & basic process engineering, process flow sheets, preliminary equipment layouts and equipment specifications for 60 mt/day offset printing paper mill and 115 mt/day pulp mill; for CIC Inc. initial proposal and subsequent proposal revisions. Work included five technical/marketing trips to China, assistance in equipment selection, and assistance in contract negotiations.

Client: Canadian Industrial Consortium Inc., Montreal, Quebec, Canada
Project: Chongching Yuzhou Bamboo Pulp & Paper Mill
Location: People's Republic of China
Materials: Bamboo, purchased pulp
Products: Offset printing paper, market pulp

120 mt/day Bagasse Pulp & Fine Paper Mill

Basic process engineering, process flow sheets, preliminary equipment layouts and equipment specifications for 120 mt/day pulp and paper mill for producing writing and printing papers; for CIC Inc. proposal.

Client: Canadian Industrial Consortium Inc., Montreal, Quebec, Canada
Project: Pakland Paper Ltd., Karachi, Pakistan
Location: Thatta, Pakistan
Materials: Sugarcane bagasse, wheat straw, imported woodpulp
Products: Printing & writing paper

300 mt/day Bagasse Pulp & Fine Paper Mill

Basic engineering, equipment selection, process flow sheets and preliminary equipment layouts for 100,000 mt/year printing and writing paper mill; for H.A. Simons proposal.

Client: H.A. Simons (Overseas) Ltd., Vancouver, B.C., Canada
Project: Kous Paper Project
Location: Kous, Egypt
Materials: Sugarcane bagasse, purchased woodpulp
Products: Printing & writing paper

Mill Expansion & Modernization - National Paper Company

National's Engineering Consultant for modernization and expansion of existing pulp mill and paper and board mill from 40,000 mt/y to 90,000 mt/y in a budget of US\$ 44 million, funded by the World Bank. Services included, in part, basic engineering, preparing specifications for equipment supply packages, bid analysis, implementation monitoring, detailed engineering and implementation of services and connections between equipment packages, assistance in startup and commissioning, and supervision of training program.

Major improvements and equipment packages included in part: addition of turbogenerator; modification and expansion of stock preparation systems for paper machines 1, 2, 3, 4, 5 and 6; addition of a wastepaper repulping and cleaning system, modifications to paper machines 1, 2 and 3; rebuild and expansion of paper machines 4, 5 and 6; expansion of finishing room and warehouse, and modernization of white water and effluent systems.

Client: National Paper Company
Location: Alexandria, Egypt
Materials: Imported woodpulp, wastepaper, rice straw
Products: Printing & writing paper, MG paper, linerboard, corrugating medium, low-grade board

Mill Expansion & Modernization - RAKTA Paper Company

RAKTA's Engineering Consultant for modernization and expansion of existing pulp mill and paper and board mill from 45,000 mt/y to 90,000 mt/y with a budget of US\$ 36 million, funded by the World Bank. Services in part included: basic engineering, preparing specifications for equipment supply packages, bid analysis, implementation monitoring, detailed engineering and implementation of services and connections between equipment packages, assistance in startup and commissioning, and supervision of training program.

Major improvements and equipment packages included in part: addition of a chloralkali plant, rebuild No. 3 paper machine to double its capacity, rebuild of the duplex board machine to double its capacity, addition of a bagasse pulp repulping and screening system, addition of a wastepaper repulping and screening system, and modifications to mill services, the pulp mill, and the stock preparation and broke system.

Client: RAKTA Paper Company
Location: Alexandria, Egypt
Materials: Rice straw, sugarcane bagasse, imported woodpulp, wastepaper
Products: Printing & writing paper, bag paper, linerboard, duplex board