Determining of the best doctor blade setting
SkyLine service – SensorBlade measurement

Damage to roll covers and web breaks can be avoided by applying an especially even pressure of the doctor blade over the entire roll width. With SensorBlade, Voith is offering a new service to optimize doctor blade settings.

Advantages of the SensorBlade Measurement
+ Problems associated with uneven pressure distribution are detected
+ Higher machine efficiency and lower TCO can be achieved with properly set doctor blades
+ Optimization of the service life of doctor blades and roll covers
+ Comprehensive service with a clear list of actions
+ Everything from a single source: Measurement, blades, holders and technology support
Measurement preparation
• Machine shut down
• It must be possible to apply and raise the blade holder
• The blade holder must be cleaned in advance
• The roll cover or cylinder surface must be clean
• Repair work that causes vibrations in the immediate vicinity must be stopped

Helpful information – what is needed for the measurement?
• External compressed air
• Information regarding the compressed air connection
• Application pressure of the doctor blade
• Operating times of the doctor blades
• Information regarding problems and abnormalities
• Measured profiles of the doctor blades (if available)
• Information regarding the blade holder
• Information regarding the roll cover or cylinder surface

Structure and implementation of the measurement
• SensorBlade is based on a standard SkyLine doctor blade, which provides realistic measurement conditions.
• SensorBlade consists of several interconnectable segments equipped with multiple sensors.
• The individual sensors determine the contact pressure over the entire roll width.
• From the measurement results, the contact pressure profile is calculated and visualized using the SensorBlade software.

Assessing the measurement results
• After the measurement is finished, a detailed report is created covering the actual doctor blade contact pressure and the distribution of force across the entire roll cover or cylinder surface. The report contains the following information and recommendations:
  • Optimization of the doctor blade work
  • Identification of the best doctor blade for your specific application
  • Optimization of the roll cover or cylinder surface conditioning
  • The best contact pressure for the doctor blade
  • The best doctor blade angle
  • The optimal setting for the doctor holder
  • Areas of potential savings