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## Mogli User Sheet Version 2

## Starting Mogli

- 1. Make sure the power ("Netz") is connected to a 380V plug socket and all devices are switched on.
- 2. Make sure the high-pressure-pipe is connected on the local high-pressure system
- 3. Make sure all the vacuum parts are well connected and the manual flood valves are closed
- 4. If the main switch is on (5F0) the FPS-display should show *PST* OFF, HV LOCKED.
- 5. Check high vacuum pressure (dual gauge, CH2) and decide wheter to UNLOCK HV or not (F4, F3).
- 6. The recipient will be evacuated relatively fast. For evacuating slowly (fragile windows) install an additional fine-adjust-valve between Pirani Gauge (GP) and Turbopump (HP).
- 7. Press PST ON (F1) to start Mogli.

## 2. Mogli running

- While Mogli is running observe the dual gauge for measured pressure, Turbo Control Unit (TCU) for turbo indicators and FPS-display for messages from the controller (table: FPS-Indicators).
- 2. To change the turbopump to standby-mode use the TCU frontpanel.
- 3. To change recipients or open extern valves while Mogli is running: lock HV!
- 4. Never use the manual flood valves (FV, FVHP) or the manual switches of pneumatic valves (VV.

10 I 10 HV open I 11 HV closed I 14 VP at speed

Bollrath-FPS

OUT (red LED)					
O 02	HP on				
O 03	VP on				
O 06	open VV open BV				
O 07					
O 09	open HV				
O 11	GP < 0.1mbar				
O 12	GH < 1mbar				

IN	(green LED)		OUT (red LED)		
01	HP ok.		O 02	HP on	
02	HP 80%		O 03	VP on	
03	VP run		O 06	open VV	
04	VV open		O 07	open BV	
05	VV closed		O 09	open HV	
06	BV open		O 11	GP < 0.1mbar	
07	BV closed		O 12	GH < 1mbar	

UV, HV) without well-instructed staff and reading carefully the documentations of Mogli.

## 3. **Errors**

You can find the full version of how to fix an error in the documentations. The FPS shows errors on the display as textmessages successively.

- 1. FPS shows wrong display text  $\rightarrow$  load FPS-program "Mogli\_v2.fps" from a computer to FPS.
- 2. VP ERROR  $\rightarrow$  VP not at speed after 30s. Check wiring, let VP run separately (ext. power)
- 3. HP ERROR → No feedback HP ok. After 30s. Check wiring and TCU.
- 4. START TIME ERROR  $\rightarrow$  GP > 0.1mbar after 10min. Check Pirani Gauge and vacuum-connections up to HV.
- 5. RECOVERY TIME ERROR  $\rightarrow$  GP > 0.1mbar after 1h. when HV open. Recipient Volume could be to big. Make sure FV and FVHP are closed. Check GP and GH.
- 6. INGRESS OF AIR  $\rightarrow$  GH > 1mbar when HV has been open. Leak in the vacuumsystem!
- 7. GAUGE ERROR GP/GH → wrong input-voltage from dual gauge. Check wiring and Gauges.
- 8. COMPRESSED AIR ERROR → Valves don't react. Check high-pressure connections.

If you fixed an error press ERROR RESET (F5). If the problem is solved the error message doesn't appear anymore.

