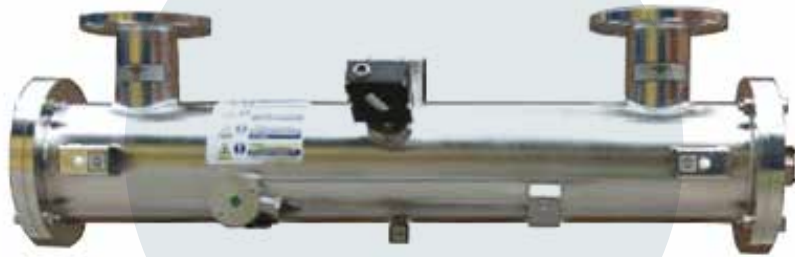


We UVCare...

# Application Optimised UV for Food & Beverage



**PURELINE S PH 60-80**



## UV disinfection for sugar syrup

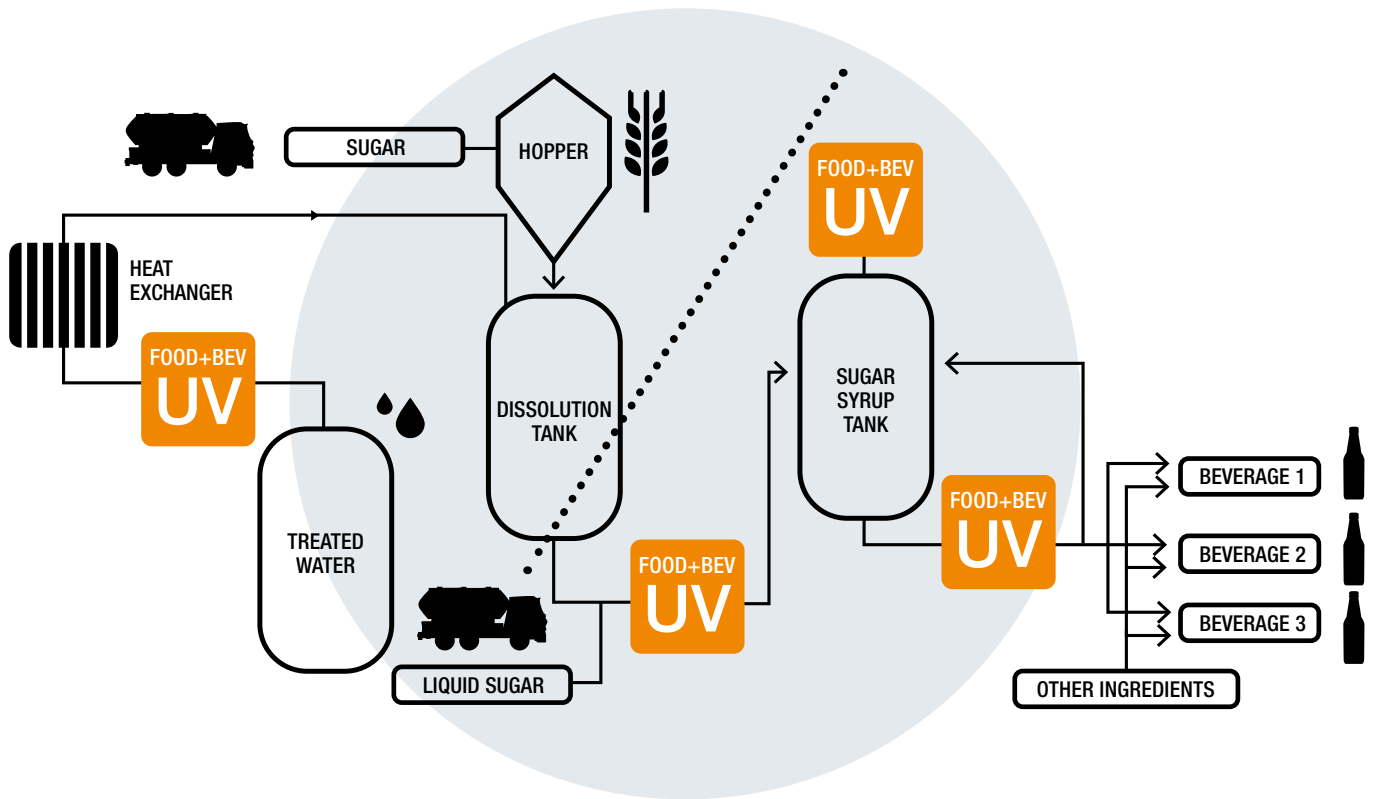
Our PureLine S PH systems are aimed specifically at providing UV disinfection for sugar syrup used in the food and beverage industry. By using a UV system you will disinfect the sugar syrup, eliminate harmful micro-organisms, reducing the need for thermal pasteurisation with its associated energy costs. Each system comes with a UV monitor to measure the germicidal output of the UV system and make it easy to monitor and log performance.

