PILOT COATER - Pond size press and Metering size press

Width: 40 in. (1000 mm) wide nominal
Speed: maximum 4,000 ft. per minute (1220 m/min)
Metering: Rod – smooth or grooved
Blade – beveled or bent
Airknife – 26” (660 mm) width
Applicator: Applicator roll (flooded-nip)
Short dwell time
Metering (film) size press
Pond size press
Calendering: Steel-to-steel, one nip
Hot soft-nip, four nips, on-line

Pond Size Press
1000 fpm (305 mpm)
Left – 10% starch
Right – 14% CaCO₃/starch
10 gsm
5.5% moisture

Metering Size Press
3,000 fpm (910 mpm)
63% - clay/CaCO₃:SBR/Starch
Left – top roll
Right – bottom roll
18 gsm
5% moisture
FOURDRINIER PAPER MACHINE – pond size press, fourdrinier table (spray), wet end

Width: 24 in. (610 mm) wide
Speed: maximum 120 fpm (36 mpm)
Basis Weight: 16 to 410 lb. (3,000 ft² ream size) or 26 to 700 gsm

24/7 Papermaking: stock and additive preparation sized to make extended continuous operations practical at production rates up to 160 lbs. per hour (72.5 kg/hr).

Size Press: Horizontal pond size press - two-stage run tank allows instantaneous size changes with minimum stock loss. The paper machine can also accept up to 18" (460 mm) diameter rolls off your own paper machine or slit rolls at WMU. Depending on how much paper you need, you can test as many as 35 different size press formulations in a single eight-hour day.

Spray Bar: Apply starch slurry to the newly formed sheet before it hits the first dryer can. The spray imparts internal sizing benefits the closer the spray is to the headbox and a surface sizing benefit when applied closer to the dry line.

Calendering: Steel-to-steel, three nips