GlossTech

Super Calender Steamshower for SC and LWC

Paper Mills making high gloss paper, need a specified level of gloss and smoothness after the surface treatment in the super calender. Today with the GlossTech and its unique steam application technology, superior grades in gloss, surface roughness and smoothness are achievable. The GlossTech is a minimum size type of steamshower for super calender and off-line multinip calender. Our advanced technology allows V I B Systems to provide a high performance reliable steam actuator with zone spacing down to 75 mm. This, along with our long life reliable pneumatic actuators, provides superior benefits for today's paper makers.

Advanced Actuator Control Systems

GlossTech Description

The most important properties of a calender steam-shower are its capability and its ability to raise sheet gloss level without delamination and sticking on the calender rolls. These properties will improve the sheet's cross-directional gloss profile and optimize the level, two-sideness and runability. With the GlossTech in the calender, managing gloss profile and gloss target at the same time are achievable.

The compromise between quality increases and profiling capability has been eliminated by increasing the velocity of the steam jets onto the web.

The GlossTech has a cross directional header to make the profiler absolutely drip free. The steam header collects all condensate which might come from the steam supply and assures that only dry steam reaches the profiling valves. The profiling zone is fully compartmentalized, supplying high velocity steam to each cross direction compartment via a separate, uniquely designed actuation valve that allows optimum zone definition and precise control. The spring loaded profile valves assure immediate steam shut-off at sheetbreak. These proprietary control valves assure finest control of steam amount to prevent delamination on coated grades. The patented V I B integrated control tech-nology assures sophisticated calender control with limits for different grades. The GlossTech heating system assures that the steam shower is always hot and immediately ready for steam application.

Primary material for GlossTech is stainless steel 1.4571 (316 Ti). Special material system of the diffuser plate assures complete heating even during longer sheetbreaks.

Control Station[ECS] is an electronic control station that manages the control of the pneumatic actuators. Each actuator is controlled with an I/P-converter with a control signal from 0.4 to 2 bar (6 - 30 psi). Setpoints are sent from the V I B control station[IPS] using measurement system data.

Control Station[IPS] is an integrated process station that serves as the central process point for the system. It contains the integrated MD/CD control, the operator visualization package, PLC functions and the intelligence to manage the total actuator control system.

Benefits to the Paper Industry

- Increased gloss for improved new grades.
- Flatter gloss profiles and caliper profile can be achieved simultaneously.
- Control of two-sideness by using GlossTech on top and bottom side.
- Narrow spacing of the actuator can be defined based on the desired profiling effect.
- Optional feedback of the actuator position ensures reliable functioning of the GlossTech Actuator.
- Provides better edge performance for improved reel building.
- Gloss increase for LWC grades from 5 - 10 %.
- Gloss increase for SC grades from 6 - 12 %.
- CD gloss 2-sigma improvement of 60 %.
- **Efficiency increase of total production line with integrated gloss control of 3 - 4 %.**

Technical Features

- Steam dryer header in cross direction.
- Steam heating system.
- Diffuser plate special material.
- Integrated CD and MD control including PLC functionalities (interlocks, loops).
- Profiling zone spacing down to 75 mm means high profiling capability.
- Rigid construction, material 316 Ti.
- LAN or Serial Link protocol for connection to the measurement system. Switchable with a mouse click.

Technical Specifications

Pneumatic Actuator
Body material 1.4404
Control signal 0.4 - 2 bar (6 - 30 psi)
Position indicator
Closed when no control signal

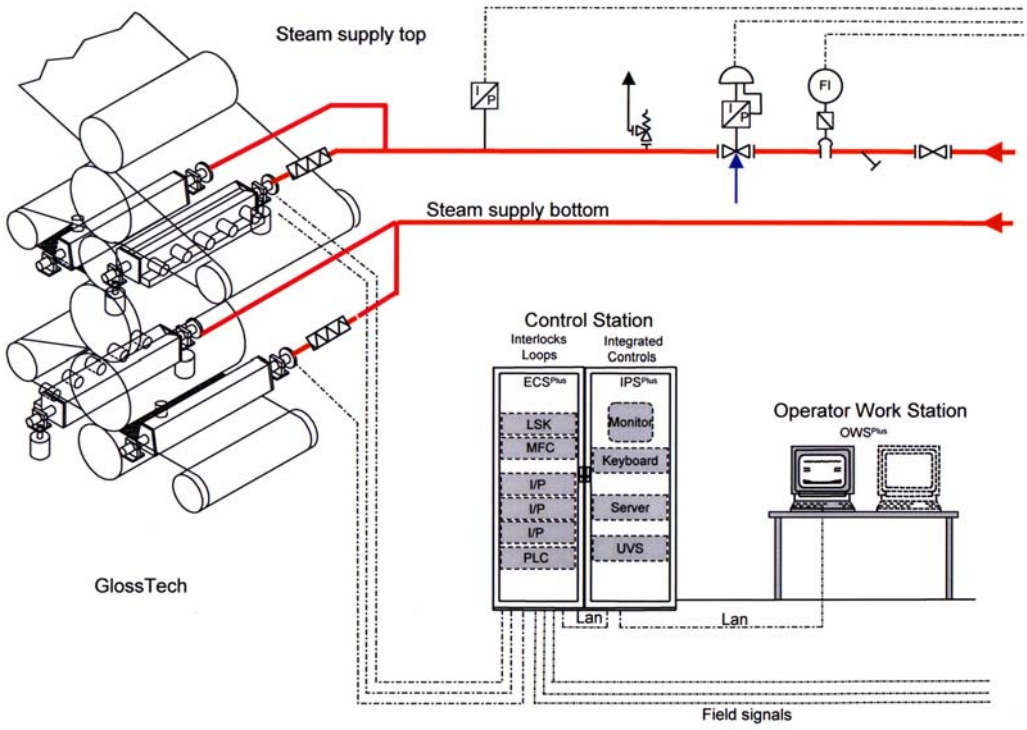
Stainless Steel
Primary 1.4571 (316 Ti)

PSF® - Precision Steam Finishing

Optio

- Pne
- Hyc
- Ste
- Pos
- Tur

ver
and LWC



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