



## ***The Coating Processes*** **Edited by Jan C. Walter**

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This book, now in soft cover, covers fundamentals and practical applications of paper coating. The book is divided into eight chapters which outline the process of making coated paper, the preparation, application and drying, mixing and dispersion in coating operations, continuous coating make-down system, screening of paper coatings and their ingredients, pumps and circulation systems, flow and material measurement in the coating process, raw material quality control, blade, air knife and rod coaters, and much more.

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Coating Formulation

Drying and Finishing

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Topcoat

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Coating Formulation

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- ammoniacal salts
- ammonium
  - hydroxide
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- calendering
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- Champion Process charting
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- clam shell
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- CMC
- coagulants
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- dispersing
- dispersion
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- formation
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- fourdrinier former
  
- ga
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- Glass Transition Temperature
- gloss
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- gravity lines
- gravity strainers
- gravure
- grooved rods
  
- halogen gas
- heat load
- heat transfer
- heat transfer coefficient
- HEC
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- holdout
- hoods
- horsepower
- hydroxyethyl cellulose (HEC)

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IGT pick  
impellers  
impingement  
sensors  
kraft

laminar  
laminar flow  
laminator  
latex  
level  
leveling index  
load cells  
lobe type pump  
long dwell  
lubricants

magnetic field  
magnetic flow  
sensors  
makedown  
mass flow sensors  
mass meter  
Massey coater  
Mayer rod  
mechanical seals  
mechanically  
cleaned filter  
mesh  
metering pumps  
mixer(s)  
mixing  
moisture  
motor  
mottle  
mottled streaks

Newtonian  
nip loading  
pressure  
nipped roll  
Normal Running  
Load (NRL)  
NRL

off-machine  
offset gravure  
coater  
offset pivot guide  
offset print  
offset printing  
oleaginous

infrared (IR)  
infrared dryer  
ink holdout  
insolubilizer  
inverted-blade  
materials  
on-line sensors  
on-machine  
opacity  
optical brighteners  
optical properties  
orange peel  
oscillating doctors  
over-spray

pan  
paper properties  
particle size  
particle size  
distribution  
particle size streaks  
pearl starch  
perforated  
pH  
pigment(s)  
piping  
Plank's distribution  
law  
plastic pigment(s)  
polyvinyl acetate  
polyvinyl alcohol  
(PVA)  
pores  
Porometrique Noir  
positive  
displacement flow  
sensors  
potassium  
hydroxide  
pre-meter  
precast  
precipitated calcium  
carbonate  
pressure  
pressure drop  
pressure filters  
pressure relief  
valves  
primary arms  
process control  
profile  
progressive cavity  
pump

coaters  
isolation

jet cooking

protein  
protein shock  
pseudoplastic  
puddle  
pull roll  
pump  
pumping  
PVA

quality  
quartz tube  
queen roll

radial  
radiation  
railroad tracking  
raw materials  
raw stock  
RDC  
recirculation  
Recommended  
Drive Capacity  
(RDC)  
recycled board  
recycled fiber  
reel  
refining  
retrogradation  
rewind  
rewinder  
Reynolds number  
rheological  
Rheology  
rod  
rod coaters  
rod diameter  
rod holder  
rod metering  
roll applicator  
rotameters  
rotary pumps  
rotary unions  
rotor  
runnability

S-wrap roll  
satin white  
scale

K & N ink  
Kamberoller  
Kimberly Clark-  
Mead (KCM)  
king roll  
screening  
screw jacks  
seal water  
secondary arms  
sedimentation  
semi-bulk bags  
sensors  
shear  
shear thixotropy  
short dwell  
sieve  
silica  
Single Window  
size press  
slitter dust  
slotted  
smooth rod coating  
smoothness  
soda ash  
sodium alginate  
sodium hydroxide  
soft nip calendering  
solid bleached  
sulfate board  
solids  
sonic level  
transmitter  
sonic sensors  
soy polymers  
soy protein  
SPC  
speed  
spool  
SQC  
St. Regis-Faeber  
process  
starch  
statistical process  
control (SPC)  
statistical quality  
control (SQC)  
statistics  
steam  
steam cylinder  
steam cylinder  
dryers  
steam heated  
cylinder



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steam injunction	stuffing box	surface treatment	(TiO <sub>2</sub> )
steel roll	styrene-butadiene	suspended solids	top liner
steel-to-steel	latex (SBR, S/B)	synthetic fabric	topcoat
Stefan-Boltzmann	styrene-butadiene		torque
law	latex (SBT, S/B)	tank(s)	tracking
stickies	suction	tear	transfer roll coater
stiffness	supercalender	temperature	transfer-type
storage	supercalendered	tensile	unwind
streaking	supercalendering	TiO <sub>2</sub>	transmitter
structured pigments	surface sizing	titanium dioxide	triple coating
tubular filters	woven stainless		
tungsten wire	steel		
tunnel dryer	wrap angle		
Turbine sensors	wrinkles		
turbulence			
turbulent flow	X-bar		
turret-type unwind	Yankee dryers		
	Zahn cup viscosity		
U-tube			
unbleached kraft			
board			
unnipped roll			
unwind			
vacuum roll			
vacuum table			
valves			
variables-speed			
drive			
velocities			
vessel			
vibratory screens			
vinyl			
viscosity			
Vortex meters			
Vortex sensors			
water box			
water-retention			
agents			
waterwashed clay			
wavelengths			
wax paper			
web guides			
web spreaders			
wedge wire			
weigh tank			
West Virginia			
Coater			
wet-on-wet			
Wien's			
displacement law			
wire wound rods			