

Industry: Food & Beverage

# PureLine S PH

## 30-80 m<sup>3</sup>/h

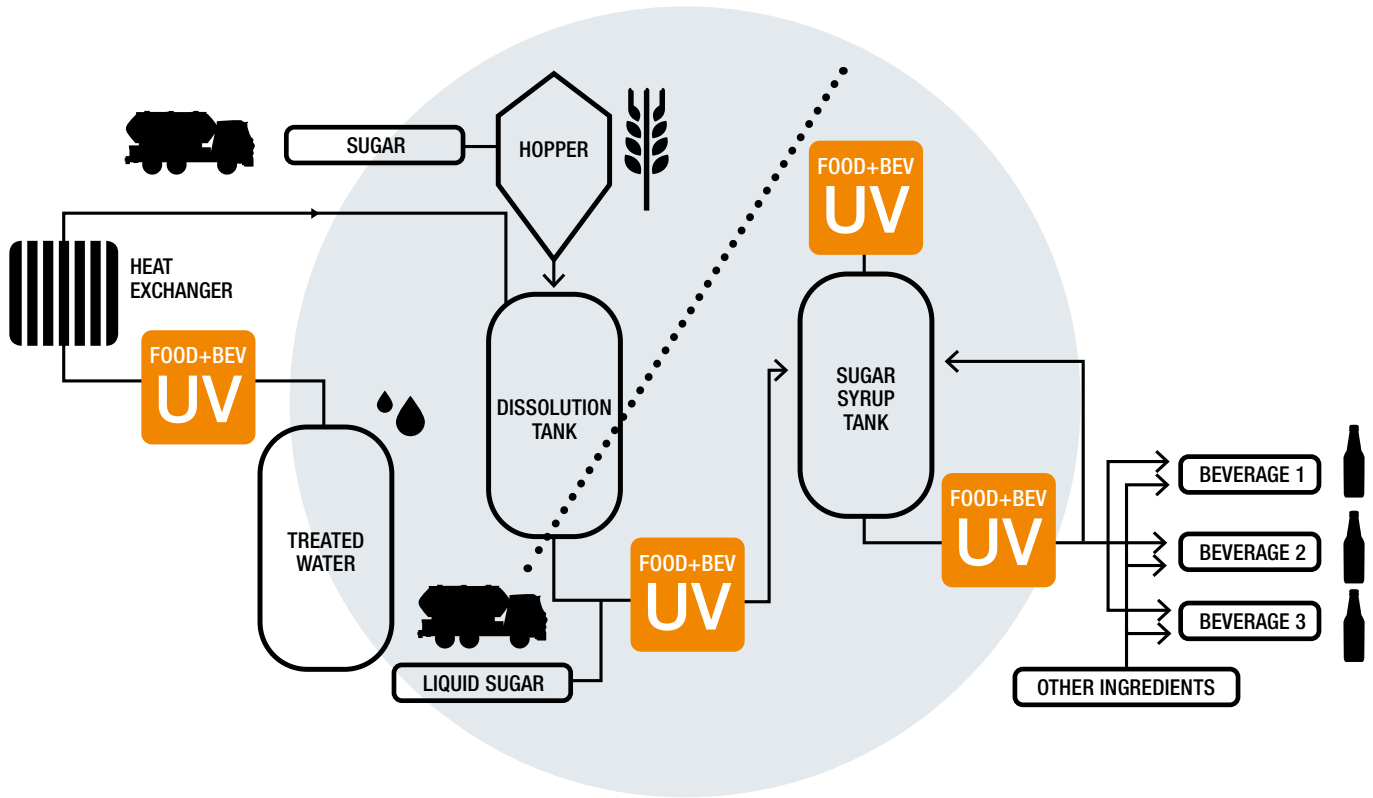


### **UV disinfection for sugar syrup**

**PureLine S PH systems are aimed specifically at providing UV disinfection for sugar syrup used in the food and beverage industry.**

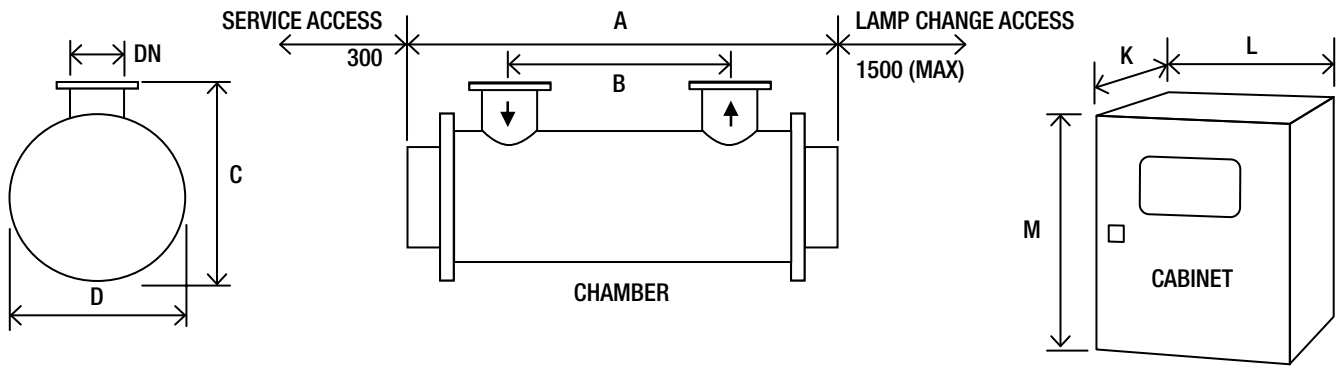
By using a UV system you will disinfect the sugar syrup, eliminate harmful micro-organisms, reducing the need for thermal pasteurisation with its associated energy costs. Each system comes with a UV monitor to measure the germicidal output of the UV system and make it easy to monitor and log performance.

# Potential locations of the PureLine S PH™ 30-80 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 No chemicals
Designed for the food and beverage industry	FDA-approved materials used for all wetted parts	Industry compliant materials
	*Chamber with tri-clamp connections and <math><0.38 \mu\text{m}</math> internal finish	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 0030	7.8	30	1090	710	319	240	65	330	1100	1100	50	165
PureLine S PH 0045	12.5	30	1090	710	319	240	80	330	1100	1600	50	282
PureLine S PH 0060	12.5	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):	1 (S PH 0030), 3 (S PH 0045), 4 (S PH 0060 and S PH 0080)
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):	S PH 0030: 190 V to 480 V (+/-10%) S PH 0045-0080: 380 V to 480 V (+/-10%) 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



**S P E C T R A<sup>®</sup>**

**PROFESSIONAL UV SOLUTIONS**

Str. Zizinului, Nr. 110, 500407, Braşov, România  
[www.spectra.ro](http://www.spectra.ro) / [contact@spectra.ro](mailto:contact@spectra.ro) / (+40) 0770-187-379  
SPECTRA is a trademark of AKRO