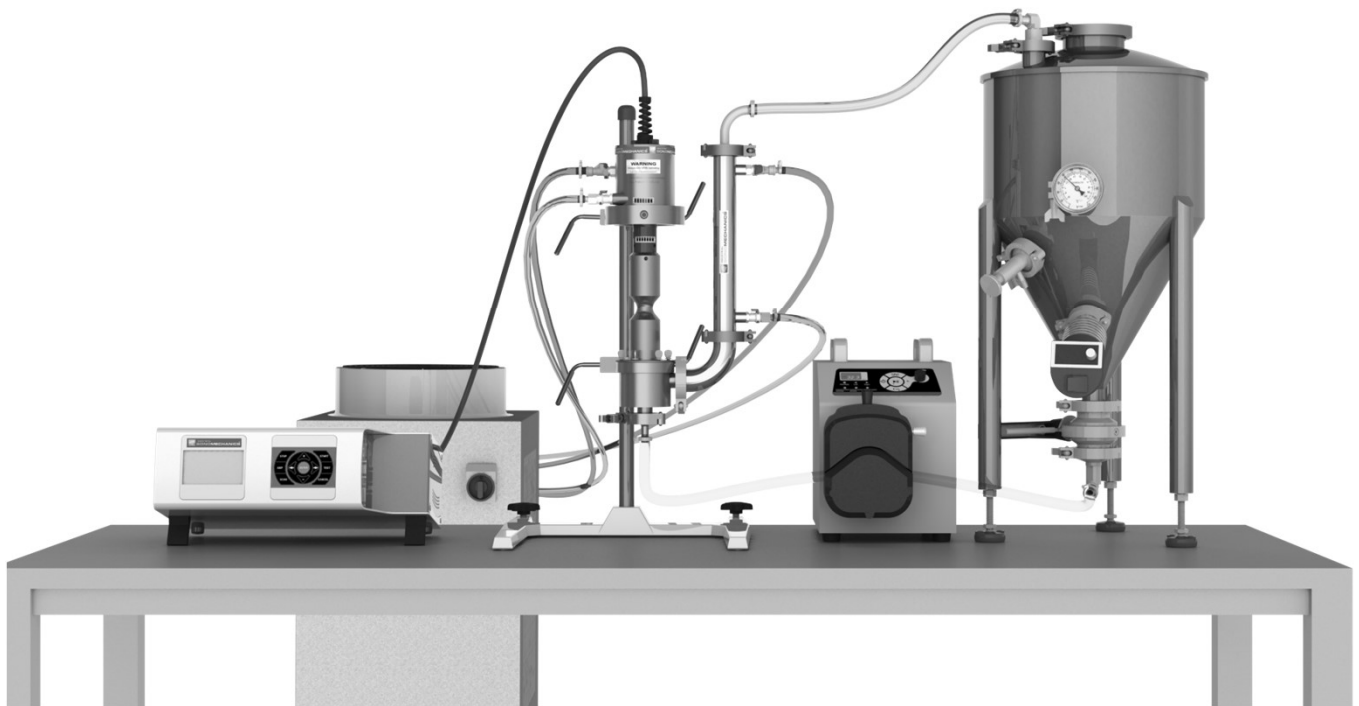


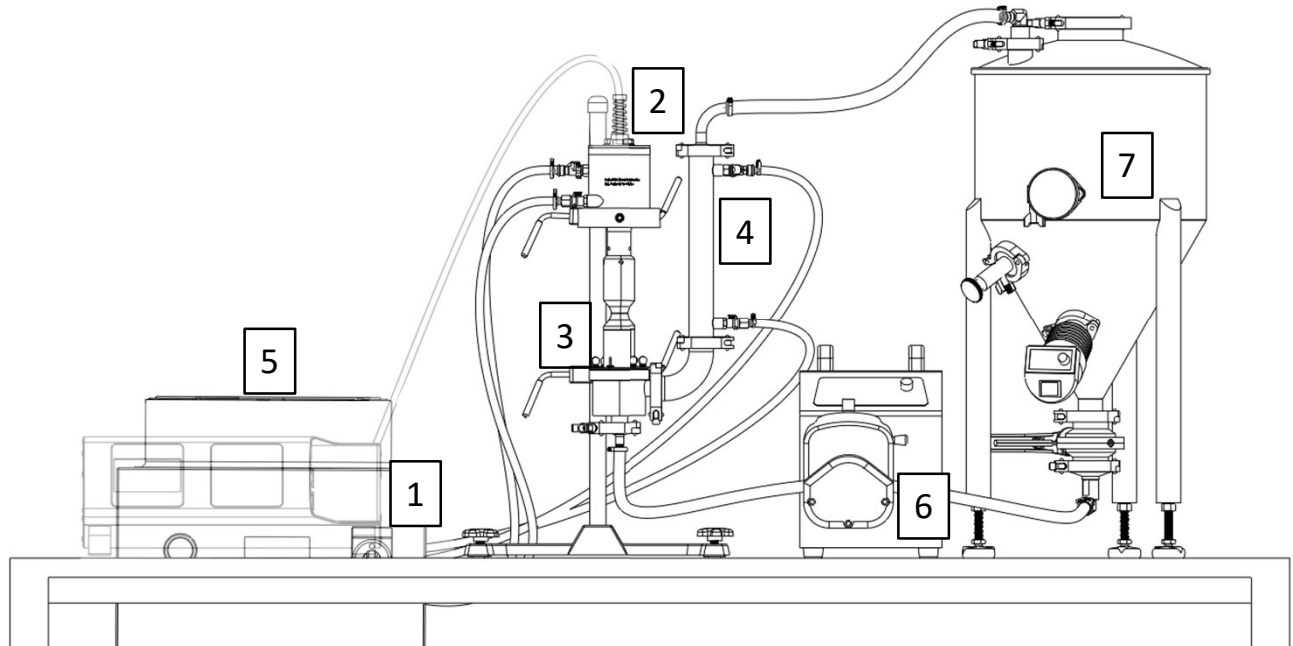


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# Peripheral Equipment Assembly Guide for ISP-3600 Ultrasonic Processor

## Items list, flow-through configuration



### Main Equipment Items\*:

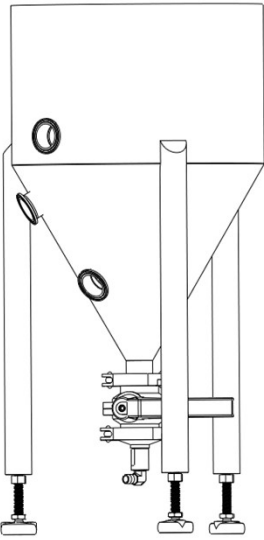
- 1) Ultrasound Generator
- 2) Sealed Water-Cooled Transducer/Barbell Horn Assembly
- 3) Reactor Chamber
- 4) Heat Exchanger

### Peripheral Equipment Items:

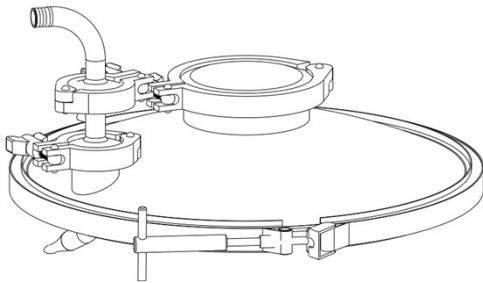
- 5) Recirculating Water Chiller (“chiller”)
- 6) Peristaltic Pump (“pump”)
- 7) Cone-Bottom Storage/Mixing Tank with Magnetically Coupled Mixer (“tank”)

\*Not described in this Guide. For further information, see the ISP-3600 User Manual.

