

Challenge

Issue

Excess pulp stock was sticking to roll surface, requiring a “doctor blade” to be used, which slowed down machine speed.

Goal

Client sought easier release properties to increase machine speed.

Root Cause

Due to temperature, super calendered stock was sticking to TFE coated roll surface.

Solution

Preparation

- Abrasive blast remove TFE coating
- Grind off chrome layer
- Grit blast to Sa 2.5 with 3 mil (75 µm) profile

Application

1. Apply ARC 858 at WFT* of 60 mils (1.5 mm)
2. Force cure followed by surface machining

*WFT = Wet Film Thickness

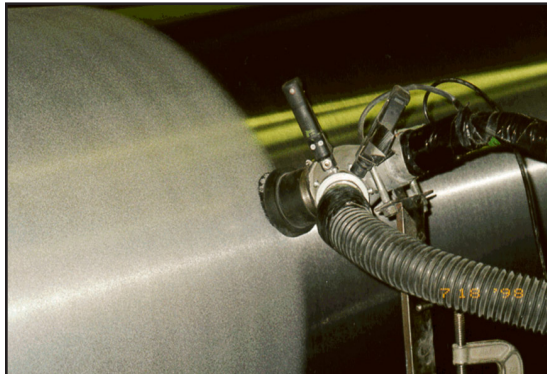
Results

Client Reported Productivity/Output Increase

- After start-up pulp did not stick to roll surface
- Machine speed (productivity) was increased by 13% (1,500 m/min. to 1,700 m/min.)

Additional Comments

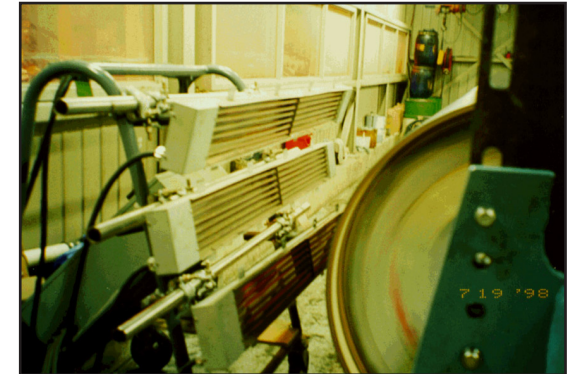
- As a result of this success, additional rolls (guide and tension) in the forming section have been coated with ARC S2



Vacuum grit blasting roll surface



ARC 858 being applied



Curing ARC coated surfaces