Factory Ready Hygienic Ice Pigging Machine for line cleaning and improved product recovery on process lines seen as un-piggable.

**AQL500**

Factory Ready Hygienic Ice Pigging Machine

**Designed to EHEDG guidelines**
- Inbuilt CIP function.
- Communication with and controlled by factory SCADA system.
- Inbuilt recipe management.
- Skid mounted compact plant.
- Fully commissioned turnkey system.
- Offsite remote support options.
- Component specification to suit factory operating conditions.

**Ice Management**
- Fully automated ice management.
- Ice Pig produced and maintained within stringent quality tolerance.
- Ice quality verified by precision differential pressure measurement.
- Robust design allows for a range of operating temperatures.
- Ice Pig can be produced using a selection of freezing point depressants.
- Insulated tank to minimise energy loss.

**Ice Delivery**
- On demand Ice Pig distribution.
- Application optimised ice delivery sequence.
- Pressure and flow regulated distribution.
- Over pressure protection.
- Factory or local delivery control.
Ice Production System (AQL500)

This ice production system combines ice production, storage, maintenance and delivery into one unit. The purpose of the unit is to manufacture two phase ice slurry using potable water and a selected additive as a freeze point depressant. The system operates on a continuous basis capable of delivering “always-ready” conditioned ice for the purpose of Ice Pigging of liquid products and foodstuffs in enclosed pipelines.

- 2 x 1.250 stainless steel Ziegra ice generator with an output of approximately 900–1400kg of high quality ice slurry per 24 hours (dependent on additive used, quality required and ambient operating conditions).
- 500 litre working volume, vertical fully agitated, insulated storage tank on load cells for accurate mass delivery.
- Progressive cavity pump for ice delivery with line protection (1.25 l/s).
- PLC/HMI controlled, with actuated valves for fully automatic operation.
- Ice quality measurement system for consistent recipe delivery.
- Complete system built into skid unit and enclosed with stainless steel panels.
- Hygienic fully drainable design and components.
- Built in CIP cycle (full tank flooding system/ quick rinse via spray balls).
- Machine decals, HMI screens and instruction manuals will be provided in English or other language as required.
- Ice separator to enable continuous ice production.
- Built in ice slurry conditioning system to maintain ice slurry and minimise the effects of ice aging.

**INSTALLATION REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
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<tbody>
<tr>
<td>Dimensions:</td>
<td>2776 x 1596 x 2073 mm (L x W x H)</td>
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<tr>
<td>Weight:</td>
<td>2000 kg (dry)</td>
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<tr>
<td>Electrical:</td>
<td>38 – 460V 3 phase (3P, N + E) 50/60 Hz. 63A appliance input (Ceeform), power consumption: 22 kW.</td>
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<td>Pneumatic:</td>
<td>8mm push fit air connection, 7 – 10 bar pressure.</td>
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<td>Process connections:</td>
<td>DIN 11851</td>
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<tr>
<td>Water supply:</td>
<td>Minimum 5 bar pressure and 2 l/s flow rate (T.B.C)</td>
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