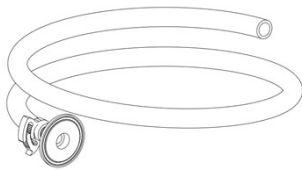
## Included in the tank box



1x Tank body with outlet assembly



1x Tank lid with return assembly and lid clamp



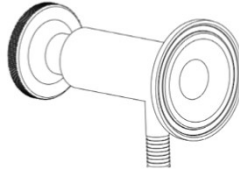
1x Return hose assembly



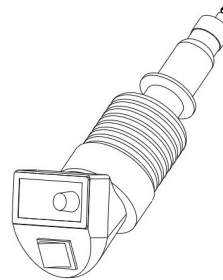
3x Sanitary clamps (loose)



3x Sanitary gaskets (loose)



1x Sampling valve



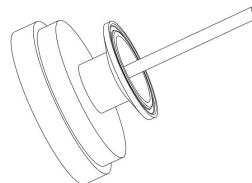
1x Mixer body



1x Mixer impeller



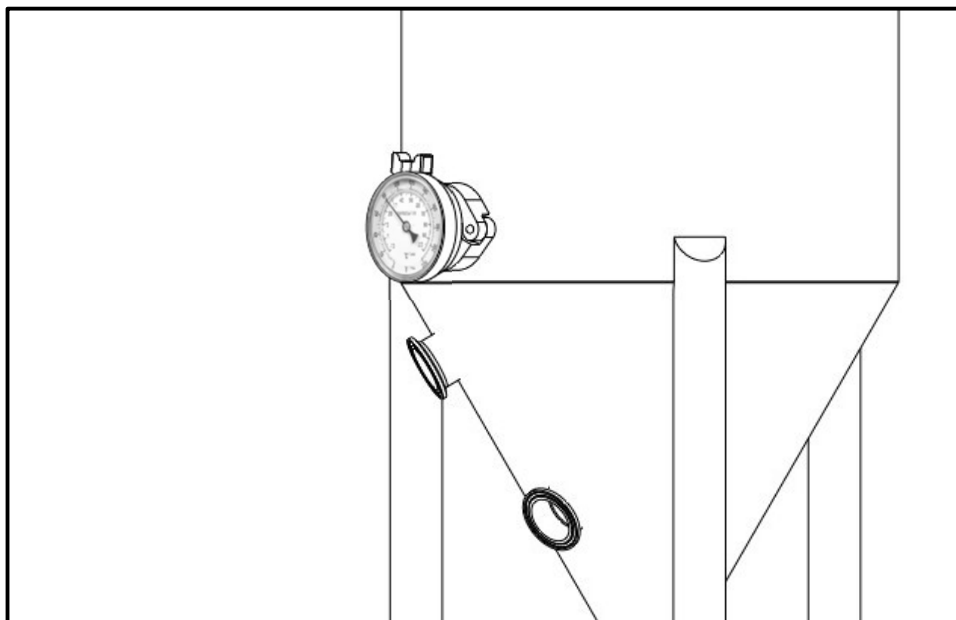
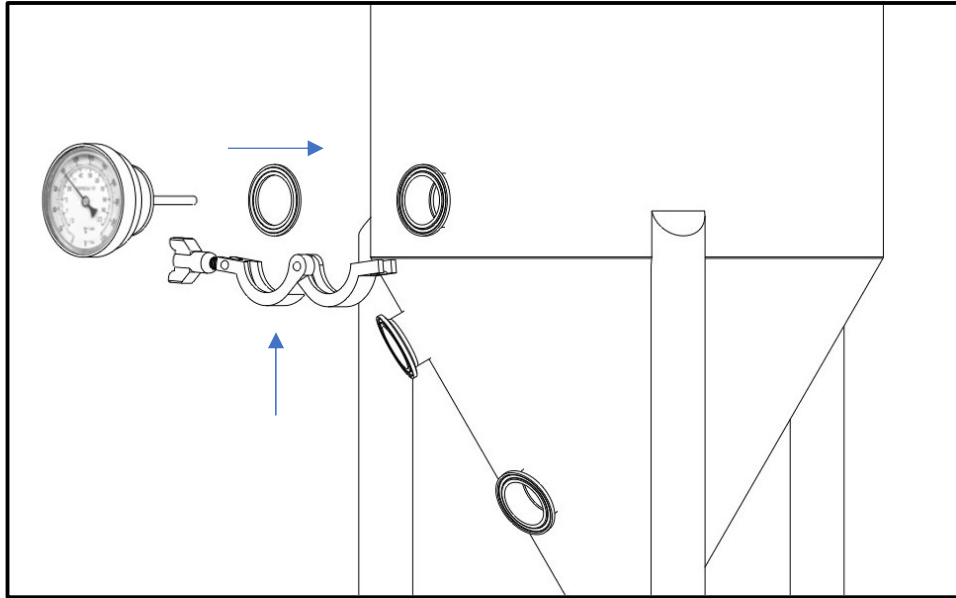
1x Mixer power source



