



Modernization of a Paper Machine System Diagram

Components	Associated Drive Control Concepts	Regenerative Drives
Lineshaft Converting lineshaft driven paper machines to sectional drives.	The conversion to sectional drives can take many forms such as: <ul style="list-style-type: none">• Adding helper drives• Replacing the steam turbine• All wet end drives to electric sectionals• All drive points to electric sectionals	Yes for dry end applications.
Digital Front End Electronics Replacing older analog or digital drive electronics with modern digital front end electronics.	Older drive systems can be brought up to date by replacing the drive power unit electronics with modern digital front end electronics. This approach keeps the same motors, cables and power components with greater capability.	Yes for dry end applications
<ul style="list-style-type: none">• Master Controller Existing master controllers can be replaced with a modern master controller.	Older drive systems can be brought up to date in stages. The advantages of modernizing the existing drive system are: <ul style="list-style-type: none">• Updated software tools• Auto-tuning• Increased functionality• Human Machine Interface• Operator Interface• Maintainability	na