

Yield Engineering Yes III Vapor Prime Oven

HMDS receipe

step	command	time	relays	description
1	M	0:02:00	0,2	initial pump down
2	B>30		0,2	check for vacuum>?
3	M	0:03:00	0,1	backfilll with N2
4	A>30		0,1	check pressure
5	M	0:02:00	0,2	2nd pump down
6	B>30		0,2	check for vacuum>?
7	M	0:10:00	0,1	backfilll with N2 to ATM
8	A>30		0,1	verify pressure
9	M	0:03:00	0,2	Final pump down
10	D>30		0,2	check vacuum
11	L=150		0,3	start HMDS prime
12	S	0:02:00	0,3	HMDS vapor time in seconds
13	D>30		0,3	verify vacuum
14	L>12		0,3	loop
15	M	0:00:30	0,2	Residual vapor pump out
16	M	0:01:30	0,1	N2 backfill
17	M	0:01:00	0,2	pump out
18	M	0:02:00	0,1	N2 backfill
19	M	0:02:00	0,2	pump out
20	M	0:04:30	0,1	final purge
21	M	0:00:01	0,1,2	vent pump line
22	M	0:00:05	1,2	turn off pump, vent pump line to ATM pressure
23	M	0:00:20	1	Ensure ATM pressure in chamber
24	Goto 00			
Error section				
30	M	0:00:02	0,1,2	
31	M	0:02:00	1,2	
32	S	0:00:10	1	
33	GoTo 30			

Symbol definition

M	time in minutes
S	time in seconds
A	pressure greater than setpoint 1
B	pressure less than setpoint1
C	pressure greater than setpoint 2
D	pressure less than setpoint 2
>	goto if not true
L	loop

Data

Setpoint 1 Vacuum gauge set to 410torr

Setpoint 2 Vacuum gauge set to 20 Torr

Note: Times are adjusted for N2 pressure of 11psi