

# S200 SOILED BEDDING REMOVAL SYSTEM

www.sure-flo.ca

# SURE-FLO

# **S200 SOILED BEDDING REMOVAL SYSTEM**

The Sure-Flo<sup>™</sup> S200 Soiled Bedding Removal System is a tubular drag-chain design which uses a continuous series of disks pulled through a transport pipe to convey moist soiled animal bedding and materials from the cage wash room to a disposal dumpster without clogging.

#### **Solid Construction**

Systems are available in either stainless steel including the conveying chain or in painted carbon steel with carbon steel chain.

#### Capacity

Users can anticipate a average capacity of 330 lbs/hr [150 kg/hr] of continuous conveying.

#### **Minimal Space Required**

A typical Sure-Flo™ system consists of conveying piping, UHMW disks, chain, drive station, chain tensioner station, inlet port, bedding dump station, discharge port, and a control panel.

#### **Energy Savings**

Each system consists of a main 3hp drive motor (typical) which pulls the chain. Optional 1/2hp turn station motors which assist in the horizontal and vertical change of direction may also be used. Energy requirements are typically 85% less than comparable vacuum systems.

## Controls

Can be either the standard pushbutton type with PLC microprocessor wall mounted or can be fully integrated into the touchscreen of the BetterBuilt T200 Series Tunnel Washer. A remote panel is also provided at the dumpster.

## Chain Tensioner Station Patented

A chain tensioning station takes up slack in the chain and automatically adjusts for tension changes. Proper chain tension minimizes wear, reduces downtime and maintenance costs, and the possibility of the chain being misaligned.



#### **Idler or Motorized Turn Station**

Change in conveying path in either horizontal or vertical direct is achieved with a 90 degree motorized turn station allowing the chain to travel with minimal friction. A 1/2hp electric motor (typical) is used for smooth and quiet operation. Depending on the system layout, non-motorized Turn Stations may also be used.



## **Manual Dump Station**

Soiled bedding dump station is all stainless steel construction with removable grill provided as the main work surface. The dump station can be designed with a downdraft unit which captures dust and allergens when integrated with the optional dust collection unit.

## **Soiled Bedding Inlet**

A flanged connection between the soiled bedding dump station and the conveying line is the inlet port for the soiled materials. Multiple inlet ports can be utilized in one Sure-Flo™ system.

#### Drive Station

The drive station is located at the discharge end of each system; it consists of a drive sprocket, motor and gear box.

## **Optional Allergen Dust Collector**

The dust collector is integral to the soiled bedding dump station(s). The system is designed to capture and remove allergens and dust generated during dumping of the soiled bedding materials.

#### Link Chain Assembly

The conveyor consists of a continuous, true chain link mounted with solid circular disks which are a two-piece bolted design made of UHMW. The split disk design enables changing only the bottom half-disk which is subjected to wear.

#### **Discharge Port**

Incorporated with the main drive station is the discharge port which allows soiled bedding material to exit the conveying lines and gravity fall through a flexible hose into a dumpster below. Multiple discharge ports can be utilized in one Sure-Flo™ system.

## Air Knife

Located at the discharge port are forced air nozzles to ensure the chain and disks are free from soiled bedding materials.

#### **No Specialized Dumpster**

Soiled bedding materials are collected in a soiled container typically located at or near the dock area. The user shall coordinate supply of container and collection of waste with local waste management company.

#### **Transport Piping**

The conveying line is a closed loop system consisting of transport and return lines. Pipe line joints are a combination of bolted flange or compression bolt couplings.

#### **Radius Turn in Piping**

Conveying piping can be provided with 5 ft radius turn for directional change in either horizontal or vertical directions in place of powered and nonpowered turn stations. Requirement is dependent on site conditions and system layout.

#### **Optional Clean-out Disk**

One or more of these optional clean-out disks will facilitate periodic cleaning of the conveying piping interior as the system operates. Exact number and type to be determined based upon facility requirements.





# S200 SOILED BEDDING REMOVAL SYSTEM

#### Application

The Sure-Flo™ S200 Soiled Bedding Removal System is designed to transport moist soiled bedding and materials from a cage wash facility to a disposal container found in the care and housing of research animals.

Note: Due to continued engineering improvements, specifications are subject to change without notice.

#### **STANDARD FEATURES**

- Painted Carbon Steel System Components w/Carbon Steel Chain
- 3HP TEFC Main Drive Motor
- Sch 10 (4" dia) Conveying Piping
- Chain Tensioner Station (Patented)
- Joints are Bolted Flange or Compression Bolt Coupling
- Push-button Controls w/ Remote Panel
- Soiled Bedding Inlet Port

- Discharge Port w/ Flex Hose
- Air-Knife Nozzle at Discharge Port
- Safety Features, E-stops and Sensors
- UHMW-PE Moulded, Two Piece Discs
- Drive Sprocket
- Tension Wheel
- Bearings Sealed Roller Type
- Overload Contactors and VFD
- Nema 12 Carbon Steel Control Panel

#### **OPTIONAL FEATURES**

- Soiled Bedding Manual Dump Station
- Stainless Steel System Components w/SS Chain
- Multiple Discharge Ports
- Multiple Inlet Ports
- 1/2HP Motorized Turn Stations
- Idler Turn Stations
- Radius Turn Piping
- Maintenance Ports
- Chain Knocker Assembly
- Touchscreen Controls
- Integrated Controls w/ BetterBuilt Tunnel Washer
- 5"or 8" Touch Screen Control Panel
- Stainless Steel Controls Guard

- Compact Flash Card Program Backup
- Support Hangers and Structures
- Soiled Waste Containers
- Seismic Anchoring
- Downdraft Allergen Dust Collector
- Cleanout Flight Discs
- Motorized Brush Cleaning Station
- Factory Ethernet Connectivity for Online Diagnostics
- Touchscreen Ethernet Web Server Connectivity
- Modem Connectivity for Factory Diagnostics
- Surge Protection
- CCTV Capabilities for Remote Monitoring
- Audible Start-up Buzzer at Waste Container

#### **RELATED EQUIPMENT** –

T200 Series Tunnel Washer ■ Activ<sup>™</sup> ADS (Automated Dump Station)

DIVISION OF NORTHWESTERN SYSTEMS CORP. 7601 MacDonald Road • Delta, British Columbia • Canada V4G 1N3

888-553-0855 • Tel: 604-952-0925 • Fax: 604-952-0941 www.nsc-betterbuilt.com • info@nsc-betterbuilt.com