



Pulp Mill & Recovery Scheduling System

PRO-PLAN

The PRO-PLAN Pulp Mill & Recovery Scheduling System maximizes the use of available fibre line and recovery capacities.

PRO-PLAN is a short to medium term scheduling and simulation system that determines the maximum Pulp Mill production rates consistent with constraints on:

- pulp demand and storages,
- weak black liquor storage and evaporator/recovery throughput, and
- white liquor supply.

It also calculates the appropriate production rates for evaporators, recovery boilers, recausticizers and lime kilns to achieve and maintain optimum levels in WBL, SBL, Green Liquor and White Liquor storages.

It assists Mill Co-ordinators, and Pulp Mill and Recovery Operators to determine the most appropriate production rates for maximizing production and minimizing rate changes.

With no constraints, the system calculates production rates to achieve and maintain the levels in the pulp silos and liquor storages that will best cope with planned or unplanned shuts upstream or downstream of each storage. This is based on the probability of plant downtime upstream and downstream of each storage. The optimal levels will vary as planned shuts approach.

If there is a mismatch in pulp demand and minimum or maximum production rates, best use will be made of the available capacity in the storages to maintain production. If pulp mill production is limited by white liquor supply or evaporator throughput, the maximum production rate is calculated according to the current priorities and available capacity in the white liquor or WBL systems.

The system also determines whether:

- washer Dilution Factors need to be changed to assist WBL management,
- evaporator performance has degraded and the WBL system has capacity for an evaporator wash.



FINANCIAL BENEFITS

The financial benefits from using the PRO-PLAN Pulp Mill Scheduling System will vary from mill to mill, and are dependent on the types of constraints and the operating methods of the mill prior to using the system.

Typical improvements might be:

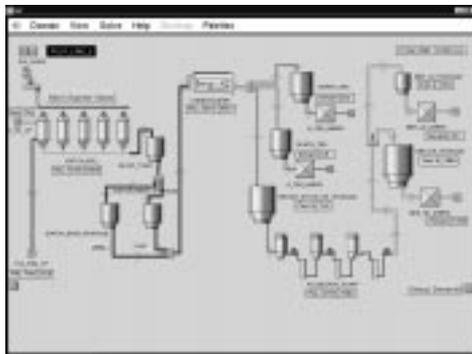
(a) Better utilisation of capacity -

1% increased production of 500 tonnes/day for 350 days @ \$200 margin = \$ 350,000 p.a.

(b) Better storage management -

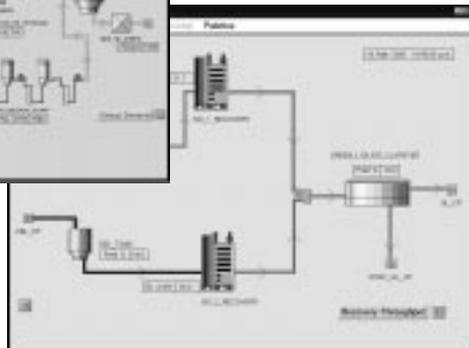
If there are 10 unscheduled upsets per year, and the storages are 5% closer to optimal levels, the increased production before needing to shut is:

$10 \times 5\% \times 500t \times \$200 = \$ 50,000 \text{ p.a.}$

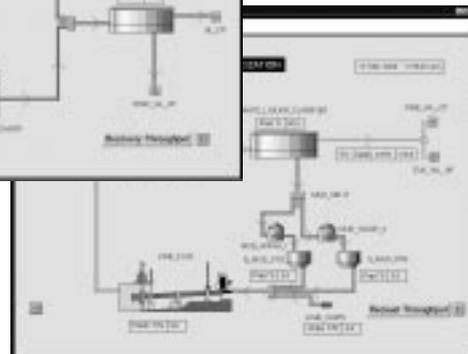


Pulp Mills, Bleach Plants ...

... Evaporators, Recovery Boilers ...



.... Causticizers, Lime Kilns, etc.



PRO-PLAN is highly configurable, so is easily set up and maintained for any mill situation. It is based on Gensym's G2 Real Time Expert System, which allows any unique operating rules or constraints for a particular mill to be easily added.



To discover more about PRO-PLAN and its potential payback for your situation, explore: www.procex.com.au, call Procex on (613) 9386 1235, or email: procex@lexicon.net

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