

## **MEGA-SWEET Induction System (Chemical or Air)**

Submersible Wastewater Efficient Effluent Treatment

### **¾ and 1 Hp Chemical (up to 650 ppd Capacity)**

The MEGA-SWEET chemical/air induction package is used to create a vacuum that draws in either liquid/gas chemicals or air. The MEGA-SWEET Package is specifically designed for air or vacuum chemical feed systems in the final contact chamber.

The MEGA-SWEET provides advanced treatment, reliability, and efficiency over conventional vacuum feed systems and costly problematic motor driven propeller-type induction units.



#### **MEGA-SWEET Package Components:**

- Engineered oversized pump,
- Kynar (PVDF) Venturi Ejector
- Jet/Diffuser manifold

### **Chemical Induction Pump**

#### **Features:**

- Low installation and operational costs
- Easy to retrofit and install
- Minimal maintenance
- Optimal mixing with jet/diffusers
- More efficient chemical use
- Unlimited water depth
- No potable water required
- Permanently lubricated ball bearings
- No external water piping
- Safe operation – vacuum feed

### **Air Induction Pump**

#### **Features:**

- Low installation and operational costs
- Easy to retrofit and install
- Minimal maintenance
- No blowers, results in whisper quiet operation
- Unlimited water depth
- Can be used to inject air or pure oxygen
- Energy efficient oxygen transfer
- Safe operation – vacuum feed

The **Mega-SWEET** (Chemical or Air) Induction System provides a reliable and safe chemical feed system for wastewater applications.

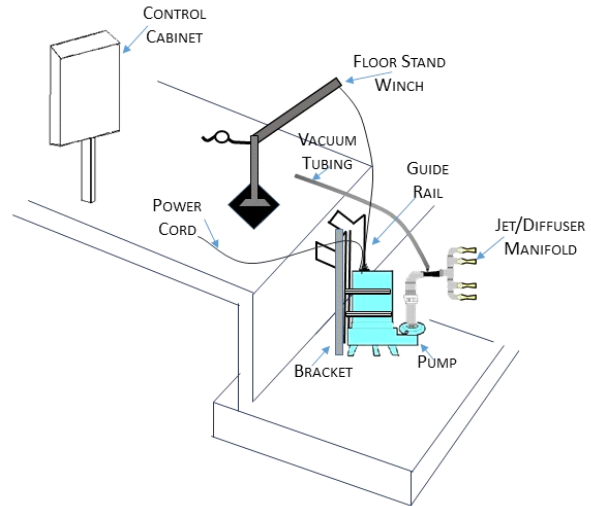
**The Process:**

A vacuum is created via an engineered submersible sewage wastewater pump, a kynar (PVDF) venture and jet/diffuser manifold.

- The specifically selected heavy solids handling pump is designed to meet the strict hydraulic requirements of the venture and jet/diffuser manifold.
- The oil filled, hermetically sealed motors, along with the permanently lubricated upper and lower ball bearings provide the reliability and durability required for years of use with minimum service.
- Process water passes through the engineered, oversized pump, kynar (PVDF) venture, and jet/diffuser manifold to draw and mix disinfection chemical into the contact chamber.
- Jet/diffuser manifold optimizes chemical mixing, resulting in reduced chemical costs.
- Volume of air or chemical solution discharged through the jet/diffusers plume will be five times greater than the volume of motive fluid entering.
- The mixed solution is pumped through the orifice of the jet/diffuser. A low pressure area is created that acts to pull the process water from behind the bell shape of the jet and out the diffuser bell-end to an 11 degree plume..

**Specifications:**

- 5/8" Vacuum Connection (standard)
- Impeller: Two vane, Class 25, Cast Iron
- Pump/Motor: Powder Coated
- Minimum Bearing Life: 50,000 Hours
- Mechanical Seal: Utilized Ceramic Carbon
- Shaft/Hardware: Stainless



**MEGA SWEET Options:**

- Guide Rails
- Bracket
- Crane/Winch
- Control Panel

Model	Horse Power	Full Load Amps	Voltage	Phase/Cycle	SF	Weight (lbs)	Electric Cord	Max Gas (ppd)	Max Liquid (gph)
MEGA-SWEET-4130-3/4-1	¾	12	115	1/60	1	80	25' of SJTW (1ph)	350	30
MEGA-SWEET-4130-1-1	1	8	208/230	1/60	1	100	25' of SJTW (1ph)	650	80
MEGA-SWEET-4130-1-3	1	2.5	440-480	3/60	1	100	25' of SEOOW (3ph)	650	80