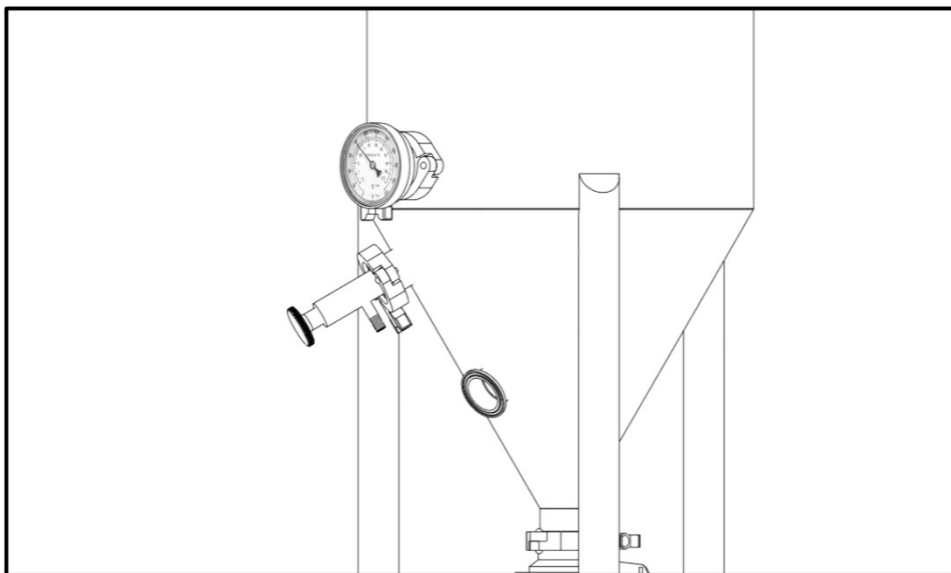
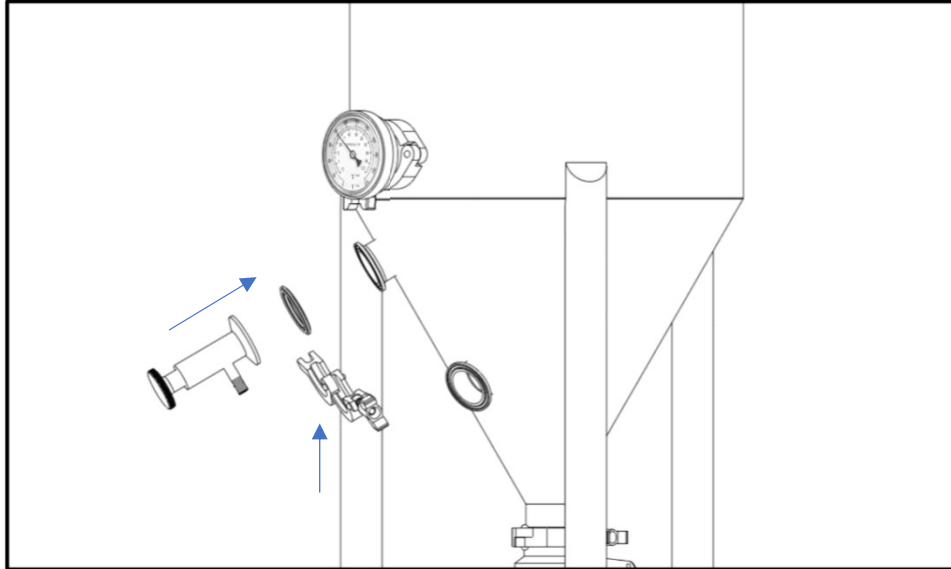
1x Analog thermometer

- 1) Check that all listed parts are in the box and undamaged. Report any issues to ISM as soon as possible.
- 2) After unpacking the box, remove the lid from the tank to begin assembly.

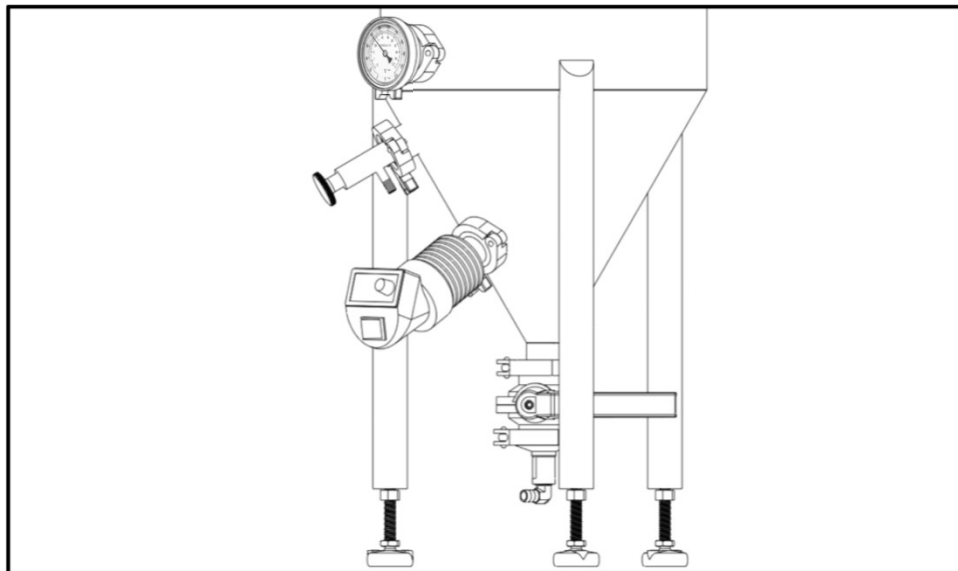
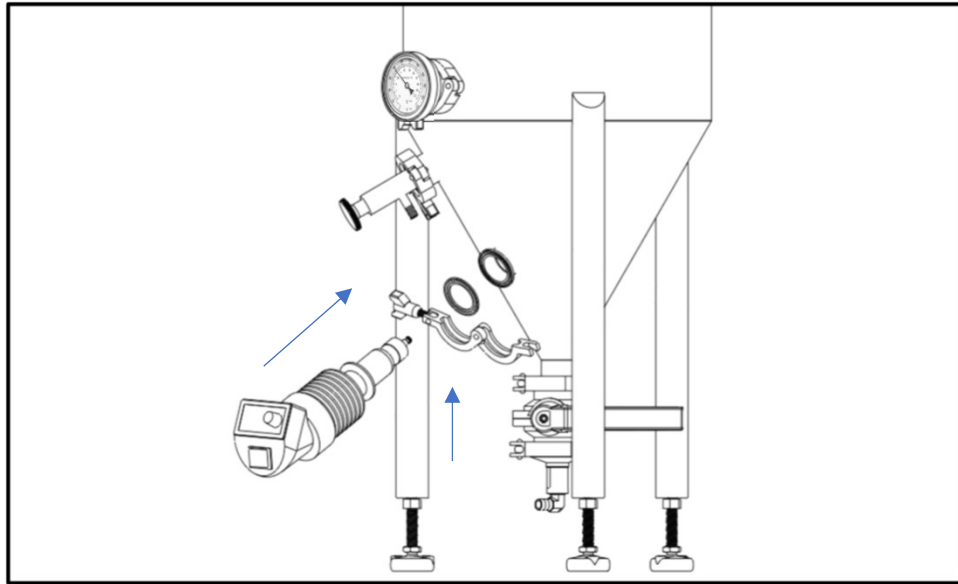
## Step 1: Analog thermometer installation



