

## ***Gas System in SX5***

Normal operating procedure Operating Procedure Purging will be done by Andre Lyonnet 160811. If needed see Appendix 'B'.

The Gas control system is situated in the most Southern corner of SX5 ( building 3585 )  
The supply bottles and evacuation pump are outside and the control and safety system are inside.

### ***The Supply Bottles.***



Nominally these bottles are under the control of GDS Tel 160845 or 163782 Fabrice .  
All requests for connections should go through these people. There is a restriction on the consumption of R134a that is recorded by Christoph.  
Access to the isobutene hut is restricted to the above people or the fire service in the event of an emergency.

Consult the log for indications of previous malfunction and its non repair !

***All start-ups and stops, operations and strange (un)explained occurrences MUST be written in the Log , so as to facilitate the future running of the installation.***

*Inside the building*

The Gas mix rack is at the far end # 153 , named 'CMS-RPC'.

The gas control is on the left

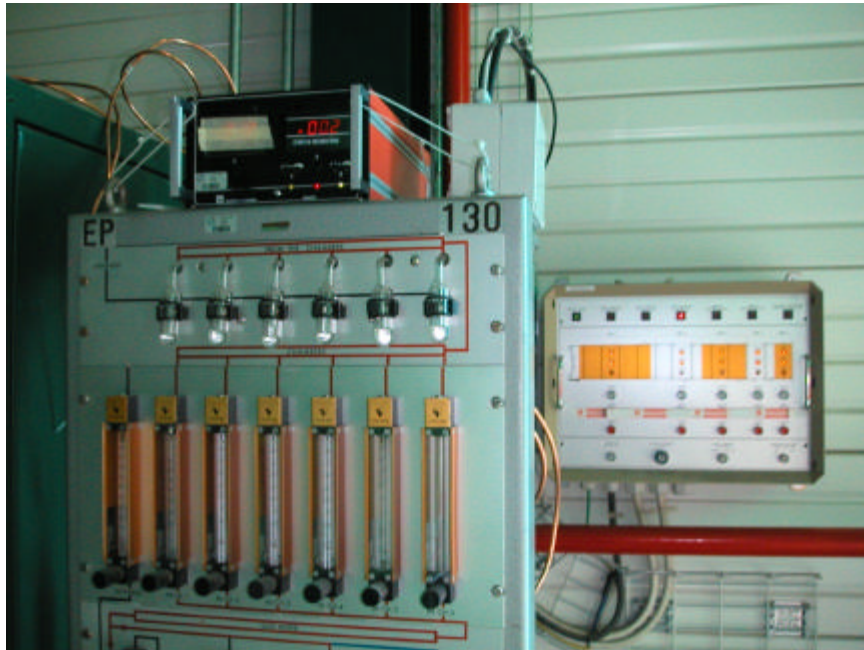
The gas distribution panel is on the end wall. The isobutene is situated behind Rack #153

See Appendic 'A'

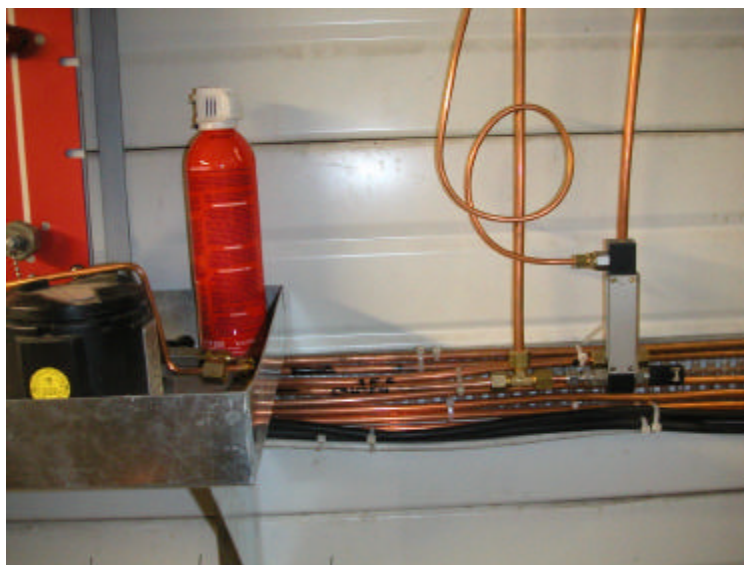


## BINOS

The 'Bonis' is situated on the Rack #130. If the Freon R134a has been left on then it must read zero. On the RH display. As shown



The flow control to the 'Binis' is controlled thru' the Analogue Flow meter control situated on the wall at the the mixer rack on the RHS of the Iso-Butane distribution panel.