**berson**

**hanovia**

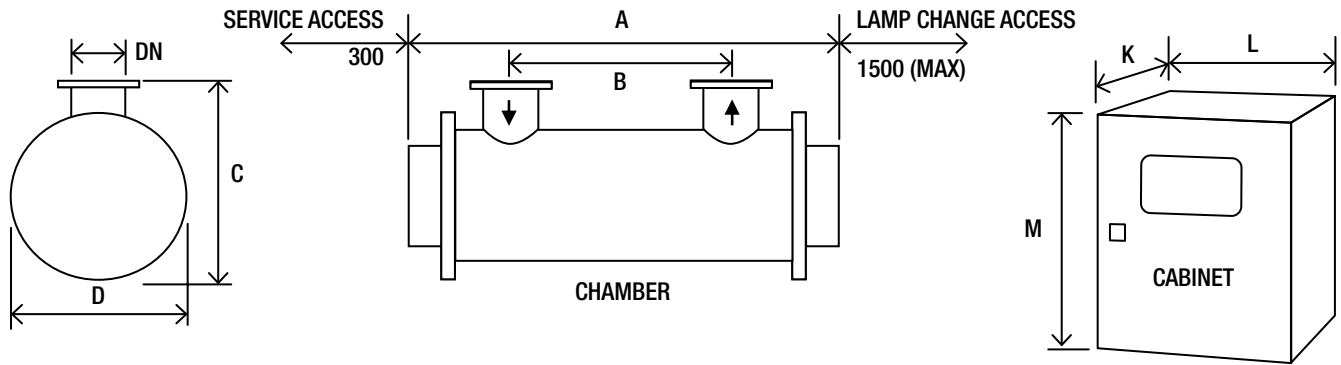
**aquionics**

# Potential locations of the PureLine S PH™ 60-80 sugar syrup disinfection



| KEY FEATURES  | WHAT IT GIVES YOU   | BENEFITS FOR YOU                                  |
|---|---|---|
| <b>INTELLIGENCE</b>                                   |   |   |
| UV intensity monitor measuring germicidal wavelengths | Continuous verification of performance with in-built low intensity alarm                    | Easy to monitor and log system performance        |
| <b>OPTIMISATION</b>                                   |   |   |
| UV disinfection                                       | Protect your sugar syrup from microbiological contamination including thermophilic bacteria | Does not affect taste and colour of final product |
| Designed for the food and beverage industry           | FDA-approved materials used for all wetted parts  | No chemicals                                      |
|   | *Chamber with tri-clamp connections and <math><0.38 \mu\text{m}</math> internal finish      | Industry compliant materials                      |
|   |   | Sanitary design                                   |
| <b>INTEGRATION</b>                                    |   |   |
| Compact design  | Can be fitted to skids  | Easy integration                                  |
|   | Can be retrofitted to existing process  |   |

\*Option



| Model Number       | Maximum Power (kW) | Min T <sub>10</sub> (%) | Dimensions (mm) |     |     |     |     |     |      |      | Approx weight (Kg) |                 |
|--------------------|--------------------|-------------------------|-----------------|-----|-----|-----|-----|-----|------|------|--------------------|-----------------|
|                    |                    |                         | A               | B   | C   | D   | DN  | K*  | L    | M**  | Chamber (Empty)    | Control Cabinet |
| PureLine S PH 0060 | 10.1               | 30                      | 1090            | 710 | 319 | 240 | 100 | 330 | 1100 | 1600 | 50                 | 282             |
| PureLine S PH 0080 | 16.5               | 30                      | 1090            | 710 | 319 | 240 | 100 | 330 | 1100 | 1600 | 50                 | 282             |

\* Allow dimension L in front of cabinet for door opening and panel access.

