Chem-Trak Tunnel Express is the ultimate in modularity, allowing versatile configurations to fit your laundry tunnel. With the ability to add various pumps, valves, and other accessories, Chem-Trak Tunnel Express ensures consistent wash quality and predictable costs in any plant.

- The only tunnel dispenser system with air or electric operated pumps: **Air Operated Double Diaphragm Pumps (4.0 GPM)(25.7 LPM)** or **Electric Diaphragm Pumps (.4 GPM)(1.5 LPM)**
- **Less service and maintenance** is required with the AODD and EDP pumps because there are no tubes that need to be replaced.
- High speed injection with improved accuracy / resolution of chemical dosing (+/- 2%)
- Exclusive module injection assembly allows for simple, fast, and **non-invasive one person calibration**
- Precision metering of pumps to +/- .10 oz/second
- **Flush or no flush configurations**
- Simple, multi-lingual menus (English, Spanish, French, German, Italian, Dutch)
- **Data management** reports (Excel)
- Able to network with multi-washer and conventional Knight dispensers
Chem-Trak Tunnel Express: High Speed, Accurate, Reliable, and Easy

Chem-Trak Tunnel Express captures all the simplicity and proven reliability of a Knight engineered laundry chemical injection system with several unique features geared to reduce installation time, improve the speed of your injections and deliver quality results each and every load transfer!

**Chem-Trak Tunnel Express Automates and Controls Chemical Dispensing**

- **Bright LED Display** – easier to see in poorly lit areas
- **Multilingual Function Key Label** is available in English, Spanish, French, Italian, Dutch, and German
- **Large, Alpha Numeric Key Pad** designed for use with gloves on and will withstand chemical exposure
- **Attractive Watertight Stainless Steel Control Cabinet and Membrane** keeps direct spray from attacking components
- **New Intuitive Membrane Switch User Panel** is easy to use for technicians and end users.
- **Security Lock**
- **Bold, easy access buttons** for starting and stopping the dispensing cycle

New Tunnel Express Chemical Injection Controller -
This new integrated pump/valve controller features good looks, robust function keys and multilingual displays. Electronics that store usage data and manage the chemical injection are easily accessed and easy to use because they are Knight Trak!

Exculsive Pump Options for Tunnel Dispensers
Chem-Trak Tunnel Express offers the industry’s only tunnel dispenser with the choices of the industries most reliable and carefree high speed pumps. Air operated double diaphragm pumps (AODD) and CleanGuard Electric Diaphragm pumps offer fast reliable flow rates from .4 GPM (1.5 LPM) to 12 GPM (45.4 LPM). These pumps are virtually service free!

<table>
<thead>
<tr>
<th><strong>PUMP NAME</strong></th>
<th><strong>AODD PUMPS</strong></th>
<th><strong>CLEANGUARD EDP PUMPS</strong></th>
<th><strong>900 SERIES PERISTALTIC PUMPS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pump Type</strong></td>
<td>Air Operated Double Diaphragm Pump</td>
<td>Electric Diaphragm Pump (EDP)</td>
<td>Peristaltic Pump System</td>
</tr>
<tr>
<td><strong>Flow Rate</strong></td>
<td>KAP-25: 4 GPM (15 LPM) Uniflow KAP-50: 12 GPM (45.4 LPM)</td>
<td>.4 GPM (1.5 LPM) or 1.5 GPM (5.6 LPM) or 3.2 GPM (12.1 LPM) at 70 PSI</td>
<td>230 oz/min. (6.8 LPM) at 30 PSI</td>
</tr>
<tr>
<td><strong>Power Source</strong></td>
<td>Air at minimum of 8 SCFM</td>
<td>110 or 230 VAC</td>
<td>110 or 230 VAC</td>
</tr>
<tr>
<td><strong>Chemical Compatibility</strong></td>
<td>All Known Laundry Products</td>
<td>All Known Laundry Products</td>
<td>All Known Laundry Products</td>
</tr>
</tbody>
</table>

- AODD PUMPS
  - KAP-25: 4 GPM (15 LPM)
  - Uniflow KAP-50: 12 GPM (45.4 LPM)
- CLEAN GUARD EDP PUMPS
  - .4 GPM (1.5 LPM) or 1.5 GPM (5.6 LPM) or 3.2 GPM (12.1 LPM) at 70 PSI
- 900 SERIES PERISTALTIC PUMPS
  - 230 oz/min. (6.8 LPM) at 30 PSI
**Exclusive Module Injection Assembly**

One of the key advantages of Tunnel Express is the ease of which pump calibration is achieved. Chem-Trak Tunnel Express offers the only injection assembly located at the washer that allows for easy and quick one person calibration and control. The module injection assembly allows for metering the chemical flow rates, dead heading the pumps during service, directing chemical to the washer or to a measuring vessel, preventing siphoning, and visualizing the chemical flow. All these controls within an arms length allows for easy one person control, and the quickest, safest calibration in the industry.

* Metering chemical flow rate
* Dead heading the pumps
* Directing chemical to the washer or to the measuring vessel for calibration
* Anti-siphoning
* Visualizing chemical flow

**Proof of Delivery Sight Tube:** Clear sight tube allows operators to see that chemicals are primed, supply tanks are full, and product is going into the washer. (Optional)

**Three Way Ball Valve:** A three way ball valve controls the flow path to the washer or to the measuring vessel. The valve eliminates the need to remove lines from the washer for calibration.

