

Stock Preparation Simulator



**Your technical resource for improving
Pulp and Paper process control performance**

Applications

- Improve process and control troubleshooting skills
- Investigate variability propagation from the stock preparation system to the reel
- Select optimum pump and valve
- Investigate the impact of stock chest agitation performance
- Identify opportunities for VFD's
- Evaluate Blending control strategy options
- Evaluate financial benefits of reduced Basis Weight and Moisture variability

Use the Simulator to:

Train operators

- Improve process knowledge
- Understand control strategies
- Develop troubleshooting skills

Train control personnel

- Develop control strategies
- Optimize control loop tuning
- Select control equipment
- Improve troubleshooting skills

Troubleshoot control problems

- Inject 'what if' disturbances
- Inject process non-linearities

Evaluate design options

- Dilution valve sizing
- Control strategy options
- Identify process bottlenecks

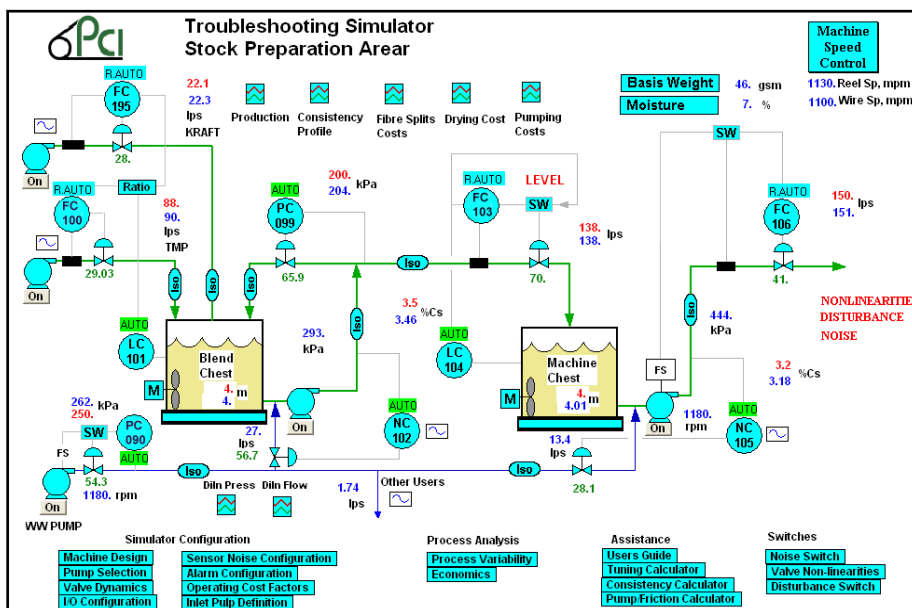
Simulator Pricing

From CDN per license \$3500.00
 USD per license \$3200.00

(Canadian Taxes Included.)
 Fees include a copy of VisSim Viewer, a stock preparation simulator handbook, and a USB protection plug.

About ProNamics

ProNamics Control Inc. is based in Vancouver, BC. The company conducts process and control optimization surveys, prepares process simulations to establish best practices and provides a range of training courses related to process control optimization. Visit our web sites at www.pronamicscontrol.com for more information about our services.



Stock Preparation Simulator Features

- DCS-like graphical interface
- Extensive trending and data export capability
- Built-in help displays
- Configurable process equipment
 - Sizing of Tanks, Pumps, Valves
- Selectable control strategies
 - Blending Ratio control
 - Basis Weight and Moisture
 - Level Control
- Adjustable controller tuning, filtering, controller configuration
- Disturbance injection capabilities to build troubleshooting skills and conduct sensitivity analysis

Controller Operator Station

Controller Operating Settings

Tag: BW_SCAN

Basis Weight Scan Average

Loop Tuning... Loop Config...

Man Auto Casc

SP: 46.00 gsm

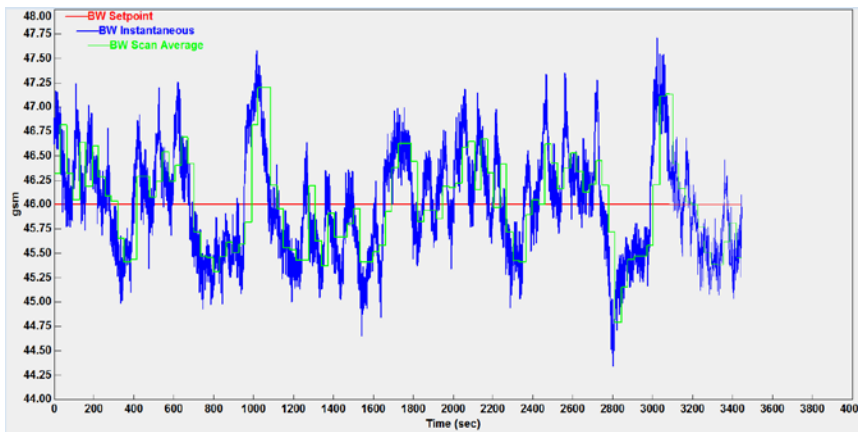
EV: 46.17 gsm

QP: 59.89 %Output

New SP: 46

OK Cancel

Trend Plots



Valve Selection

fcv102 Properties

Valve Series_NCV101: Fisher V-150

Valve Size_NCV101: 4 inch

Generic Valve Flow Characteristic: Equal Percentage

Generic Valve Max Cv: 1000

OK Cancel

Pump Configuration

pump Properties

Pump Selection: Generic Fixed Speed Pump Curve

Stock Pump Speed (Nominal): 1180

Pump Design Flow: 2000

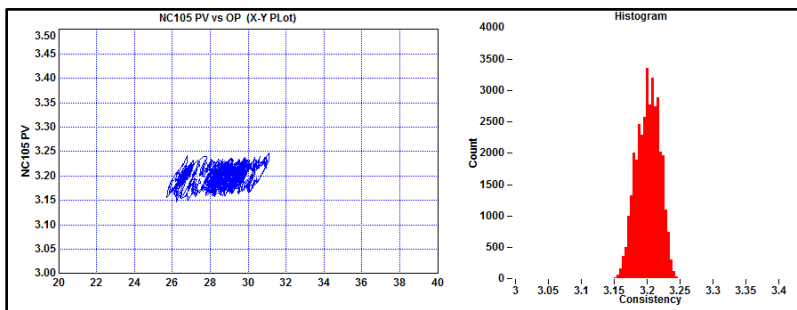
Pump Design Head ft: 120

Pump Best Efficiency: 81

Trim Impeller by %: 0

OK Cancel

Time Series Analysis



Disturbance Injection

sine1 Properties

Disturbance Wave Selector: Sine Wave

TMP Consistency Cycle Period second/cycle: 2000

TMP Consistency Disturbance Gain, %Cs: 0.2

TMP Consistency Disturbance Step, %Cs: 0

OK Cancel