

SEEPEX.

An Ingersoll Rand Business

EFFICIENT FOOD WASTE HANDLING. SMART AIR INJECTION



SAI

STREAMLINED, SAFE HANDLING.

Food and beverage facilities generate waste that must be quickly and efficiently removed to maintain cleanliness and maximize production capacity. Traditional conveyors are costly, energy-intensive and problematic, especially over long distances, whilst manual handling increases the risk of contamination and safety hazards.

Smart Air Injection (SAI) from SEEPEX is a cutting-edge solution that transforms food waste transport. SAI's advanced pumping technology boosts operational efficiency, cuts costs and ensures a safer, cleaner working environment.

Streamlined and flexible installation due to an enclosed pipe design, SAI minimizes odors, eliminates spillages and reduces the need for bulky support structures. It's the smart, economical choice for waste management.

Upgrade to SAI for lower maintenance costs, significant energy savings, and a safer conveying solution.

WHY SAI FOR FOOD WASTE TRANSPORT?



UNMATCHED ENERGY EFFICIENCY

Boost process efficiency and reduce operational costs. Compressed air pulses deliver unprecedented energy savings, while low-pressure piping cuts setup expenses and extends service life.



SAFETY HAZARDS ELIMINATED

Enclosed piping improves efficiency and safety on the factory floor by reducing traffic and hazards in high-risk areas and eliminating the need for fume extraction and emission control.



PRODUCTIVITY BOOSTER

Cut operating costs with revolutionary technology that streamlines food waste transport, eliminating the need for manual or mechanical handling.



COMPREHENSIVE MONITORING

Achieve total control with SEEPEX Pump Monitoring for predictive maintenance and performance optimization.



MAINTAIN IN PLACE

The patented Drive Joint Access and Rotor Joint Access make open hopper pump maintenance quick and easy, eliminating the need to remove pipework or pump skids. This reduces maintenance costs, enables quick inspections of joints/seals and increases uptime for smooth, trouble-free operation.

AIR INJECTION

Compressed air is pulsed into the pipeline to convey the pre-compacted food waste plug.

ROTOR JOINT ACCESS

A removable casing part slides over the stator allowing quick, effortless access to the rotor-side joint. Enabling easy maintenance without dismantling stator, pressure branch or discharge pipework.

EXTENSION HOPPER

Customized extension hopper for efficient connection to the upstream food waste disposal systems. A level sensor regulates pump speed, guaranteeing smooth, trouble-free operation.

SPOOL PIECE

Fitted with all necessary connections for the injection of lubrication, compressed air and mounting of all sensors to monitor and control compressed air pulses.

BOUNDARY LAYER INJECTION

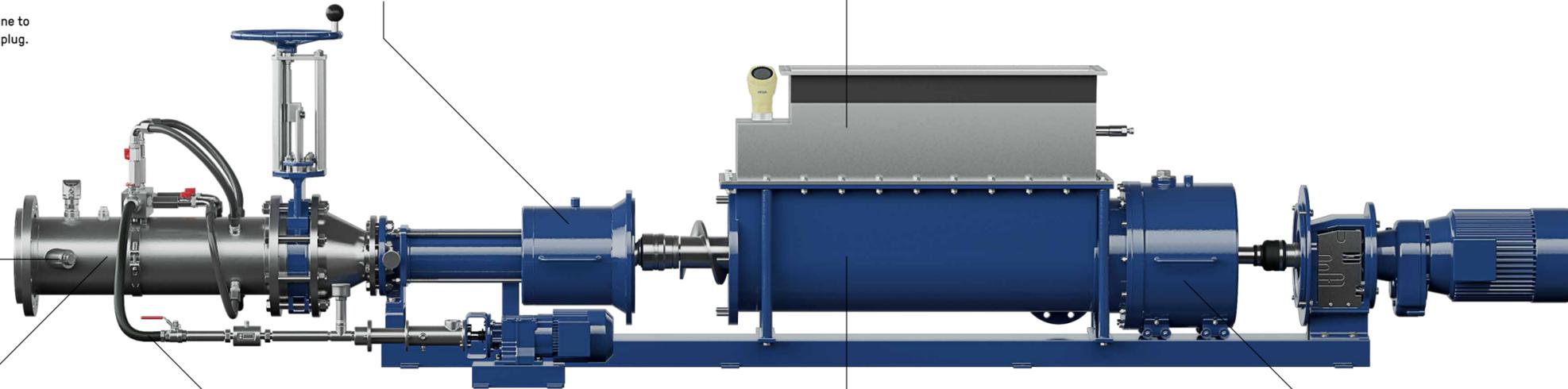
To reduce friction losses and discharge pressure in the pipeline. The lubricant's conveying capacity is automatically adjusted to match the main pump's capacity.

OPEN HOPPER PUMP

Ideal for moving solid-laden, viscous products with low or no flowability. The pump open hopper and auger feed screw are tailored to suit the media and application to ensure efficient product flow in various conditions.

DRIVE JOINT ACCESS

The sliding casing provides quick and easy access to the drive-side joint, enabling rapid replacement of the coupling rod and mechanical seal without the need to dismantle the hopper and any additional hopper extensions.



APPLICATIONS

SAI is ideal for the food and beverage industry, including processing plants, manufacturers and large food service operations. It successfully handles a range of waste types, residues and by-products.

The SAI system efficiently transports semi-solid and highly viscous waste materials, including coffee and tea grounds, mustard hulls, soybean residues, microcellulose, legumes, oatmeal, pectin residues and much more. Optional lubricant injection further enhances efficiency.

Do you have waste handling problems? Give us a call!

BENEFITS

- Unmatched energy efficiency, lower operating costs and faster maintenance compared to mechanical conveyors
- Closed pipe system prevents odors and spillages, enhancing safety and reducing manual cleaning
- Handles long distances, elevation changes and directional shifts effortlessly
- Eliminates bulky structures to cut construction time and costs

KEY FACTS

- Conveying capacity:
0.5–30 m³/h (2.2–132 USGPM)
- Transfer distance:
several hundred meters
- Wetness-content of food waste:
60–85%

SEEPEX GmbH

www.seepex.com