## ***Gas Distribution***

Proceed by checking that the manometers on the Gas distribution panel are as follows

R134a (C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> )	2-5bar
SF <sub>6</sub>	2-5 bar
Isobutane	1-2Bar

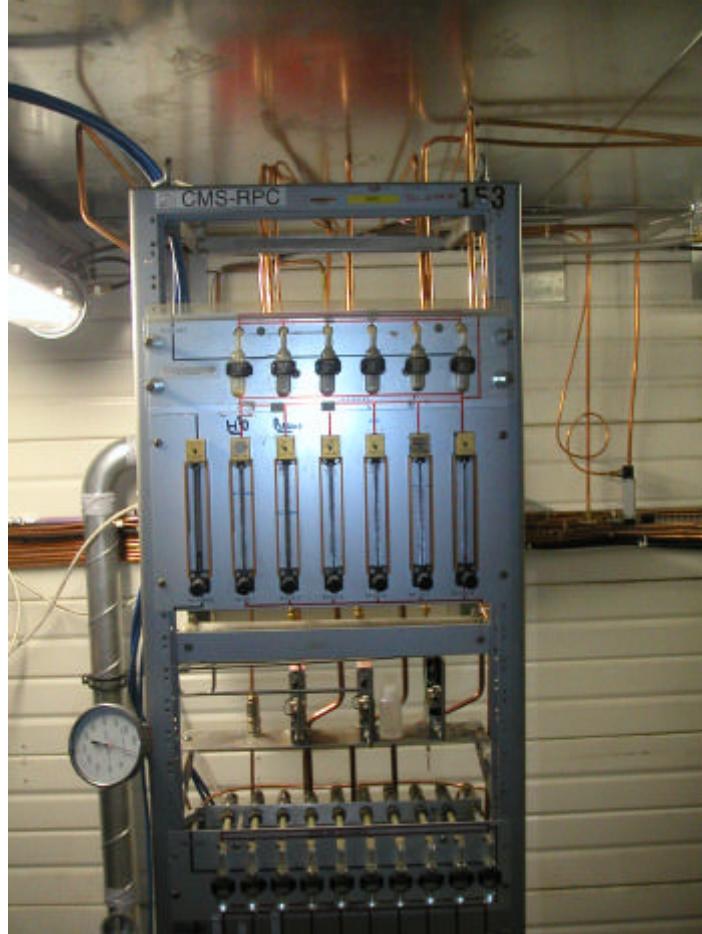
In the latter case check to see that the gas detection head is in place as shown in Appendix 'A'

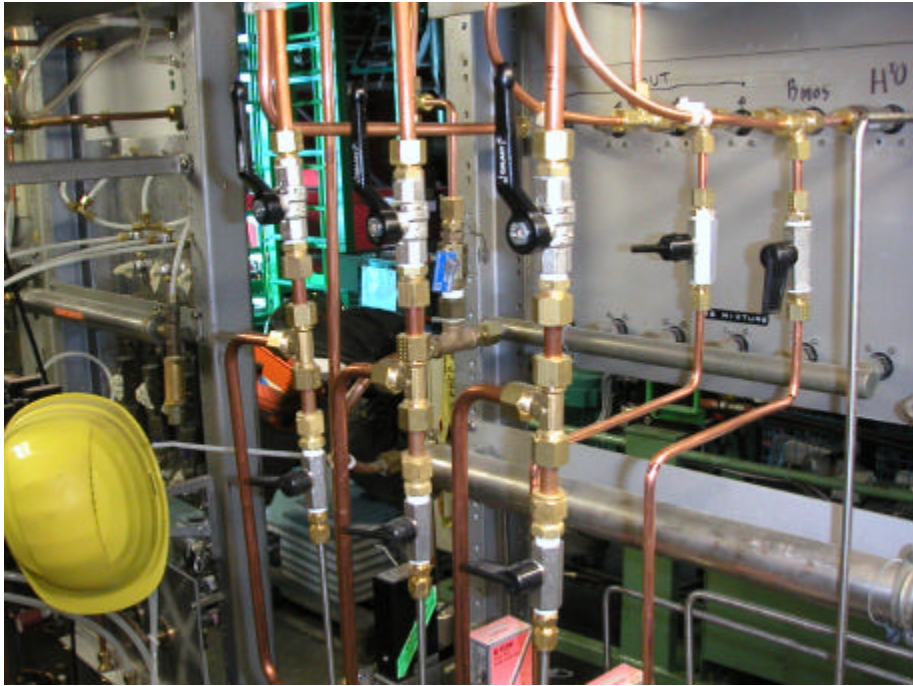
Check to see that the ventilation is turned on by putting your hand under the edge of the exhaust extraction pipe. If this is not functioning do not turn the gas on at the Gas distribution panel. Also check to see that the flammable gas detector head is in place as shown at the base of the mixing rack.



