全自动临界点干燥仪 Leica EM CPD300 操作手册

一、 软件介绍

屏幕初始化



Touch screen to start

Version: 01.01.15

主屏

1	lica 11:	10 Set 14	15 Pro	ogram Name Pro	ogram 1	
C	PD300 AUTO	Holder	Cool	8	_15 °C	
2	Programs	Filler 0%	CO ₂ IN	fast	9	
	T c 17 °C	3 10	Exchange	5	0/14	
	Pc 1.0 bar	0	Heat	slow	35 °C	11
4	Process time 1:20:40	0	Gas OUT	slow 100%	12	
5	Settings	6	13 Start			

暗灰色按钮已激活,浅灰色按钮未激活。

- 1. 仪器型号为 CPD300
- 2. 点击进入程序设置面板
- 3. 显示填充板和包埋槽的使用情况
- 4. 显示温度、压力及程序完成剩余时间情况
- 5. 点击设置仪器常用参数
- 6. 照明开关
- 7. 显示程序运行情况

- 8. 预设样品室温度
- 9. CO2注入速度
- 10.置换速度和预设置换循环的完成情况
- 11.设定临界点温度和达到临界点温度的速度
- 12.放气的速度
- 13.程序开始运行
- 14.时间设置功能
- 15.正在使用程序的名称

程序设置面板



- 1. 点击可更改程序名称
- 2. 激活的程序为绿色
- 3. 涡旋开关和速度设置
- 4. 选择全自动模式, 若不勾选则为手动模式
- 5. 设置 CO2 注入速度
- 6. 设置填充板和样品架的选用情况
- 7. 设置 CO2 注入后到开始置换的间隔时间
- 8. 设置置换速度

- 9. 设置置换次数
- 10.设置加热到临界点温度的速度
- 11.设置放气速度
- 12.已存程序上下移动按钮
- 13.确定激活已选程序

二、 操作步骤

运用扫描电镜常规制样方法,样品经过固定和系列脱水后,接下来就可以用全自动临界点干燥仪干燥样品了。

- 1、打开全自动临界点干燥仪电源。
- 2、根据样品大小,选择适当的样品架和填充板。将填充板和装有样品的样品架
 转移至样品腔。注意:转移过程中保持样品完全浸在纯酒精或丙酮中。
 样品架:



填充板:



样品腔:



3、点击 Progress, 进入程序设置界面。

Leica 13 2	27 Set		Prog	ram Name Pro g	Name Pr ogram 1			
			Cool		15 °C			
Programs	Holder Filler 0%	0	CO ₂ IN	slow				
T c 26 °C		0	Exchange	5	0/16			
P c 1.0 bar		0	Heat	med.	35 °C			
Process time 1:16:03		0	Gas OUT	fast	_			
Settings		[Start					

4、点击 Progress Name,修改程序名。



5、根据样品需要,依次设置涡轮是否旋转、是否全自动、CO2注入速度、填充板和样品架的使用情况、CO2注入后到开始置换的间隔时间、置换速度、置换次数、加热速度和放气速度,点击OK确定。