\*\* M dimension includes the space for the cabinet mounting brackets but you need to allow space below the cabinet for cable entry and access (minimum of 250 mm).

All dimensions are approximate for clearance purposes only. We have a policy of continuous product development, exact drawings are available on request. All specifications are subject to change without notification. Your distributor or our account manager can advise on correct sizing and specification requirements.

| UV CHAMBER                       |  |
|----------------------------------|--|
| Material:                        | Stainless steel 316L / 1.4404  |
| Internal finish:                 | As made pipe and tube, welds as laid, electropolished and passivated |
| External finish:                 | Sateen polish (120 grit) electropolished and passivated              |
| Process (mating) connections:    | Flange EN 1092-1 PN16  |
| Drain connection:                | Tri-clamp  |
| End plate:                       | Removable end plate  |
| Degree of protection:            | IP65 equivalent to NEMA 4 but not for outside use                    |
| Arc tube (lamp):                 | Medium pressure  |
| Arc tube enclosure:              | Pure quartz (F200)   |
| Number of arc tubes (lamps):     | 4  |
| Expected lamp life:              | 8000 hours   |
| Temperature sensor:              | Yes  |
| UV sensor:                       | Wet UV monitor (if above minimum T <sub>10</sub> )                   |
| Working fluid temperature:       | 1°C to 80°C  |
| Maximum CIP temperature:         | 95°C with cabinet electrically isolated                              |
| Hydrostatically pressure tested: | Yes to PED requirements EN 13445                                     |
| Chamber mounting:                | Horizontal only  |
| Operating pressure:              | 6 bar (positive pressure only)                                       |
| Seals:                           | EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved           |

| OPTIONS  |   |
|--|---|
| Document Support Pack  |   |
| Cabinet material:  | Stainless steel 316   |
| Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish |   |
| Flange options:  | ANSI 150, JIS, Table 'E' and tri-clamp                      |
| Chamber internal finish:   | <0.38 µm welds polished out, electropolished and passivated |
| Lead length:   | 20 m, 30 m or 50 m cabinet to chamber                       |
| Maximum CIP temperature:   | 130°C (panel switched off)                                  |
| Welder Document Pack for chamber construction  |   |

| OPTIONS (CONTINUED)  |  |
|--|--|
| Bleed valve:   | Hygienic valve with tri-clamp connection |
| Skid mounting (not ship board or earthquake zone)  |  |
| Operating pressure:  | 10 bar                                   |
| Air vent connection:   | Tri-clamp blanked off                    |
| Stainless steel cabinet IP upgrade: air to air heat exchangers stainless steel IP 56, NEMA 4X, relative humidity <95% non condensing. If fitted no UL listing. See sales drawings for sizes. |  |

| CABINET (CONTROLLER PHOTON)    |                                     |
|--------------------------------|-------------------------------------|
| Material:                      | Polyester coated carbon steel       |
| Degree of protection:          | IP54 NEMA 12                        |
| Supply voltages (nominal):     | 380 V to 480 V (+/-10%)<br>50/60 Hz |
| Operating temperature range:   | 5°C to 40°C                         |
| Relative humidity:             | <85% non-condensing                 |
| Cooling fans:                  | Yes                                 |
| Interconnecting cable lengths: | 10 m cabinet to chamber             |

| CUSTOMER OUTPUTS                  |   |
|-----------------------------------|---|
| 4-20 mA passive or active output: | UV intensity %  |
| VFC outputs:                      | System warning, lamp ready, low UV intensity, common trip, remote reset, ELCB or water leak, system available, local or remote mode |

| CUSTOMER INPUTS                  |                                    |
|----------------------------------|------------------------------------|
| 4-20 mA passive or active input: | Flow meter                         |
| VFC inputs:                      | Remote stop/start and remote reset |

| CUSTOMER COMMUNICATIONS PORT |  |
|------------------------------|--|
| None                         |  |

| APPROVALS                    |  |
|------------------------------|--|
| CE marked, UL listed E149108 |  |



## PURELINE S

Also available in our Food & Beverage product range...



### PURELINE DC+DCD

Dechlorination and Chlorine Dioxide removal



### PURELINE DO

Ozone removal and disinfection



### PURELINE D

Disinfection as part of a multi barrier approach



### PURELINE PQ

3rd party bioassayed systems for critical disinfection or as a pathogen barrier



[www.weuvcare.com](http://www.weuvcare.com)

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