

**PRODUCT APPLICATION NOTE**

**Pulp and Paper Mills Electrical Protection**

**Raycap provides electrical protection for machinery in pulp and paper mills**

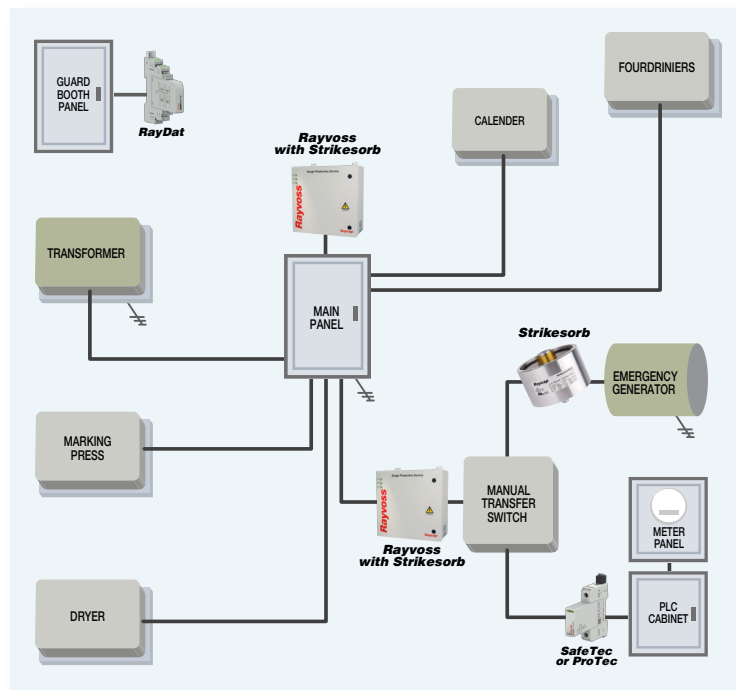
*Rayvoss®, Strikesorb®, SafeTec and ProTec Surge Protective Devices (SPDs) ensure unparalleled reliability and availability of your equipment and operational infrastructures. Raycap offers field proven protection for all motors, drives and control systems.*



All heavy-duty machinery used throughout the pulp and paper industry including manufacturing applications ranging from air and water pumps, hydraulic compressors to refrigeration units, conveyor systems,

remote-controlled valves, and more must be protected from damaging electrical surges. The pulp and paper industry relies on pumps and mechanical or electrical variable frequency drives (VFD)s, and on-board

distributed control systems such as programmable logic controllers (PLCs) and other embedded controllers which regulate the equipment to satisfy varying load conditions.



**The Challenge**

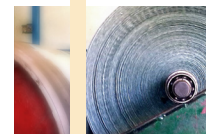
With hundreds of millions of dollars invested in industrial equipment inside their facilities, mill equipment owners must find ways to ensure the uptime and safe operation of their processing equipment, thus reducing downtime, and minimizing operations and maintenance costs. By protecting the electrical equipment from lightning, utility surges, and transient voltage power surges generated within an industrial facility, the reliability of the processing equipment can be greatly improved.

*Figure 1: Recommended one line scheme for protection of systems inside a paper mill*

**Raycap**



**INNOVATING POWER PROTECTION WORLDWIDE**



### Conclusion

Reliability and uptime are of critical importance in industrial manufacturing facilities. Raycap's diverse solutions feature its Strikesorb and SafeTec or ProTec surge protection technologies, providing around protection for any critical equipment in the mill from catastrophic failure.

“ Protection of industrial processing equipment can mean the difference between profitability and loss. ”



### Strikesorb Benefits

- Maintenance-free operation
- Safe operation: No smoke, fire or explosion
- Unique capability to withstand multiple high-energy transients
- Low let-through voltage, therefore providing excellent protection compared with competitive SPD products
- Class I/Class II compliant SPD per IEC 61643-11
- Global standards compliance: UL 1449 5<sup>th</sup> Edition, IEC, IEEE, NEMA
- 10 year global product warranty

### SafeTec Benefits

- Versatile, pluggable DIN Rail protection
- Class II compliant SPD per IEC 61643-11
- Type 2 compliant SPD per UL 1449 5th Edition
- Featuring current-limiting design
- Lifetime indicators
- Available in a variety of operating voltages
- 5 year global product warranty

### ProTec Benefits

- Versatile, pluggable DIN Rail protection
- Class I & II compliant SPD per IEC 61643-11
- Type 1 & 2 compliant SPD per UL 1449 5th Edition
- Low residual protection levels
- Lifetime indicators
- Available in a variety of operating voltages
- 2 year global product warranty

**Raycap is a trusted partner, providing maintenance-free electrical protection solutions for mission-critical applications in hundreds of thousands installations worldwide. For a detailed presentation on how Raycap's surge protection solutions can protect your pulp and paper mills, contact us today!**

# Raycap

[www.raycap.com](http://www.raycap.com)

