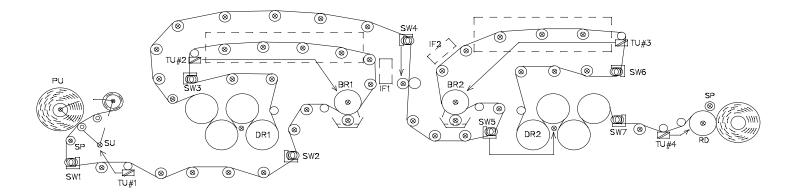
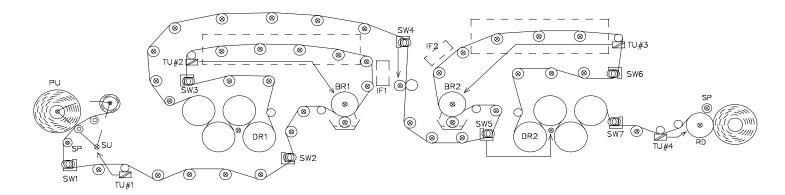
Off Machine Coater System Diagram



Mechanical Components of a Off Machine Coater	Associated Drive Control Concepts	Regenerative Drives
Unwind	The high inertial load and the high	Yes
High inertial load. The parent roll of paper is driven from the center spool. Top speed in the range of 5000 fpm with high rates of acceleration and even higher rates of deceleration. Two unwinds are operated alternately so that the expiring roll can be replace with a full roll without stopping the process.	rates of acceleration / deceleration normally determine the power rating of the unwind drives. The unwind drives must provide the sheet tension over the entire diameter range requiring constant power operation. Tension feedback is provided by swing rolls or load cells placed under rolls. The flying splice demands the high performance of a modern drive system.	Tes
Paper Rolls and Spreader Rolls The steel roll is used to change the sheet path and support the paper. The spreader roll spreads the sheet to eliminate any wrinkles going into the coaters.	The paper rolls and spreader rolls are to be speed synchronized with the paper so as to minimize its influence on the sheet tension. The spreader configuration varies and is used to spread the sheet. Paper rolls may be grouped depending on several factors.	Yes
Normally there are two coaters so that both sides of the sheet can be coated. The sheet tension is regulated through out the process with one section being the speed.	There are many types of coating stations. The main roll is speed/tension regulated with provisions for an impact load. The rewetting of the sheet must be considered during the start up process.	Yes
Dryers Can dryers and / or air float dryers may be used to dry the sheet after coating.	The can dryers present a high inertial load that must be considered due to the high acceleration and deceleration rates.	Yes

Off Machine Coater System Diagram



Mechanical Components of a Off Machine Coater	Associated Drive Control Concepts	Regenerative Drives
Rewind	The reel is tension regulated and	Yes
A pope reel is generally used for rewinding the paper. Newer reels may be center driven also. The finished roll of paper will be taken	winds up the paper continuously so as not to require stopping the coating process.	
to a rereeler for rewinding in preparation for calendaring.		