Source-to-discharge, integrated systems to meet the demands of power plant process chemistry.
• Disinfection of influent water source
• Boiler feed water control
• Select Cathode Removal (SCR)
• Multi-fieldbus interoperability

Engineered Solutions for your most exacting applications
• Ammonia injection/CO2 recovery units
• Hydrazine dilution and injection systems
• Phosphate control
• RO regeneration
• pH feed systems and controls
  pH compensated ORP for real time measurement of chlorine concentrations
• Biocide / Mollusk-ocide for critical influent treatment

Installed base of applications in Nuclear, Fossil Fuel and Combined Cycle applications
• Foundation fieldbus integrated controls
• Complete Modbus, Profibus, interoperability and system controls
• Phosphate control for critical in-leakage management

pH Compensated ORP
• Real time disinfection data
• Eliminates dead band readings and associated errors

Effluent Control
• pH
• Dechlorination
• Conductivity blow down control
River to Reel, Pulsafeeder Engineered Solutions, supplies chemical activation and metering systems for all pulp and paper process applications

- Dry polymer activation
- Anti-scale agents
- Biocide injection
- Emulsion polymer activation
- Defoamer agents
- Water disinfection

Engineered Solutions for your most exacting applications:

- ASA emulsification and injection
- “Batch down” and “On the Fly” felt wash systems
- Hypo-bromus blending and disinfection
- Peracetic acid injection
- Enzyme de-inking
- Wet strength additives
- Dry strength additives
- Micro-particle retention
- Accurate delivery of NaOCL to as low as 0.5 ml/min
- Proprietary de-gassing system for diaphragm metering pumps
  - Ideal for ammonia, chlorine, peroxide and halogen applications
- Complete polymer blending and injection;
  retention drainage and clarification
- Dye dilution and injection

Packaged Polymer Activation and Injection

- Dry strength
  - Starch injection
  - Polymeric additives
  - Alum feed
- Wet strength
  - Acid and alkaline resin injection
  - Cationic, Anionic, Non-ionic
- Alkaline size additive
- ASA emulsification and injection

Sizing

- Organic rosin size injection
- AKD
- AnKD

Brightening Agent & Pigment Control

- FWA/OBA blending & injection
- Colorant dilution & metering
- TiO₂
- Alkaline size additive
- ASA emulsification and injection
Water and Waste Water Treatment
Chemical Activation and Metering Systems (CAMS)

Reservoir to supply line, total chemical amendment of our most critical of natural resources, “clean water”
- Flocculation
- Disinfection
- Taste and odor control
- Coagulation
- Fluoridation
- pH

Engineered Solutions for your most exacting applications
- Chlorination with measured residual or pH compensated ORP
- Ammoniation
- “Chloramination” integrated system with measured residual
- Cationic/Anionic dry and emulsion polymer activation and metering
- Controlled disinfection using commercial and dilute oxidants (NaOCl, H₂O₂, mixed oxidants)
- Proprietary solutions for management of effervescent fluids
- Packaged solutions providing complete integrated systems reduces costs, streamlines documentation, eliminates construction delays and reduces startup constraints
- Design, layout and on-site engineering assistance
- Established written specifications and drawings for ease of equipment selection and incorporation into printed master plans (.pdf, AutoCAD, CSI)
- Difficult Applications: 100:1 turndown, high solids content, viscous fluids, abrasives, corrosives...

Controls Integration
- Foundation Fieldbus interoperability and systems controls
- Modbus
- Profibus
- DCS
Pulsafeeder Engineered Solutions
From raw water to the faucet, Pulsafeeder Engineered Solutions incorporate the latest improvements in fluid metering and process controls technology. Capturing the synergy of the best of the industries Positive Displacement Metering Pumps with cutting edge Instrumentation and Controls, Pulsafeeder completes systems integration while maintaining single-source systems responsibility.

pH Control
Eliminating the haphazard approach to pH on the run or process delays due to effluent contact time, Pulsafeeder pH systems provide “real-time” pH control utilizing state-of-the-art analytical instrumentation. Real time control translates to on-time results.

Polymers Feed
Robust polymer activation and injection systems that include complete systems for emulsions, wet/dry batch or continuous cycle makeup. Systems synergies include: Proprietary process for the added energy necessary to provide proper uncoiling of bound polymer chains, aging to allow for proper activation level in order to maximize coagulant abilities and systems design and equipment layout to allow for ease of access to maintenance personnel while meeting the operational systems requirements of robust construction.

Disinfection
Maximize your disinfection capabilities through the use of pH compensated ORP control. A real time measurement of the residual Chlorines actual killing strength while eliminating the misreading of the additional mili-volts as a result of swings in pH.

Typical Applications
- pH control
- Disinfection
- Bromination
- HypoBromus (Bactericidal)

Markets
- Agriculture
- Chemical
- Food & Beverage
- General Industries
- Mining
- Paints & Dyes
- Petrochemical
- Petroleum
- Pharmaceutical
- Pulp & Paper
- Power & Energy
- Water Treatment
- Water & Waste Water
Pulsafeeder Engineered Solutions

Combined process control and mechanical expertise from a single source, Pulsafeeder is the leader in providing complete chemical injection systems solutions.

- Specialty PID closed loop applications for industrial and municipal water treatment: biocides, disinfection, chloramines and felt wash
- Complete engineering design, fabrication, program FAT and SAT testing; global systems field service
- Inventory management for select partnership accounts

"Rapid Parts Replacement & Service Features"
- Intuitive layout for rapid parts, service & replacement
- Systems valved and piped for ease of maintenance
- Wear items parts replacement provided with system
- Factory Warranty for 1 Full Year
- Commissioning and On-site Service Available
- Complete system performance test prior to shipment

Refurbish
Pulsafeeder chemical delivery systems are manufactured for many years of severe duty. In an effort to further maximize the return on investment, all Pulsafeeder systems are capable of return to the manufacturer for refurbishment or refit with additional inventory management of assets as an added service.

Visit us on the web at www.pulsa.com

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