**Metering Valve:** Unique metering valve used to calibrate desired flow rates of AODD or EDP pumps. Dispense quantities as little as .25 oz (7 ml) per transfer with excellent resolution.

**On-off ball valve:** Valve used for safe service or to “dead head” pumps during calibration routine.

**Mounting Bracket:** Uni-strut mounting brackets provide versatile mounting system for the variety of Tunnel Washer designs on the market.

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**Chem-Trak Installation Diagram**

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**Data Management**

**Management Reports**

Chem-Trak Tunnel Express windows compatible software connects the Laundry Manager directly to the system.

* Track and verify chemical usage in all areas
* Remote connection via ethernet or LAN
* Export laundry reports to Excel in one report
* Usage reports include product cost, consumption, batch tracking, and user activity
* Records data instantly as chemicals are allocated
System Specifications

Chem-Trak Tunnel Express Main Controller
Dimensions: 17” H x 17” W x 7” D
Power: 120 VAC
Air inlet capacity: 100 SCFM (6.8 bar)
Water pressure: 100 PSI (6.8 bar)
Chem-Trak Tunnel Power Supply
Dimensions: 9” H x 8” W x 4” D
Input power: 110 or 230 VAC
Output power: 12 VDC
Chem-Trak Tunnel Flush Manifold
Dimensions: 16” H x 6.5” W x 2.5” D
Injection ports: four to washer and two inlet
Port size: 1/2” NPT
Materials: Schedule 80 PVC

Signal Interface
Dimensions: 4.75” H x 6.75” W x 1.5” D
Signal input: 18 VAC to 230 VAC
Output to dispenser: low voltage data

Electric Diaphragm Pump Controller
Dimensions: 16” H x 9” W x 4” D
Input power from main controller: 5 wire data line
Output power: 12 VDC

Chem-Trak Tunnel Module Injection Assembly
Dimensions: 36” H x 7” W x 5” D
Inlet thread size: 1/2” NPT
Outlet thread size: 1/2” NPT
Bypass thread size: 1/2” NPT
Materials: Schedule 80 PVC

Air Operated Pumps
KAP-25 (1/4”)
Dimensions (in case): 7.2” H x 3” W x 5.5” D
Bypass pressure: 70 PSI (4.8 bar)
Max pressure: 100 PSI (6.9 bar)
Wetted materials: Santoprene, PTFE
Port size: 1/4” NPT

UniFlow Air Operated Pumps
KAP-50 (1/2”)
Dimensions (in case): 12” H x 13” W x 8.5” D
Bypass pressure: 120 PSI (8.3 bar)
Max pressure: 100 PSI (6.9 bar)
Wetted materials: Santoprene, PTFE
Port size: 1/2” NPT

CleanGuard Electric Diaphragm Pump
Dimensions: 10” H x 9” W x 4.75” D
Flow rate: 4 GPM (1.5 LPM)
Bypass pressure: 70 PSI (4.8 bar)
Wetted materials: EPDM or Viton
Power: 110 or 230 VAC
Amperage: 1.3 Amps

Peristaltic Pump Cabinet
Dimensions: 10” H x 8” W x 4” D
Max Pumps: Six
Max Flow Pumps: KP-9270

Fluid End Components (cont.)
Part Number Description
7640636-01 CleanGuard Electric Diaphragm Pump, 4 GPM (1.5 LPM), EPDM Seals, 110 VAC in Stainless Steel Case
7640636-02 CleanGuard Electric Diaphragm Pump, 4 GPM (1.5 LPM), EPDM Seals, 230VAC in Stainless Steel Case
7640637-01 CleanGuard Electric Diaphragm Pump, 4 GPM (1.5 LPM), Viton Seals, 110 VAC in Stainless Steel Case
7640637-02 CleanGuard Electric Diaphragm Pump, 4 GPM (1.5 LPM), Viton Seals, 230 VAC in Stainless Steel Case
8600126-01 KP-9270 XP, 230 Oz./min (6.8 LPM) Peristaltic Pump w/ QC Panel, 110 VAC w/ T-86E Squeeze Tube
8600126-02 KP-9270 XP, 230 Oz./min (6.8 LPM) Peristaltic Pump w/ QC Panel, 230 VAC w/ T-86E Squeeze Tube
8600115-01 KP-8120BXP, 40 Oz./min (1 LPM) Peristaltic Pump w/ QC Panel, 110 VAC w/ T-66E Squeeze Tube
8600115-02 KP-8120BXP, 40 Oz./min (1 LPM) Peristaltic Pump w/ QC Panel, 230 VAC w/ T-66E Squeeze Tube

Tunnel Module Chemical Injection Components
2200096 Module Injection Assembly w/ Ball Metering Valve, Three Way Ball Valve, Two Way Ball Valve and Uni-strut Mounting Brackets, Inlet Check Valve (EPDM)
2200097 Module Injection Assembly w/ Ball Metering Valve, Three Way Ball Valve, Two Way Ball Valve and Uni-strut Mounting Brackets, Inlet Check Valve (Viton)
2200082 Air Operated Anti-siphon Valve w/ PTFE Body/Seals mounted on above
2200083 Sight Glass for MIA, mounted

KNIGHT LIMITED WARRANTY

Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE YEAR. All Electronic Control Boards have a TWO YEAR warranty. Warranty applies only to the replacement or repair of such parts when returned to the factory with a KRA number, freight prepaid and found to be defective upon factory inspection.

KNIGHT DISCLAIMER

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