

Water Solutions for Corrugated Packaging

Providing the ABCs in water solutions

- **Automated pH and Bacterial Control Unit**
- **Batch Treatment**
- **Chemistry**



WALLA WALLA ENVIRONMENTAL, INC.

Process water discharge limits for corrugated box plants are continuing to be dialed down, so the need to properly treat corrugated process water for discharge or reuse has become paramount. With over 30 combined years of experience in water treatment, reuse and conservation efforts, W2E is the right partner for you. We are the most experienced supplier to the corrugated industry and we can equip you with the necessary equipment, supplies, and services to help you meet or exceed your discharge parameters. **When your facility needs to use treated process water for starch adhesive, or you must ensure municipal compliance for discharge, W2E has the right solution.**

CORR-TREAT 328 AUTOMATIC BATCH TREATMENT SYSTEM

1. Gasketed filter press eliminates water leakage
2. Precoating of filter press may not be necessary, minimizing operator time, chemical costs, and sludge volume
3. Mixers in tank ensure optimum process efficiency and minimal manual maintenance
4. Fiberglass and plastic tanks ensure no-rust, long equipment life
5. Dish-bottom tank design prevents buildup of solids in holding tank and treatment tank, for more efficient processing



The Corr-Treat 328 system is designed for facilities that need to treat from 300 to 8,000 gallons of process water per batch. The Corr-Treat 328 is ideally suited for today's packaging facility with various process water issues.

During the production day, process water is collected in a holding tank (EQ Tank). When sufficient water volume is available, it is transferred to the Treatment Tank for batch processing. This begins the treatment cycle where water and solids separate. Here, the appropriate amounts of coagulant, pH adjustment (when needed) and flocculant are added in controlled steps by an Allen-Bradley Programmable Logic Controller. Solids fall out of suspension in the water and await the pressing operation.

The treated water is then pumped to the filter press for dewatering of the separated solids. All operations are automatically managed by the PLC.

If the operator needs to stop the process for any reason, it can be resumed later using the Step Advance to get back to the current operation.

Corr-Treat 328 features:

- **Scalable** (standard)—built-in filter press expansion capability allows for treatment growth as your production capacity grows
- **Fully automated** (standard)—minimal operator input, less labor
- **Step Advance** (standard)—restart treatment if stopped for any reason
- **Clean-In-Place** (standard)—optimizes press performance by automatically cleaning the filter press, economically
- **Driest cake**—typically 35% to 40% solids; reduces disposal cost, makes press cleaning easier

APB AUTOMATED pH AND BACTERIA CONTROL UNIT

The APB Control Unit is a cost-effective solution for packaging plants needing to condition their treated or untreated process water for reuse.

The APB control unit automatically sanitizes and conditions a batch of process water for use in starch making systems. Our unique system uses various sensors controlled by an Allen-Bradley micro PLC to

provide your starch adhesive mixer with consistent make-up water for every batch. **The APB Control Unit adjusts pH, sanitizes for bacteria, and introduces a preservative biocide to protect your adhesive from microbial infestation.**

Water hardness reduction and water temperature adjustment are available options.



APB features:

- Small 4' x 8' footprint—skid mounted
- May mitigate the need for a treatment system
- Conducts constant process water batch analysis
- Stabilizes process water pH automatically
- PLC employs multiple sensors for accurate stream analysis and real-time correction
- Microbial activity is eliminated (bacteria, yeast, mold)
- Saves money, time, and mess
- Provides adhesive consistent make up water every time—monitors and adjusts for pH, bacteria, water hardness, and temperature
- Process water is pH optimized for conditioned and consistent adhesive secondary/cooling water
- Allows your plant to use treated or untreated process water with confidence
- APB System Tank is sized for your requirements
- Water hardness option helps prevent calcium carbonate precipitation in your starch delivery system