## High Flow Operation

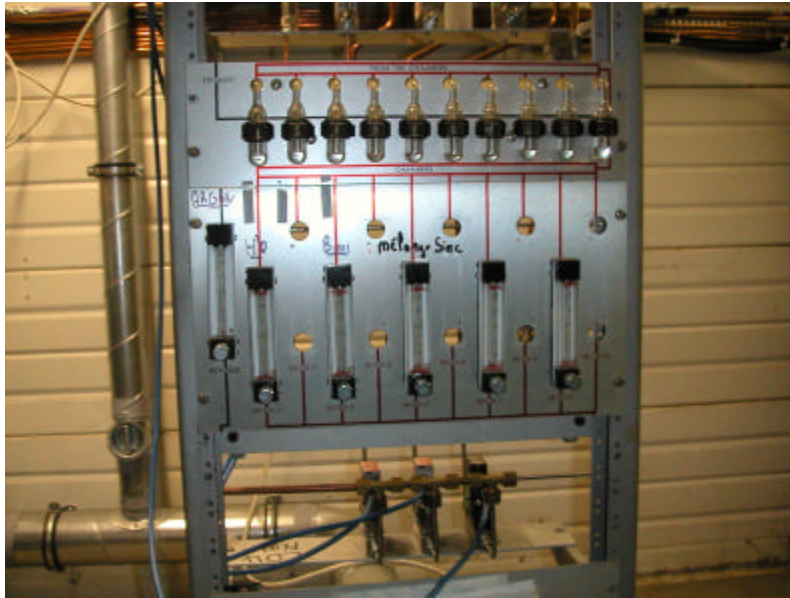
This is contained in the top Half of the Rack #153





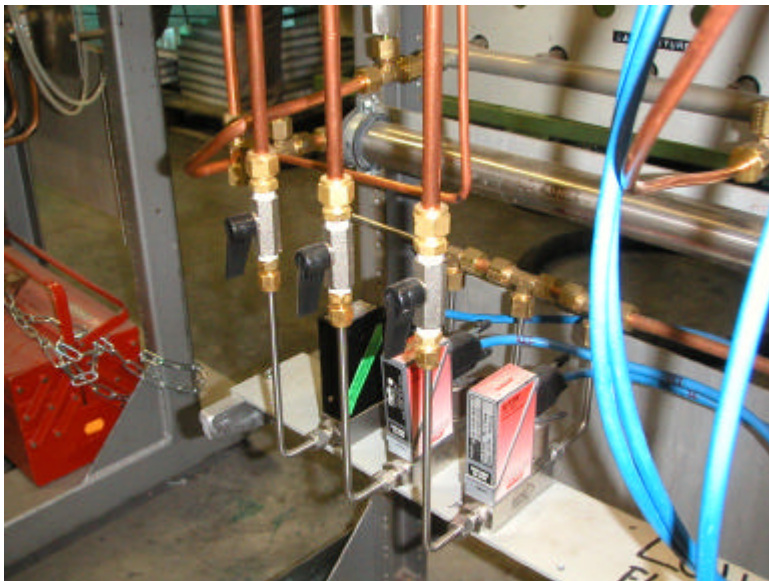
## Low Flow Operation.

