

### MHU-1 Microwave Reactor Specification

**Construction & Design:** The MHU-1 reactor is constructed in stainless steel grade 1.4301/AISI 304. Built to comply with CE, AMI and following the EHEDG (European Hygiene Engineering and Design Group) principles for hygiene and best practice. Within the reactor are a series of tubes made from PTFE or quartz glass depending on the temperature demand.

The Microwave Heating Unit (MHU) is especially useful for “difficult” liquid food products like yoghurt (with/without fruit), soups or sauces. Due to homogeneous heating and therefore shorter heating times, there is a better preservation of colour, texture, taste, and smell compared to conventional pasteurised liquids.

The MHU also allows for easier cleaning and subsequent reduction in shut down time due to direct interaction of the microwaves with the liquids instead of through the conventional plate-heat exchangers. With advantages being a reduction in both the risk of contamination and the risk of fouling.

Allen-Bradley 800 7” PanelView HMI with improved usability with remote monitoring capability.

Electrical 6A, 220-240VAC N + PE 50 Hz Rating: IP 65

Compressed air: 3-4 Bar. 8 mm

WaveGen 80 transmitter/Power supply provides up to 75 kW of power.

Requires 3 phase 50/60 Hz, 400-480 VAC, 110 kVA main supply.

Frequency options: 896 or 915 MHz



MHU Volumetric Liquid Heating Microwave Reactor for heating from +5 to +130 Celsius then reducing the temperature to +5 Celsius by the heat recovery cycle.