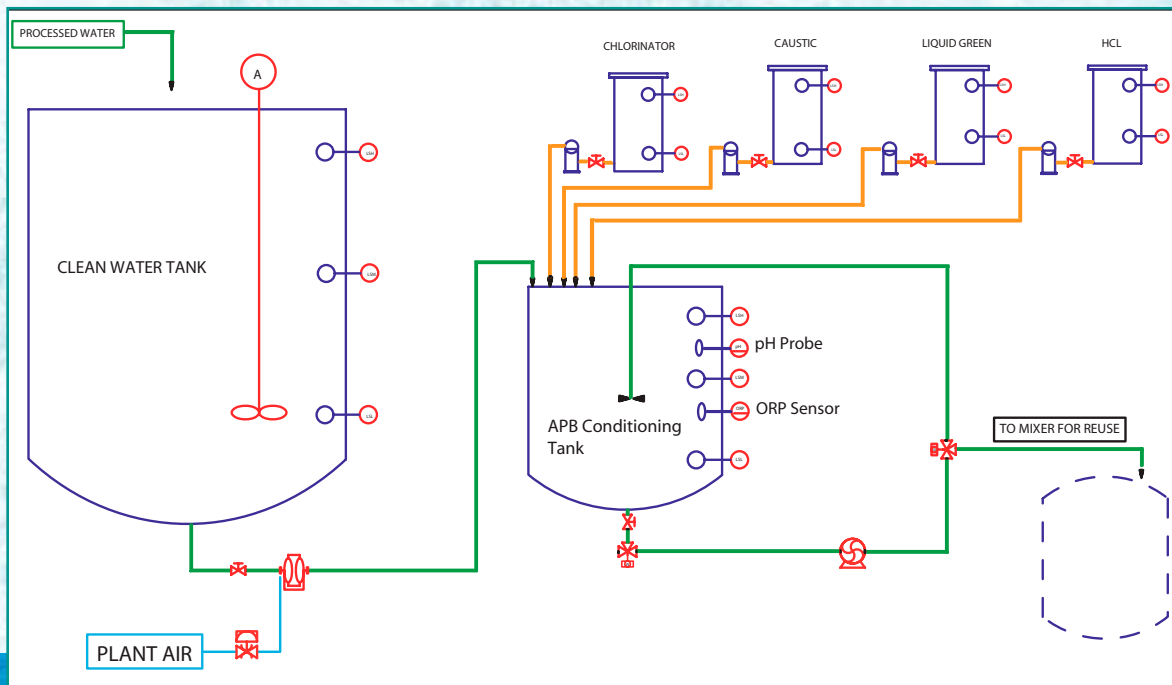


Diagram illustrates how APB is used in a process water treatment system

Put our process water expertise to work for you

Walla Walla Environmental brings you more than 15 years of experience in water issues. We provide you expert guidance in process water reuse, Zero Discharge operations and water treatment. W2E will help you create a water strategy for your facility.

With offices in Washington, California, Wisconsin, and Georgia, we cover the nation and have people and products located near you for quick response.

To explore the benefits of intelligent water management and the products, supplies, and services we offer, contact your local Walla Walla Environmental representative or call us toll free at 800-247-9011.

Walla Walla Environmental's complete range of high-quality water treatment chemicals include:

- **CAT-30**
Coagulant for ZD/Process Water Reuse
- **CAT-34**
Coagulant—blend of inorganic and organic coagulants
- **CAT-90**
Coagulant—for lowest-cost discharge
- **FLOC-600**
Anionic liquid dispersion-grade polymer for in-plant dilution
- **FLOC-720**
Anionic flocculant—delivered ready-to-use; provides highest consistency
- **Stat-125**
Chlorine-based halogen used for water reuse oxidation
- **pH Adjust and Chemical Sludge Conditioner**
Alkaline reagent used for neutralizing difficult-to-treat inks
- **Metal Precipitant**
Organic sulfide designed for treating heavily chelated metals
- **DE**
Diatomaceous Earth—when press pre-coating is necessary
- **Clean-In-Place I Filter Press Cleaner**
Nonhazardous organic acid used for cleaning inorganic scales
- **Clean-In-Place II Filter Press Cleaner**
Aggressive inhibited acid used for cleaning difficult inorganic scales
- **Biocides**
- **Cleaners**
- **Specialty Products**

Consult your Walla Walla Environmental technical representative for appropriate products to use in your waste water program.



4 West Rees Avenue
Walla Walla, Washington 99362
Tel 800-247-9011
Fax 509-522-0351
www.wwenvironmental.com