This is contained in the lower half of the Rack #153.



Check to see that the blue cables are mounted on the Mass Flow Controllers (MFC's)

Go to the rear of the Rack #153 and turn on the 3 valves as shown below.



Check to see that the valves 123 are turned off and that are turned on as shown . Turn off the flow metre supplying pure freon to the Binos.



Check to see that the Gas control is powered up. The displays should indicate some value if only 0.00. Select the desired values of flow after calculating in 3.5% of isobutene. Higher values are not permitted . The 'Binos has been set to stop flammable values of the gas mixture being produced by the mixer , both in case of error or failture of components.

Turn on the valves for the 3 gases desired

R134a`	LPxxx
SF6	LPxxx
Iso Buitane	LP137

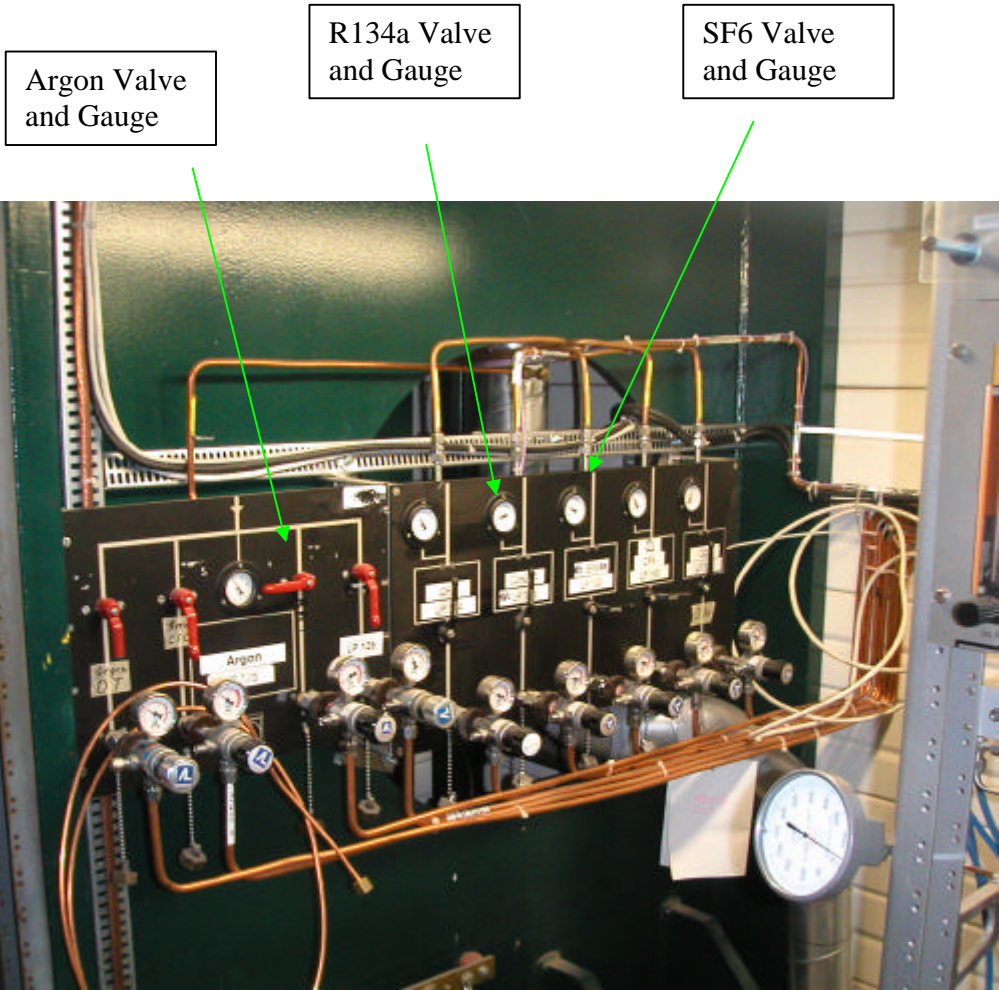
These are the set points AND NOT the flow trough the mass flow controllers.



