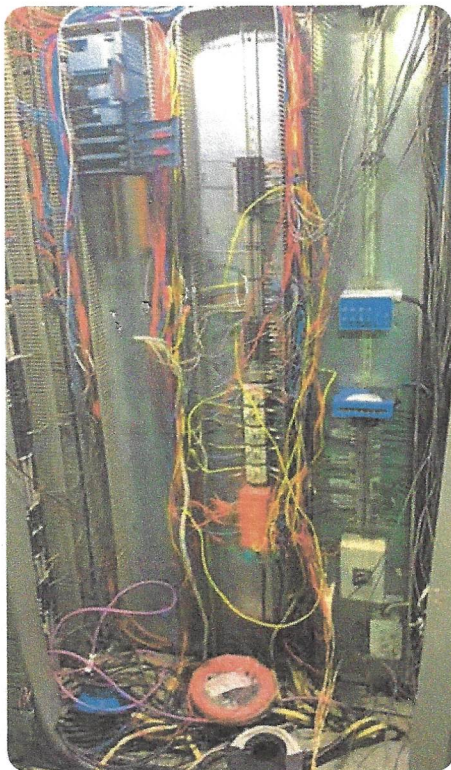
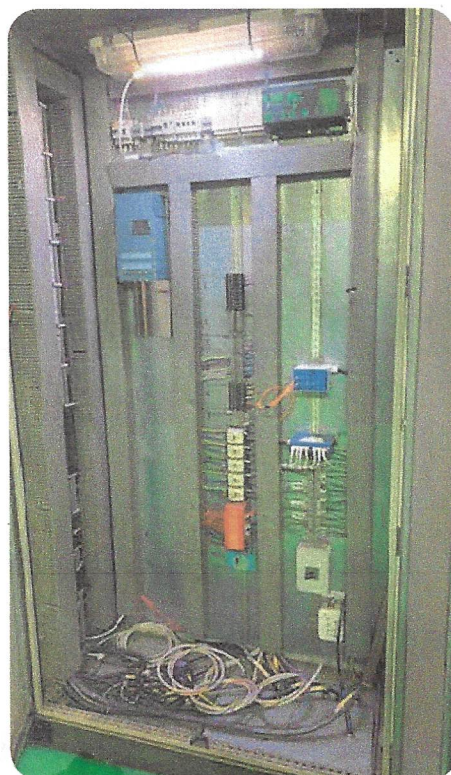


# Teamwork and collaboration gets the Uptake #2 upgrades done

By Maintenance Manager Electrical, Cobus Van Zyl



Uptake #2 PLC Drive Panel  
(Before)



Uptake #2 PLC Drive Panel  
(After)

In an age of constant innovation, upgrades are not novel. But it must be noted that in the case of Uptake #2, the upgrade we needed to do was tantamount to a heart and brain transplant! We would be ripping out the heart and soul of the uptake machine and installing a new one.

The Uptake #2 machine is one of the mill's unbleached softwood pulp outlets, and its product is used both at Ngodwana and sold to external customers. During its lifetime, the Uptake #2 machine has seen a major control system upgrade from the original ASEA DC drives and motors, to a newer ABB AC80 control system, ACS600 variable speed drives and AC motors in 2004.

The ABB AC80 control system and ACS600 variable speed drives have since reached the end of the product support stage and Sappi had to venture into another upgrade on both the control system and variable speed drives.

During the week of 10 May to 14 May 2021 the machine was stopped for the Electrical Project Team, led by Electrical Engineer, Frans Larkins, Electrical Technician, Calvin Hartman and Fluid Control Projects as the supplier and installer of the new system. The ABB system was replaced with a Siemens S7-1500 PLC and six Siemens Sinamic G120 variable speed drives, complete with new interface between the PLC, drives and the existing DCS system. The project also included two operating panels to give the operational staff a modern look and feel with which to operate the machine.

What made this project such a success was that the team's dedication and persistence resulted in the project being delivered ahead of schedule and pulp reels were again produced one full day ahead of the schedule.

Only one sheet break occurred during start-up and hot commissioning and this was due to factors outside of the scope of the drive replacement. Since the project sign-off the machine has been running without major complications and the operators are delighted with the new look and feel of their machine interface. In the first week of the June production month, a new weekly record was set at an average of 120 tons per day.

Thank you, Frans, Calvin,  
and Fluid Control Projects,  
for delivering on this  
wonderful project!