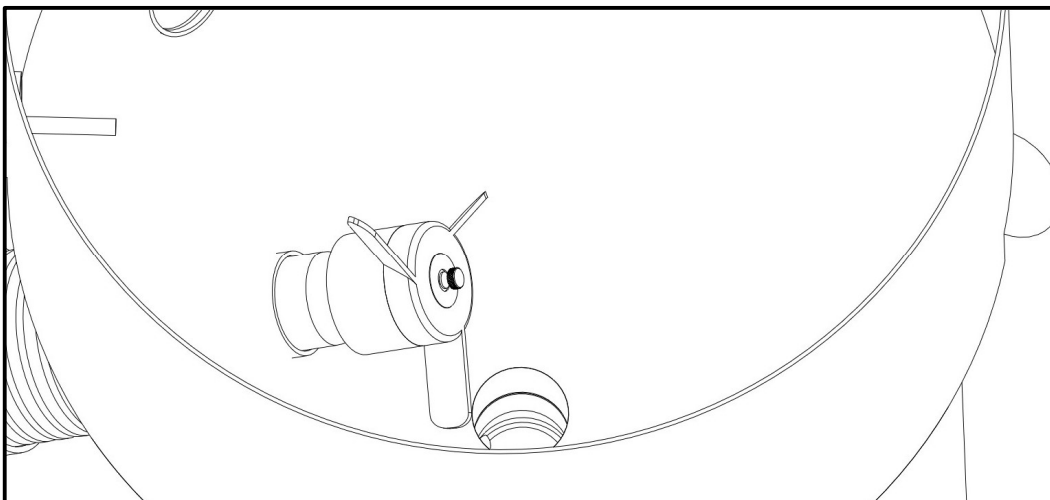
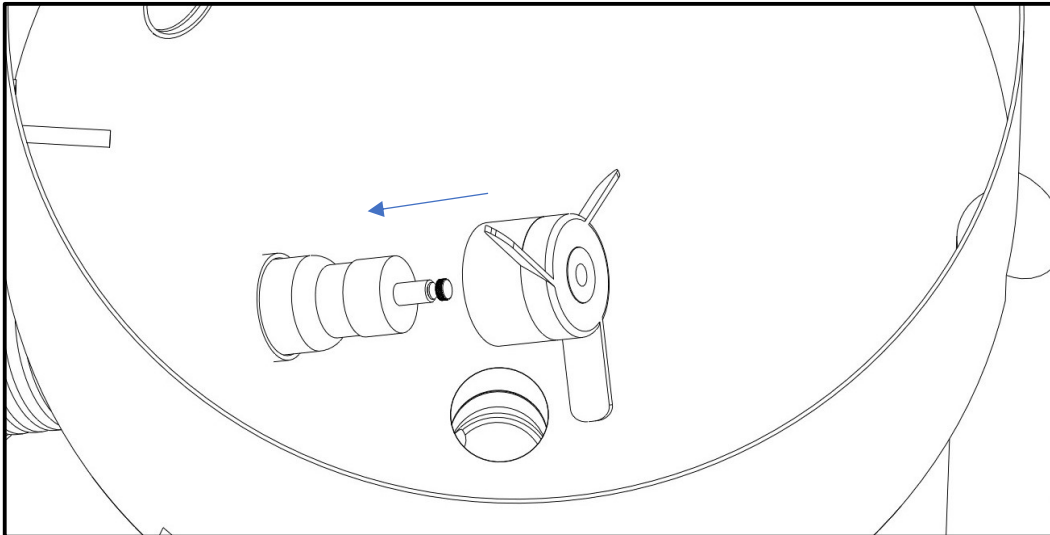
## Step 2: Sampling valve installation



## Step 3: Mixer body installation



## Step 4: Mixer impeller installation

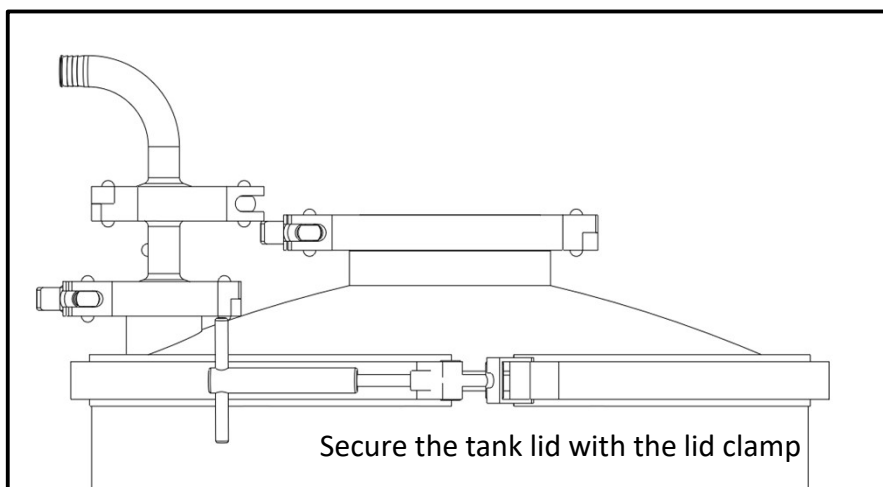
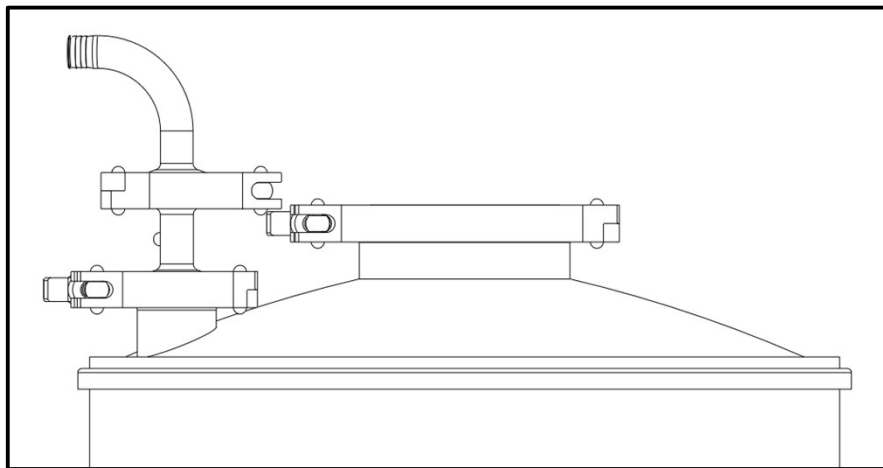
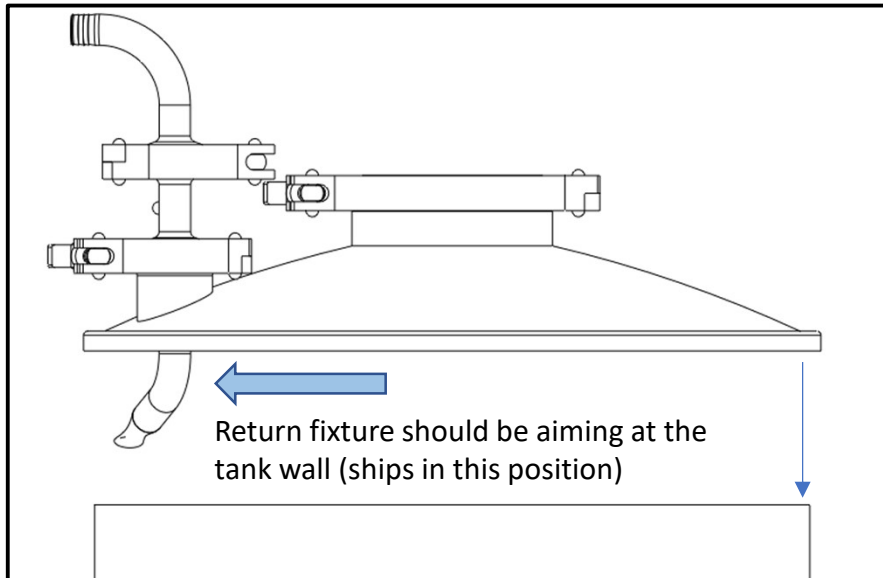