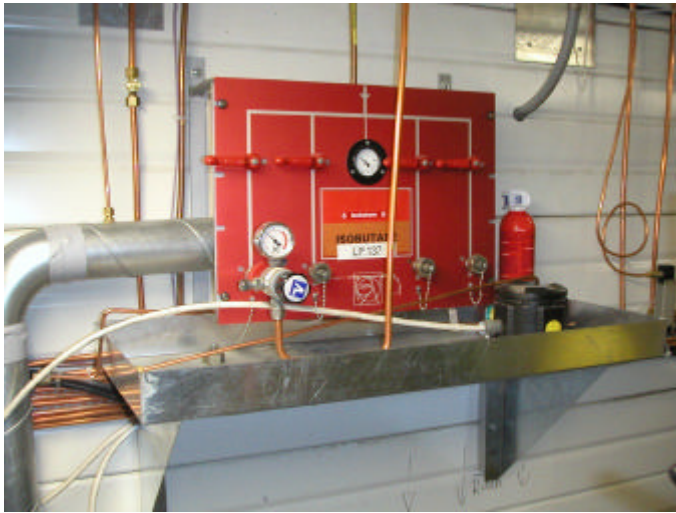


Appendix 'A'

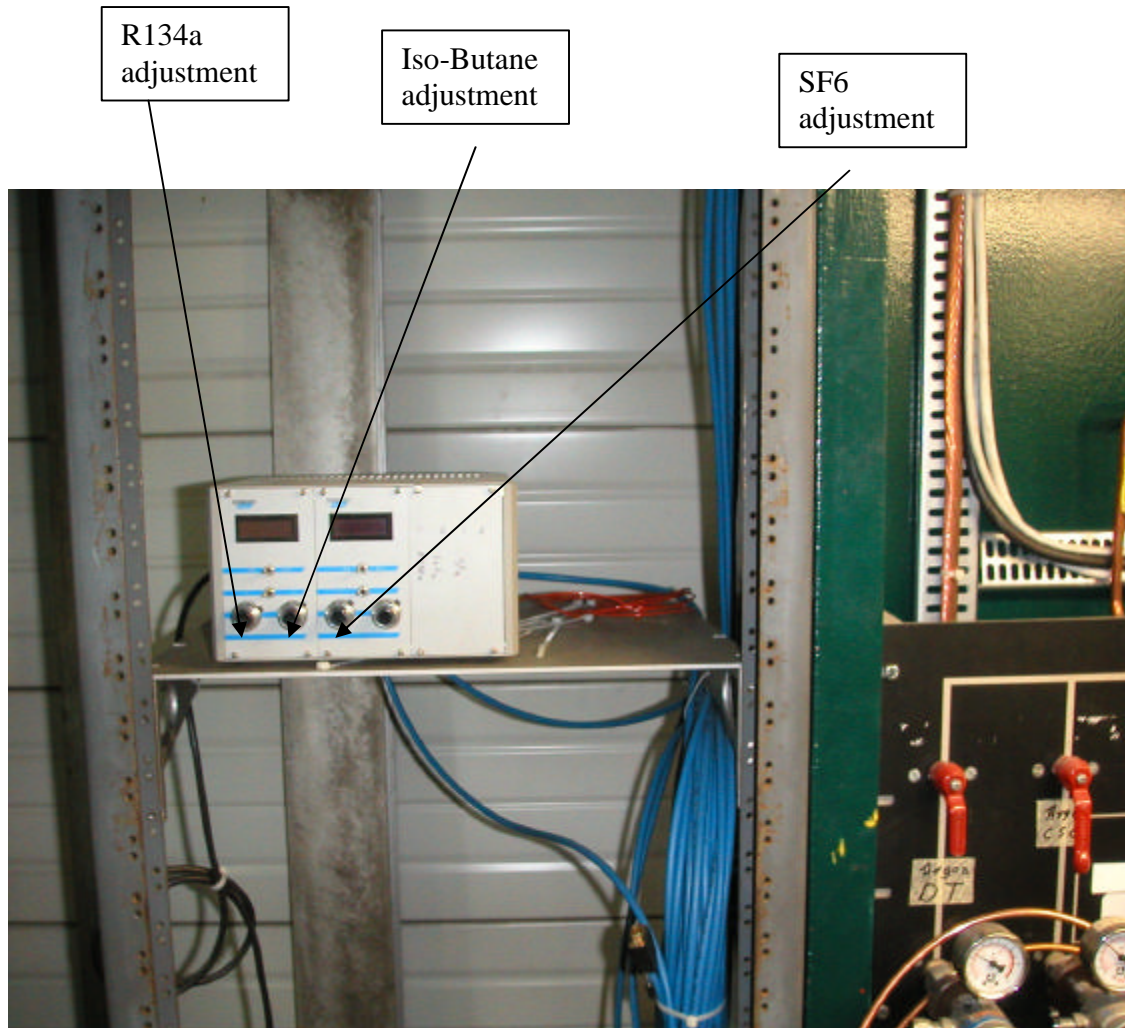
The Gas Distribution panel



The Isobutane Disribution PPanel.



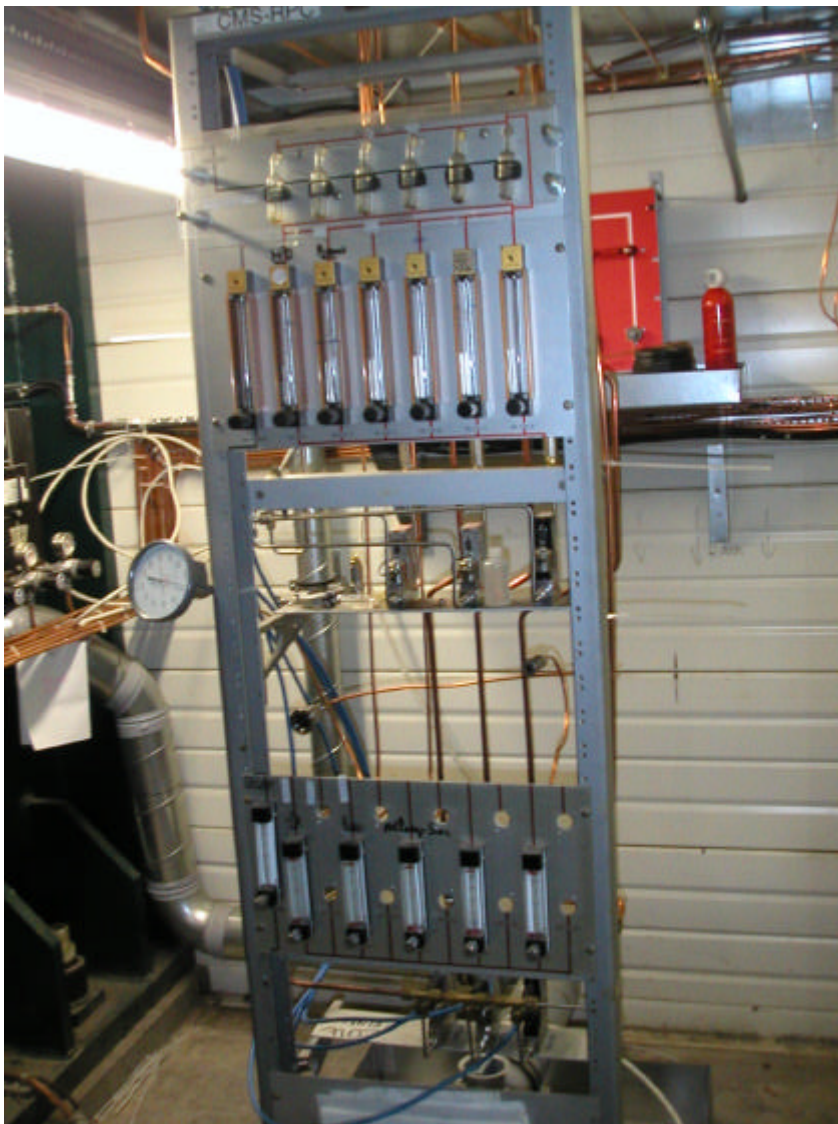
The Gas Control.



On – Off switch is at rear of box.

To read the set point of the adjustment switch the BOTTOM switch to the side you wish to read. DO NOT put the top switch in the remote position.

The Gas Mixing Rack ( # 153 )



## Appendix 'B'

Purging the Gas system.