

Vortex Tablet Chlorination SYSTEMS

SYSTEM TECHNOLOGY

The latest generation HTS-80-P2 Vortex tablet chlorinator marks 25 years of proven performance and dependability in water disinfection. Improvements in eroder design significantly reduces maintenance labor and personnel contact with chemicals. TKM™ heavy duty diaphragm pumps with adjustable stroke in addition to Hammonds variable speed controls provide precise, repeatable metering of calcium hypochlorite solution for a variety of disinfection applications. The standard HTS-80-P2 is SCADA ready and can be controlled manually or paced automatically by a 4-20 mA signal from a chlorine analyzer or process flow meter. Hammonds' patented Vortex tablet eroder operates on a fixed 8 GPM water supply that produces an adjustable strength calcium hypochlorite solution from 0 - 0.25% concentration. The HTS-80-P2 is a complete system out of the box powered by a 20 amp 110 VAC circuit providing consistent residuals for potable and waste water treatment.

U.S. Patents: 6,337,024 B1 • 6,451,271 B1 • 6,531,056 B2 • Others Pending



SPECIFICATIONS

- Tablet recommendations: NSF® Std. 60 listed solid calcium hypochlorite only
Performance: Typical 50 – 2,000 GPM wells and fresh water supply at dosing levels up to 2 PPM
- Chlorine delivery: 0 – 3.0 pounds of chlorine per hour. Delivery will vary depending on size and manufacture of calcium hypochlorite tablet.
- Solution metering pump:
 - Type: Diaphragm, positive displacement, variable stroke and variable speed
 - Performance: ~~0 - 2.75 GPM~~ **0 - 94 GPM**
- Chlorine delivery controls:
 - Manuel: Pump speed with variable control, panel mounted
 - Automatic flow pacing: Automatically adjusts pump speed when supplied with 4-20mA signal from process flow meter or chlorine analyzer
 - Solution Strength: Solution concentration can be varied by adjustment of Vortex by-pass water. (8 GPM feed water remains unchanged)
- Tablet Capacity: 80 lbs.
- Water required: 8 GPM clear, potable at pressures of 30 – 75 PSI (Feed water pressures above 75 PSI requires an optional inlet pressure regulator)
- Frame: Laser cut, hot dip galvanized steel
- Leveling legs: (4) stainless steel adjustable with leveling bubble
- Dimensions: 56 1/8" L x 28 5/8" W x 60" H
- Weight: 260 lbs.

ELECTRICAL SPECIFICATIONS

- Enclosure: UL® listed NEMA 4X
- Power supply: 110 VAC @ 5 amps
- Pump motor: 1/3 hp, variable speed, TEFC, 90 VDC
- SCADA READY

CONSTRUCTION MATERIALS

- Frame: Laser cut, hot dip galvanized steel with hot dip galvanized fasteners
- Tablet feeder (eroder): PVC
- Mixing chamber: HDPE tank with all PVC internal components including lid
- Solution tank: 33 gallon, HDPE 24" L x 18" W x 18" H
- Piping: Sch. 80 PVC
 - Inlet water supply at bulkhead: 1" Sch. 80 PVC
 - System Outlet: 1/2" FNPT
 - All piping is Sch. 80 PVC or 1" nylon reinforced PVC clear tubing
- Relief valve: Sch. 80 PVC
- Flow limiting valve: PVC
- All pipe and hose fittings: Sch. 80 PVC
- Bulkhead Fittings: HDPE spin welded and Sch. 80 PVC
- Pump Suction Strainer: PVC
- Pump:
 - Fluid end: PVC,
 - Valves: Ceramic with Viton® trim
 - Diaphragms: Teflon®/EPDM

OPTIONAL EQUIPMENT

- Chlorine analyzer, chart recorder, back-up injection pump, inlet pressure regulator, inlet strainer

CERTIFICATIONS

- Entire system is NSF® 61 listed (pending), Hammonds is ISO 9001:2015, Hammonds is a UL® certified mfg. facility™

INNOVATION—pure and simple

To contact a Hammonds water treatment specialist, please call (800) 582-4224.