1) Make sure that the direction switch (see page 12) is in the “O” (off/middle) position.

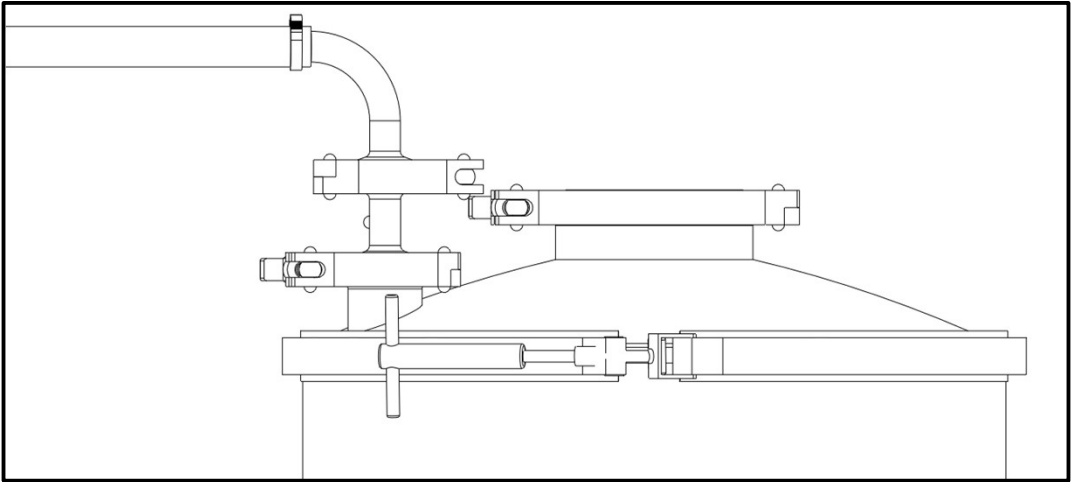
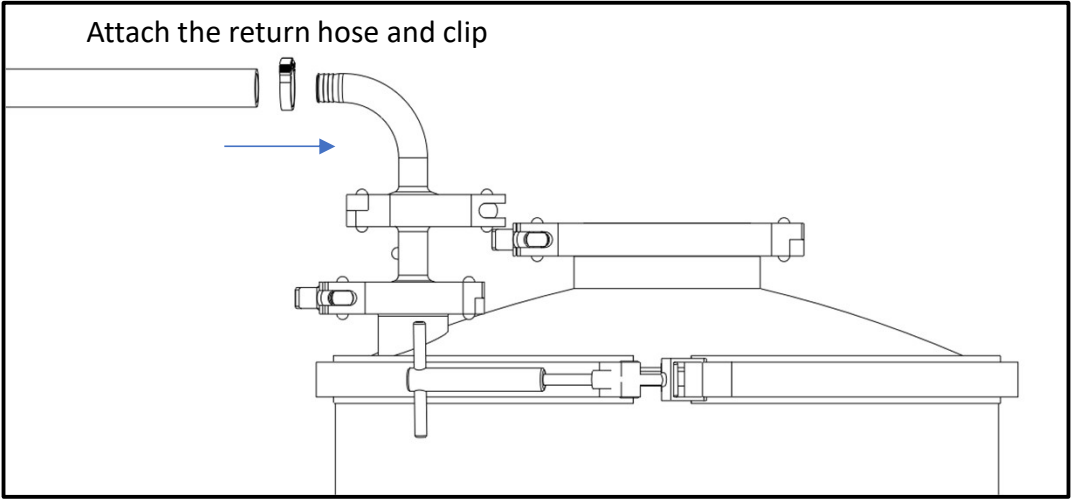
2) Plug the mixer power source into a 100 - 240 Vac outlet and connect it to the mixer body.

NOTE: It is not recommended to run the mixer without liquid present in the tank.

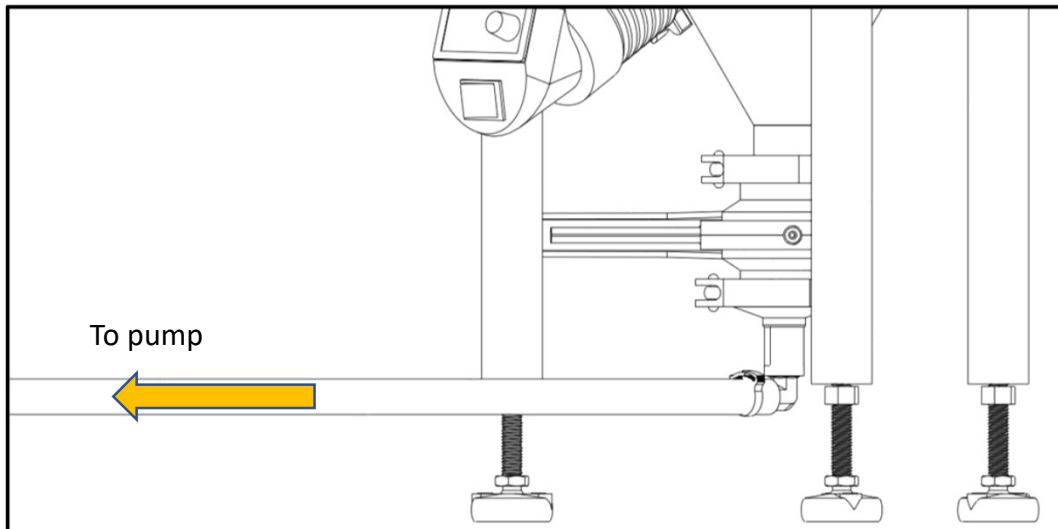
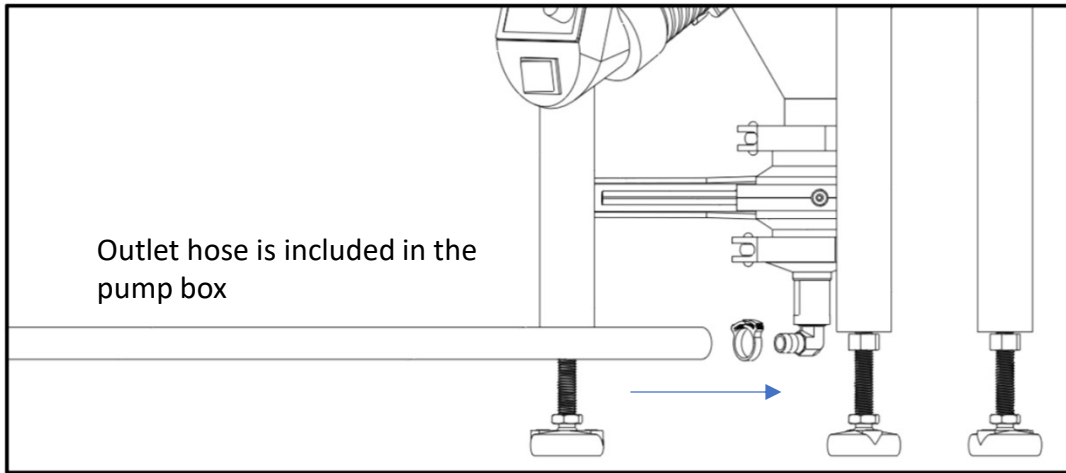
## Step 5: Lid placement and return hose connection



