Asynt HotChip™ Quick Start Guide

Plug in the power cable and switch on – the GREEN LED display will show room temperature.

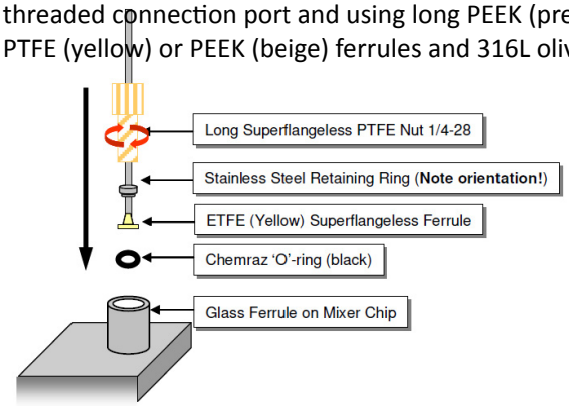
Fig 1a. *HotChip fitted with adaptor plate and small Asynt GSMs*

Fig 1b. *HotChip fitted with large Asynt GSM*

Fitting the Glass Static Mixers/Reactors (GSMs)

1. The Asynt HotChip heater block has been designed to accommodate either a single 'large' GSM (UQ5107, 10ml; UQ5108, 20ml), or up to 2 off 'small' GSMs (UQ5101, 0.27ml; UQ5102, 2.0ml). It is also possible to use the 3-input GSM (UQ5106) by fitting an optional glass cover window. Please contact Uniqsis for details.
2. Before fitting the GSM(s) ensure that the heater plate and the underside of the GSM is clean and free from any particles which will reduce thermal contact or even cause the GSM to crack when held in place.
3. When using the small GSMs, fit the glass block followed by the black adaptor plate.
4. Fit the insulated PTFE cover and finger-tighten the securing bolts.

5.Tubing connections should be made by first inserting a PerLast® 'O'-ring into the respective threaded connection port and using long PEEK (preferred) or ETFE superflangeless nuts with PTFE (yellow) or PEEK (beige) ferrules and 316L olives ('rings') as shown opposite.



The connection should be made only finger-tight and this may need to be checked for leakages periodically, but especially after several heating and cooling cycles.

Qty	Description	Part No.
10	ChemRaz® 'O'-rings	UQ7207
10	Superflangeless nut, PEEK, long	P-255X
10	Superflangeless ferrule & olive, PTFE & SS, (yellow)	P-259X
10	Superflangeless ferrule & olive, PEEK & SS, (beige)	P-359X

www.asynt.com
enquiries@asynt.com
+44 (0)1638 781709

Setting the Temperature – Manual Control

1. Press the centre of the control knob – the display changes to RED.
2. Rotate the control knob until the desired set-point temperature is displayed (the unit is limited to T_{max}=230^{o}C).
3. Press the centre of the controller to start heating. The display changes back to GREEN and the decimal points will illuminate in a repeating sequence which runs from LEFT to RIGHT (HEATING UP).

4. When the HotChip reaches within 5^{o}C of the set-point temperature, all the decimal point indicators will flash simultaneously.

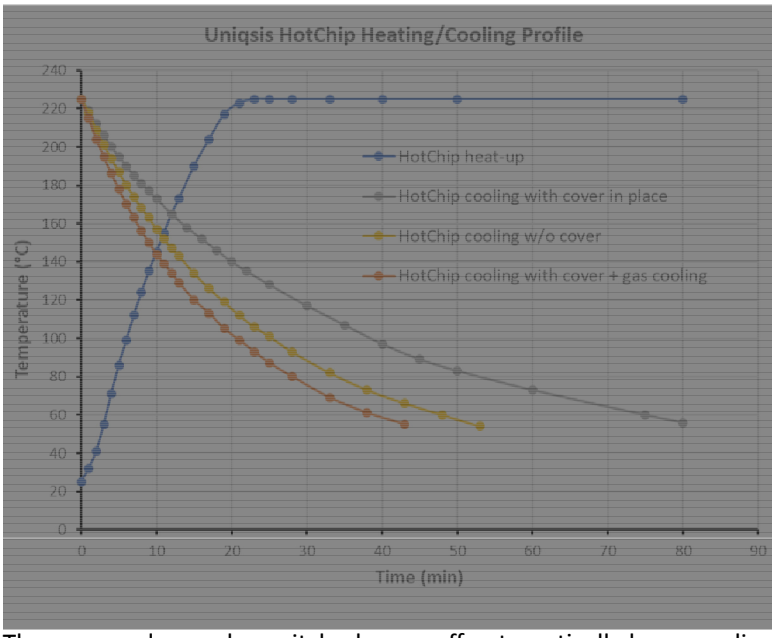
5. When the HotChip is within 2^{o}C of the set-point temperature no indicators are illuminated.
6. Similarly, when the HotChip is cooling down, the decimal point indicators light in a sequence which runs from RIGHT to LEFT (COOLING DOWN).

The large, bright LED display and the point indicators make it easy to see the status of the HotChip from across the laboratory.

Gas Cooling

The HotChip has 2 tubing connectors to the rear of the heating plate that may be used to connect a compressed gas supply (air or nitrogen; <1 bar) to accelerate cooling. Either connector can be used as the gas inlet. Note: the hose connectors get hot! Use suitably heat resistant tubing.

www.asynt.com
enquiries@asynt.com
+44 (0)1638 781709



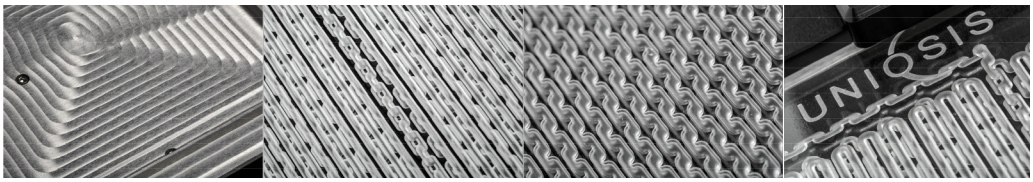
The gas supply may be switched on or off automatically by upgrading the HotChip with the Gas Cooling Kit (UQ1048) as described below.

Optional Extras

1. **Gas Cooling Kit (UQ1031).** This requires internal modifications to the unit to incorporate a solenoid pinch valve. When the unit is connected to a low-pressure gas supply (compressed air or nitrogen is fine; <1 bar), the solenoid opens to allow gas to flow through the heater block and accelerate cooling as required.

Remote Control

The HotChip can be remotely controlled over a LAN (TCP/IP). Therefore, control and data logging over Wi-Fi is possible. A crossover patch cable (supplied) is required to connect to a network.
The unit is automatically detected by other Asynt flow chemistry products such as the FlowSyn and Binary Pump dual-channel reagent delivery module.
Alternatively, command protocols can be supplied on request. The HotChip is preprogrammed with a fixed IP address (198.162.1.xxx) as displayed on the casework.



www.asynt.com
enquiries@asynt.com
+44 (0)1638 781709