

Case Study
 **Nitro™ FSn**



Faster Startup

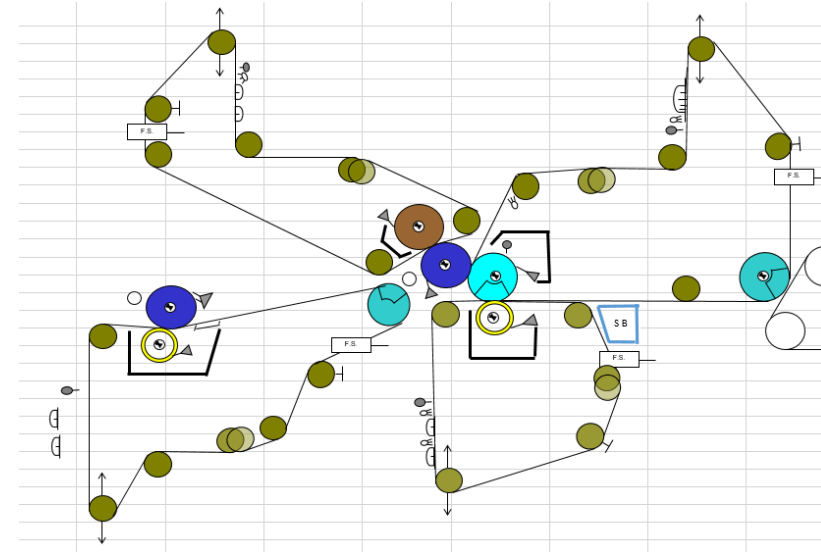
REGION:	Eastern Canada	
MACHINE:	Trinip w/ 4 th Press	
POSITION:	Pickup Felt	
GRADE:	Uncoated Freesheet	
BASIS WEIGHT:	38-60# / 3300	56-90 gsm
SPEED:	3600 fpm	1100 mpm
Loading:	450 pli	

OBJECTIVES:

Reduce Pickup Felt break-in time and maintain 49 day felt life cycle.
Standard felt takes 5-10 days to break-in.

RESULTS:

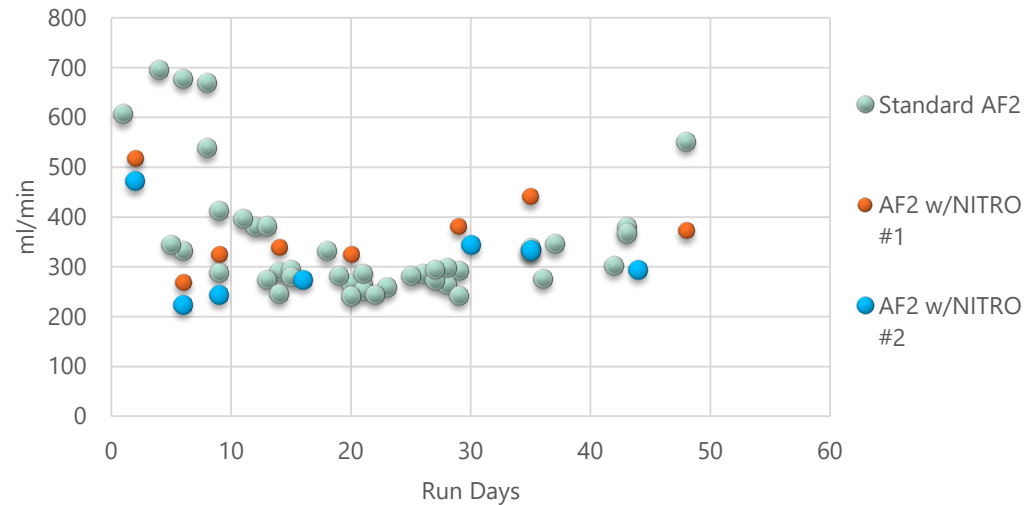
- AccuFlow 2 with Nitro was at target speed in 3 days.
- Ran the first 2 days without a wet end break.
- Competitor trial to improve break-in still took 6-7 days to get up to speed.
- 2nd Nitro trial running similar to initial trial.
- Standard Design is now AccuFlow 2 w/ Nitro



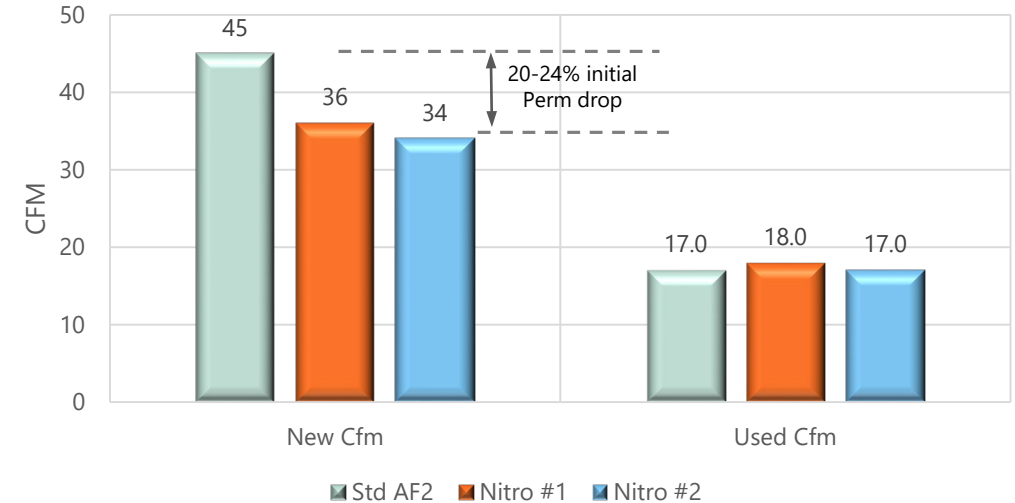
VALUE

Increased production due to reduced break-in time.
Ability to run lighter weight grades earlier in the run.

Pickup Felt Water Permeability



Pickup Felt Air Permeability



- Water Permeability values start out in the 600-700 range with the Standard AccuFlow 2 design.
- At 6-10 days, the AccuFlow 2 densifies and water permeability drops to the 250-350 range.
- At that point, the dewatering transfers from the uhle box to the nip and the machine speed increases.
- With the Nitro Startup treatment added, water permeability starts out in the 500 range.
- After only 3 days, it drops to the 250-350 range and machine speed can be increased.
- Initial Air Permeability was 20% lower than Standard AccuFlow 2 while residual Air Permeability was similar.