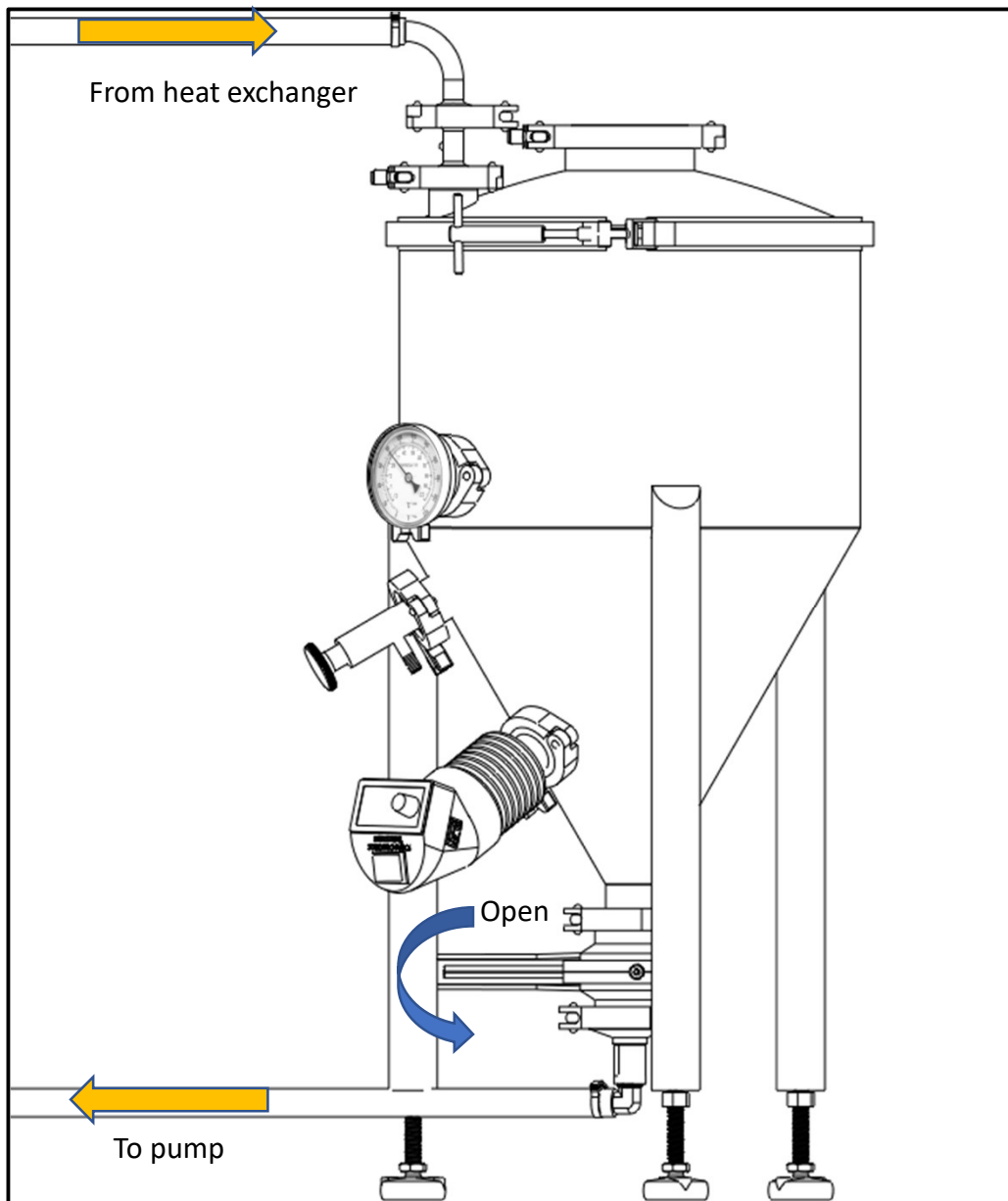




## Step 6: Outlet hose connection



## Completed tank assembly



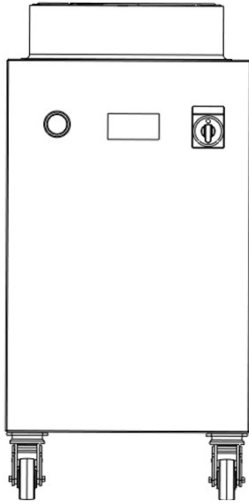
## Additional tank instructions



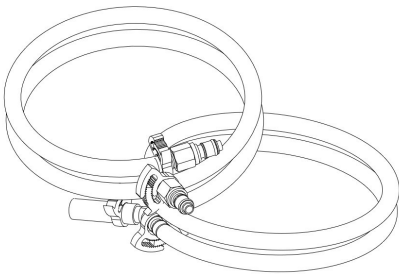
- 1) Smooth ON/OFF switch/duty knob: press = soft start, turn = adjust mixer speed
- 2) Direction switch: I = counterclockwise, II = clockwise, O = rotation OFF
- 3) For the mixer to run, power source must be plugged in, the master switch must be in the I=ON position, and the power light must be on.

**CAUTION:** When changing rotation/mixing directions, it is strongly recommended to pause for approximately 1 second in the “O” (off/middle) position of the direction switch.

