SHW S-Roll Rebuild

Swimming Rolls

• Farrel S-Roll
• Voith – Nipco Econo Nip
• Metso – Sym S
• Kusters – Swimming Roll
  Piston (Shoe) Loaded
• Metso (Beloit) – CC Roll
Seal Problem Symptoms

- Sheet Profile, Smoothness and/or Gloss Degradation
- As Seal Wears, Pressure Drops (Unattended)
- Increased Oil Flow to Maintain Operating Pressure
- Continued Increase of Oil Flow Until End of Control is Reached
- Verify by: Increasing to Max PSI and Check Flow Rate – Compare to Rating
Rebuild Scope

- Incoming Inspection & Pressure Test
- Disassembly & Internal Parts Inspection
- Replace Axial Seals
- Machine Clean-up End Seal Support Rings
- Machine Sealing Surfaces of End Seal Rings
- Brush Grind Seal Sleeves
- Machine End Covers
- Repair Counter-Bores, If Required
- Check Chill Depth Thickness & Hardness
- Replace All O-rings and Seals
- Replace Internal Bearings, If Required
- Static & Dynamic Testing at Operating Speed and Pressures
- Finish Grind
- Final Inspection
Pressure Test
Disassembly
Inspection
Shell ID Honing
Replace Seals
S-Roll End Seal Assembly

END-SEAL ASSEMBLY

- Lockwasher
- End-seal support ring
- Lockwashers
- Socket-head cap screw
- Springs
- Short axial seal
- Dowel
- Nylon buttons
- Socket-head cap screw
- End seals

SHW 1865
Casting Technologies

FARREL

“Swimming Roll”™
Rebuild End Seal Support
Rebuild & Machine End Seal Ring
Multi-Zone Crown Control

- Voith – Nipco
- Metso – Sym ZS, Sym-ZL
- Kusters - Vario
Rebuilding

- Incoming Pressure Test
- Replace O-rings and Glide Rings
- Clean Tube Bundles
- Hone Internal Shell Surface
- Check Bearings - Replace if Necessary
- Balance Shell if Requested
Zone Controlled - External Loading
Nipco Roll
Self Loaded Zone
Controlled Roll
Nipco: Self Loaded
Re-Assembly
Dynamic Pressure Test
Only SHW maintains a shop cell dedicated to S-Roll and other crown compensating roll rebuilds. And no other company has more experience.

Turn to SHW for the best care for your rolls.