Jeica			Test				Progr	ams	feica			Test			Brog	rame	feica				Test				Prog	rame
	5	CO, IN		Exch	ange	Gas OU	T	anno			CO. IN		Exchange	Gas O	UT	Tams				CO. IN		Exch	nange	Gas OL	T	ams
Nr. J	Auto Spee	Fillers	Delay	Speed	Cycles	Heat	Speed		Nr. J	Auto Speed	Fillers	Delay	Speed Cycle	s Heat	Speed		Nr.	Auto	Speed	Fillers	Delay	Speed	Cycles	Heat	Speed	
1	√ slow		120s	5	16	med.	fast			50%		120s	5 16	med.	fast		1 50%	1	slow		120s	5	16	med.	fast	
2	√ fast		120s	5	12	fast	slow 60%		200	√ fast		120s	5 12	fast	slow 50%		20	1	1		120s	5	12	fast	slow	
3 📥	√ fast		120s	5	12	fast	slow 20%		3 0	√ fast		120s	5 12	fast	slow 20%		300	1	fint		120s	5	12	fast	slow 20%	
4 ॐ	slow			5		med.	fast		4 50%	slow			5	med.	fast		4 59%		slow			5		med.	fast	
5 59%	slow			5		med.	fast		5 5%	slow			5	med.	fast		5 🎊		slow			5		med.	fast	
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Leica																	0.				Teet					
			Test	t		-	Progr	ams	Leica	_		Tes	1	_	Prog	rams	Leica	2			Test			_	Prog	rams
Nr.	Auto Spee	CO ₂ IN	i Delay	Excl	ange	Gas OL Heat	Progr	ams	<u>Leica</u>		Holder	Tes	Evohanga 0 ►	000.0	Prog	Irams	Leica Nr.	Auto	. 0	Holder	Test	t Evol 0	•	200 Q	Prog	rams
Nr.	Auto Spee	CO ₂ IN d Filler	Delay 120s	Exct Speed 5	Cycles	Gas OL Heat med.	Progr	ams	Nr. 1	Auto	Holder	Tes 1/1 1/2		Hold Filler	Prog	irams	Nr.	Auto		Holder Holder	Test	Evel 0	•	Holde Filler 10	Prog	rams
Nr. 1 59% 2 🔶	Auto Spee	CO ₂ IN d Filler	120s	Exct Speed 5 5	Cycles	Gas OL Heat med. fast	Progr Speed fast	ams	Leica Nr. 1 1 55% 2 6	Auto	Holder Holder	Tes 1/1 1/2 1/3		Hold	Prog	arams	Nr. 1 58% 2 J	Auto		Holder Holder Holder	Test	0 1 0	•	Holde Filler 10	Prog	rams
Nr. 1 555 2 00 3 00	Auto Spee	CO, IN d Filler	120s 120s	Exch Speed 5 5 5	Cycles 16 12 12	Gas OL Heat med. fast fast	Progr Speed fast slow slow	ams	Nr. 1 2 3	Auto	Holder Holder Holder Holder	Tes 1/1 1/2 1/3 1/6		Hold	Prog	jrams	Nr. 1 59% 2 J	Auto		Holder Holder Holder Holder	Test 1/1 1/2 1/3 1/6	1 0 1 0 0	• •	Holde Filler 10	Prog	rams
Nr. 1 555 2 0 3 0 4 555	Auto Spee ✓ fas ¹ ✓ fas ¹ ✓ fas ¹ ✓ slow	CO ₂ IN d Filler	120s 120s 120s	Exct Speed 5 5 5 5 5 5	Cycles 16 12 12	Gas OL Heat med. fast fast med.	Progr Speed fast slow slow fast	rams	Nr. 1 55% 2 cb 3 cb 4 55%	Auto	Holder Holder Holder Holder Filler	Tes 1/1 1/2 1/3 1/6 1/3	Contraction	Hold	Prog	grams	Nr. 1 50% 2 cb 3 cb 4 50%	Auto		Holder Holder Holder Holder Filler	Tesi 1/1 1/2 1/3 1/6 1/3	E 201 0 1 0 0		Holde Filler 10	Prog	rams
Nr. 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Auto Spee fast fast fast fast slov	CO ₂ IN	120s 120s	Exct Speed 5 5 5 5 5 5 5 5	Cycles 16 12 12	Gas OU Heat med. fast fast med. med.	Progr Speed fast slow slow fast fast	ams	Nr. 1 1 55 4 55 5 555	Auto	Holder Holder Holder Holder Filler Filler	Tes 1/1 1/2 1/3 1/6 1/3 1/6		Hold Filler	Prog	jrams	Nr. 1 500 3 J 5 500	Auto		Holder Holder Holder Holder Filler	Test 1/1 1/2 1/3 1/6 1/3 1/6	E	$\begin{array}{c} \bullet \\ \bullet $	Holde Filler 10	Prog	rams



6、点击 Star 开始运行程序,打开 CO2 罐阀门。

Leica 13:	31 Set			Test Pro	gram 1
CPD300 AUTO	Holder		Cool		15 °C
Programs	Filler 100%	0	CO ₂ IN	fast	_
Tc 26 °C		0	Exchange	7	0/12
P c 1.0 bar		0	Heat	fast	35 °C
Process time 1:08:39		0	Gas OUT	slow 75%	
Settings			Start		

7、程序结束后取出样品,关闭 CO2 罐阀门,盖上盖子,关闭全自动临界点干燥

仪电源。