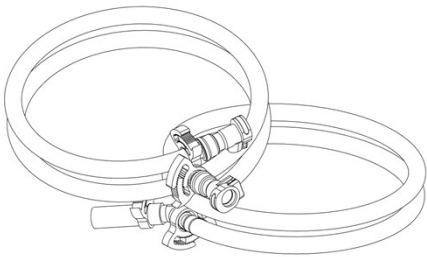
## Included in the chiller box



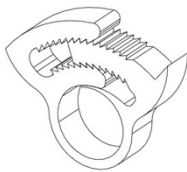
1x Chiller



1x Blue outlet hose assembly



1x Red inlet hose assembly

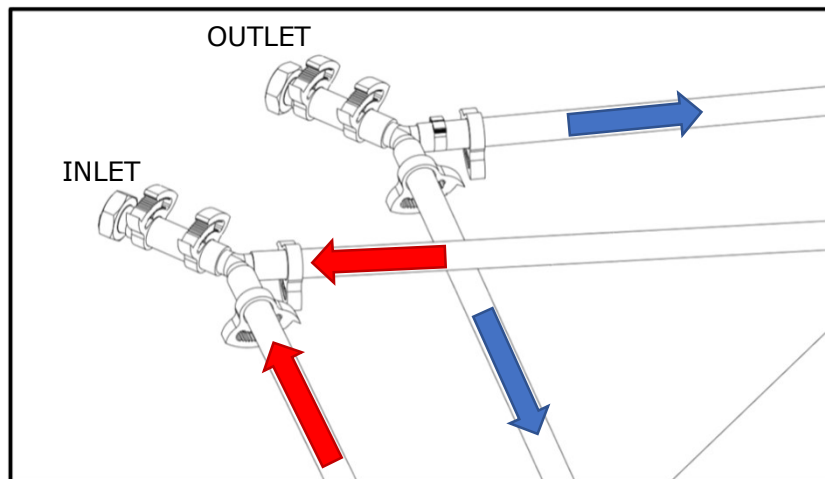
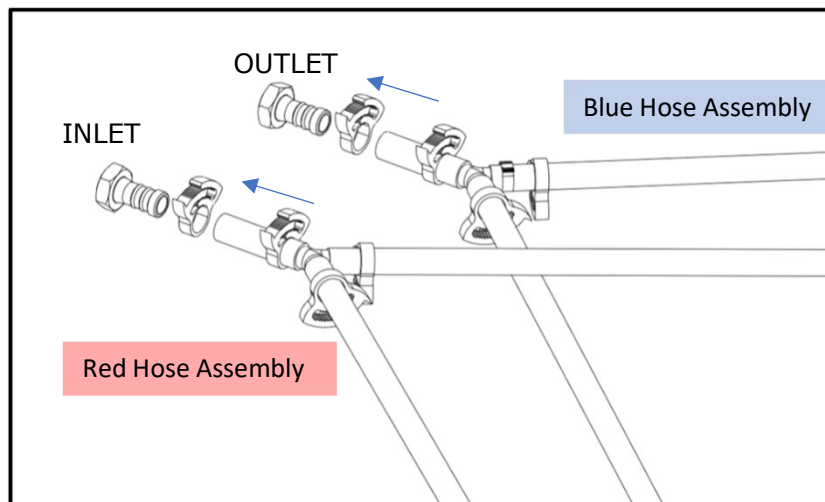


2x Clips for hose assembly

- 1) Check that all listed parts are in the box and undamaged. Report any issues to ISM as soon as possible.
- 2) The chiller ships pre-programmed to the settings required by the ISP-3600 ultrasonic processor.

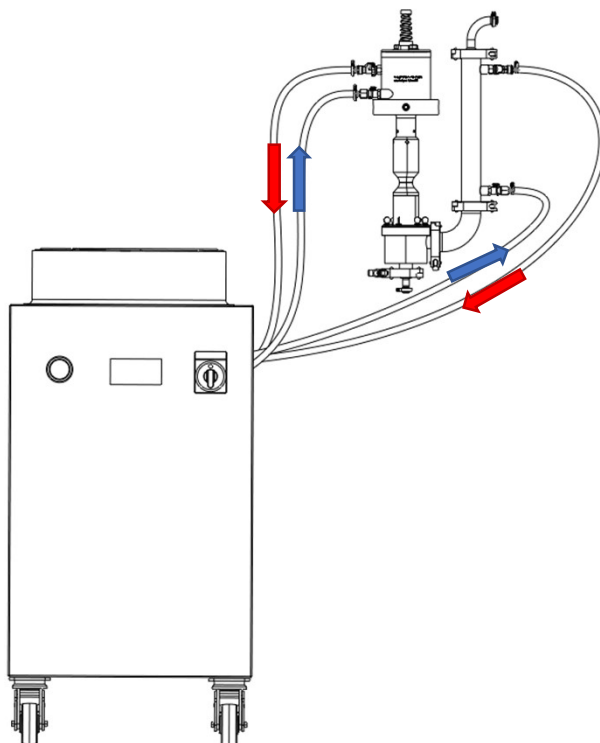
# Chiller instructions

**WARNING:** Do not turn on the chiller without the right amount of water in the reservoir.



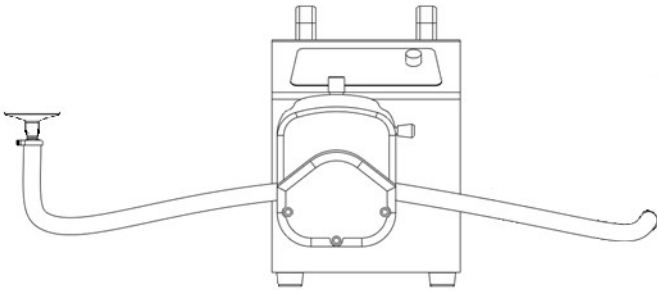
- 1) Connect the red hose assembly to the hose barb labeled “INLET” on the back of the chiller and secure it with the clip.
- 2) Connect the blue hose assembly to the hose barb labeled “OUTLET” on the back of the chiller and secure it with the clip.

# Chiller instructions



- 1) Attach the quick disconnects on both hose assemblies to the transducer and reactor chamber. The quick disconnects will only fit in correct positions.
- 2) After filling the chiller's reservoir with water and connecting the hoses as shown above, turn the chiller on. Water should begin flowing immediately.
- 3) The temperature of the chiller is pre-set to 7 °C. If you need to change this temperature or require further information, please refer to the included manufacturer's CW-6000 User Manual.