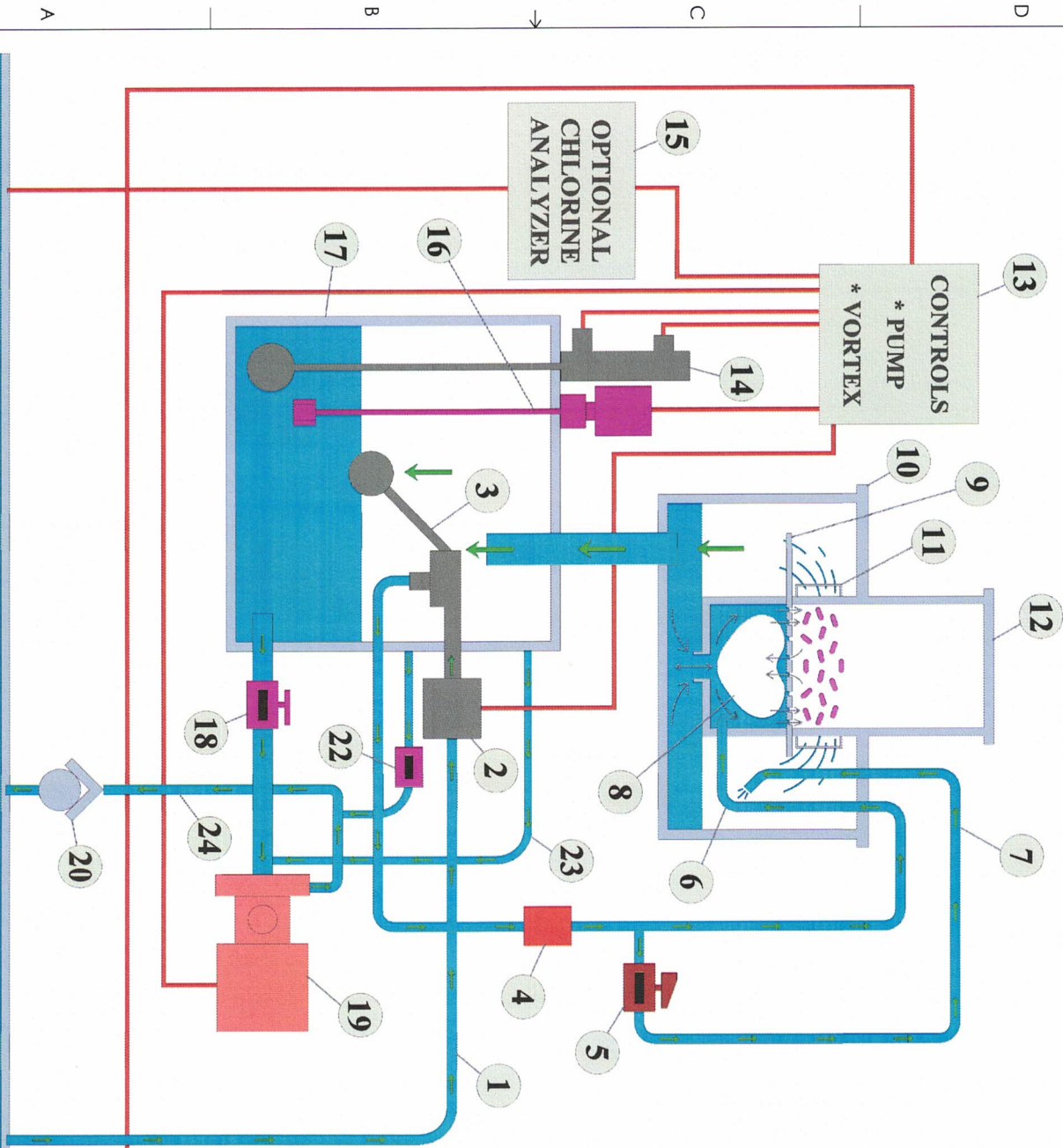
Hammonds[®]

HAMMONDS WATER TREATMENT SYSTEMS

6807 West Little York • Houston, Texas 77040
Phone (800) 582-4224
www.hammondscos.com

3/4 HP

HTS-80 SYSTEM COMPONENT CALL-OUT



1. Fresh Water Supply
2. Solenoid Valve
3. Fail Safe Float Valve
4. 8 GPM Flow Limiter
5. Vortex Adjusting Valve
6. Vortex Feed
7. Vortex By-Pass
8. Vortex
9. Sieve Plate Slider
10. Mixing Chamber
11. External Weir
12. Tablet Eroder
13. Electrical Controls
14. Hi-Low Level Control
15. Optional Chlorine Analyzer
16. Constant Run Solution Mixer
17. Solution Tank
18. Suction Service Valve
19. Metering Pump
20. Injection Point Check Valve
21. Optional Process Flow Meter
22. Relief Valve
23. Pump Suction Vent
24. System Discharge

OPTIONAL
FLOW METER
21

NOTES: 1) OVERALL DIMENSIONAL CALL-OUT: 28-5/8" (W) X 56-1/8" (L) X 60" (H)

REVISIONS	
1	ZONE
ADD ITEMS 22,23,24	REV.
05/29/2024	DESCRIPTION
JH	DATE
	APPROVED

HAMMONDS
DOC. APPROVED FOR
INITIAL RELEASE
ENG. CHANGE
X-REVISION 1
DATE 05/29/2024
BY JH

**HAMMONDS TECHNICAL SERVICES INC**
www.hammondscos.com

THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO HAMMOND TECHNICAL SERVICES INC. THE INFORMATION CONTAINED HEREIN SHALL NOT BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF HAMMOND TECHNICAL SERVICES INC.

DATE: 05/09/2024
DATE: 01/01/2024
DATE:

SCALE: NTS
WEIGHT: (AA) 810.0 lbs

**HTS-80
TECHNICAL SCHEMATIC
PN:HIW-2.0**

3RD ANGLE PROJECTION
DO NOT SCALE
HIW-2.0
1
SHEET 1 OF 1