

To Whom It May Concern

From: Carl Stewart

Subject: Used two-roll Manchester calender stack

The used stack was purchased from Perry-Videx and was located at the Groveton, NH mill. It was removed and shipped to Lincoln, at Lincoln's expense, by Nordic Construction Services located at Berlin, NH. Contact Tom Bushey at (603) 915-0501.

EQUIPMENT:

Present location

One set of calender frames	Installed on #4 PM 3/5/2012
A spare swimming roll	Finishing Room
A spare queen roll	Finishing Room
Catwalk	Next to fire building East of Mill
Hydraulic control panel	Paper Stock house
Doctor oscillators	On Doctors
Drive motor and gearbox	Paper Stock house
Caltrol air control panel	Paper Stock house

DOCUMENTATION:

Voith Installation Manual	Engineering File Labeled "Groveton Roll Wrapper"
Groveton Drawings	Same
Photos	\\Liserv2\users\cstewart\My Documents\Carl\Projects\PAPER AREA\#4 PM 2 Roll Calender
C Stewart Files	Engineering File Labeled "Groveton Roll Wrapper" Also \\Liserv2\users\cstewart\My Documents\Carl\Projects\PAPER AREA\#4 PM 2 Roll Calender
C Stewart emails	Liserv2\User cstewart/carl/projects/papermill/2roll cal
Forsight Engineering files	Engineering File Labeled "Groveton Roll Wrapper"

SCOPE:

Scope was to install the used stack in the place of #4 pm dead weight stack, on the same sole plates and cross machine centerline. The frame was to be redrilled to allow the outboard bolts to fit onto the frame since the frame will overhang the soleplates.

This stack was used by Groveton on a right hand machine whereas #4 is a left hand machine. This means the former tending side frame is installed as a drive side frame and vise versa for the other. The swimming roll will be installed as before but the queen roll will be swung end for end to allow it to be driven.

The existing corner gearbox is to be raised to the elevation of the queen roll by designing, fabricating and installing a packer box. The same for the cone pulley and clutch. A new upstairs cone pulley has been delivered to compensate for the difference in driven roll diameters. Lane Supply has furnished the pulley. A new drive shaft connecting the gearbox to the queen roll has been designed. A new drive belt has been designed, ordered and received. The 8GHB gearbox removed from the old drive is to be rebuilt to be available for a spare.

The calendar at Groveton did not use a Mt Hope roll at the ingoing nip. Our existing calendar does. The existing Mt Hope roll is installed on the new stack.

A new dual monorail system has been designed by Forsight Engineering. There are two 5 ton electric hoists in the beater room basement that are available. The plan is to mount two steel cables to support the power cables to these hoists with plugs on each end. One end will be plugged into the hoist, when installed, and the other into the welding plugs located in the felt room and on a column by #5PM shaft puller.

CONSTRUCTION

The calendar was installed by mill maintenance personnel working around the clock. The machine was shut down and locked out to be ready for the millwrights and electricians at 7:00 am Monday. An alignment contractor has been in and has marked alignment guidelines on the soleplate to facilitate the initial setup of the frames. (See the drawing #4 PM 2 Roll Calender.dwg, layout tab baselines)

The calendar was started up Friday night but was forced back down by a bad bearing on the drive cone pulley.