## Included in the pump box



1x Pump with #82 silicone hose and sanitary flange adapter

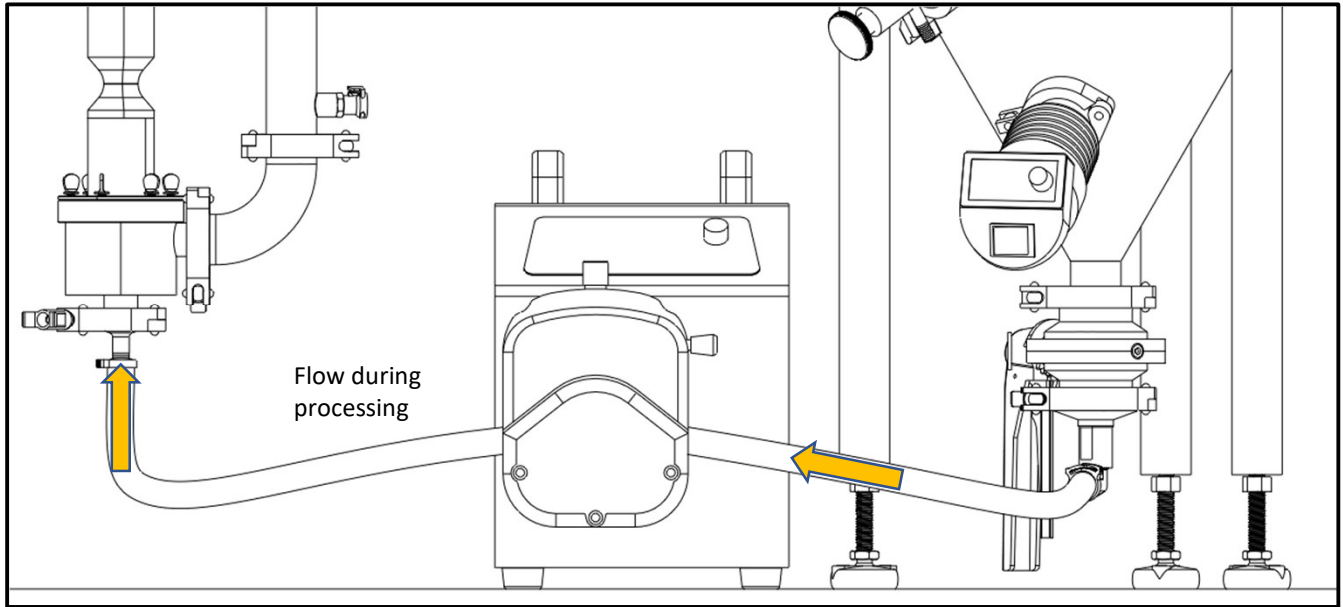


1x Pump power cable

- 1) Check that all listed parts are in the box and undamaged. Report any issues to ISM as soon as possible.
- 2) The pump ships fully assembled.



# Pump instructions



- 1) Connect the left side of the pump hose to the bottom of the reactor chamber.
- 2) Connect the right side of the pump hose to the tank outlet (see page 10).

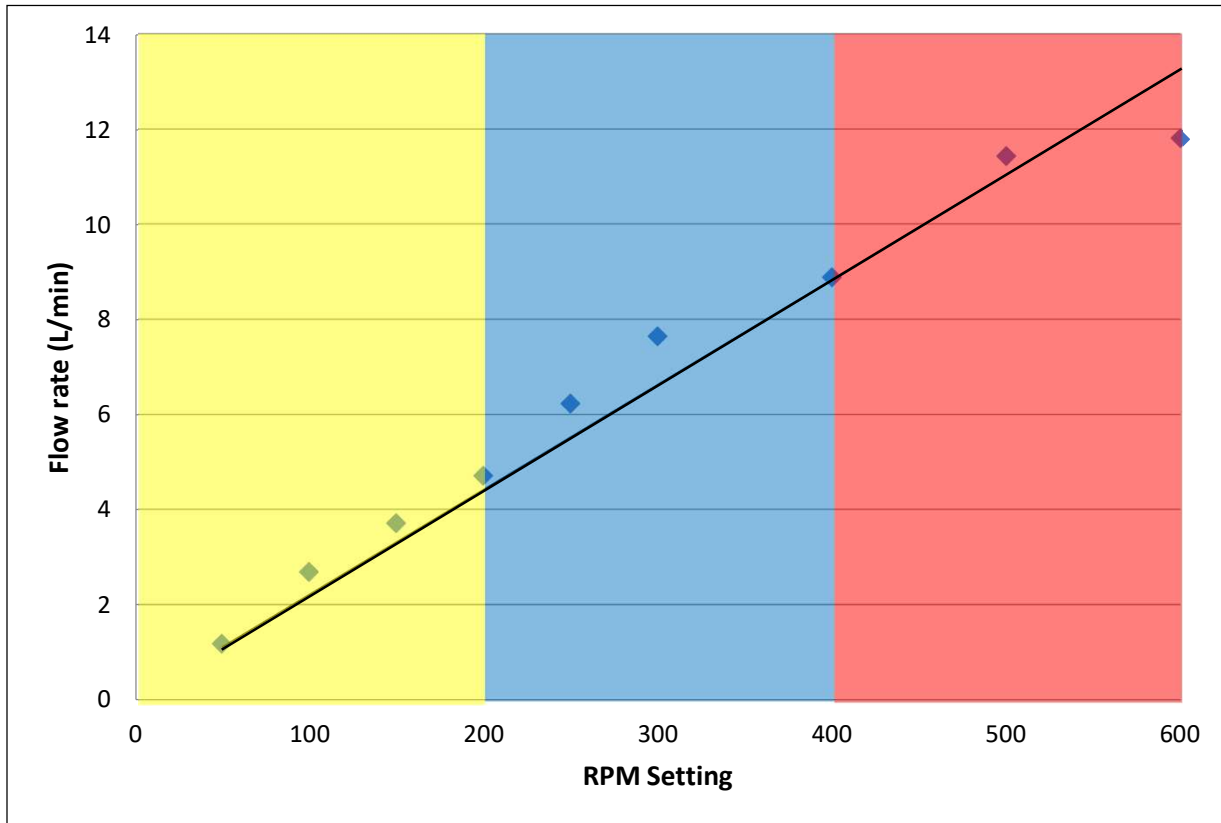
Note:

a) During normal operation the processed liquid is pumped from the tank into the reactor chamber. The light indicator “Left” should be turned on via the pump’s control panel.

b) During the collection stage (after processing is completed), the processed liquid is purged from the reactor chamber and hoses back into the tank. The light indicator “Right” should be turned on via the pump’s control panel.

**CAUTION:** Avoid hose rupture by checking the hose condition before and after each run, or include it in your maintenance schedule. Only use the supplied peristaltic pump silicone hose.

# Pump instructions



Note:

- Use this chart to determine the flow rate provided by the pump as a function of its RPM setting.
- If you need further information, please refer to the included manufacturer's Precision Pump Manual, M6 Series.