

Vario MACRO 操作说明书- CHN 模式升级到 CHNS 模式

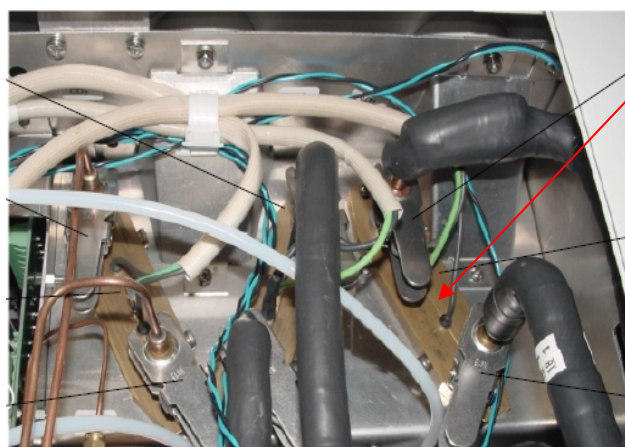
8.7.1 从 CHN 模式升级到 CHNS 模式 (order no. 11.45-5203).

8.7.1.1 初始化操作

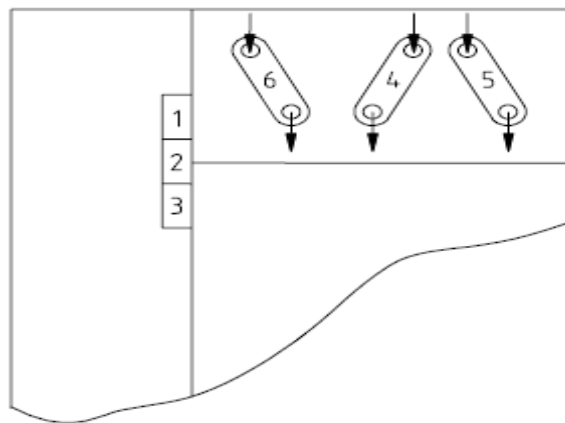
- 设定加热炉的温度到 0°C [Options >Parameter] ,等待加热炉冷却到 30°C 退出软件，关闭仪器和载气
- 打开仪器的左箱盖



- 去掉 SO2 柱的盖子，插入 SO2 柱

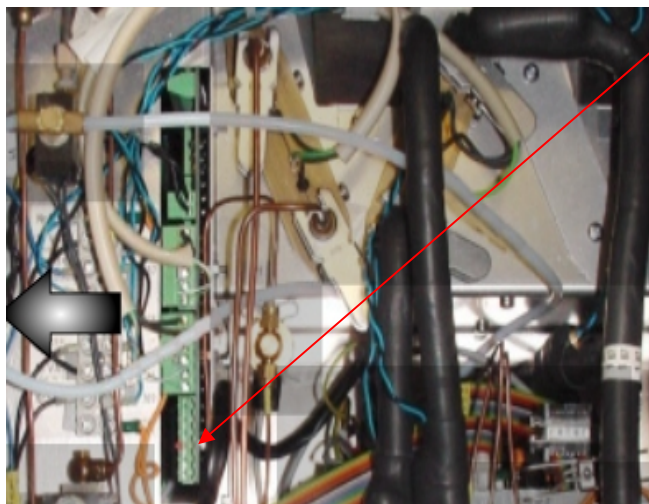


吸附柱的分布图

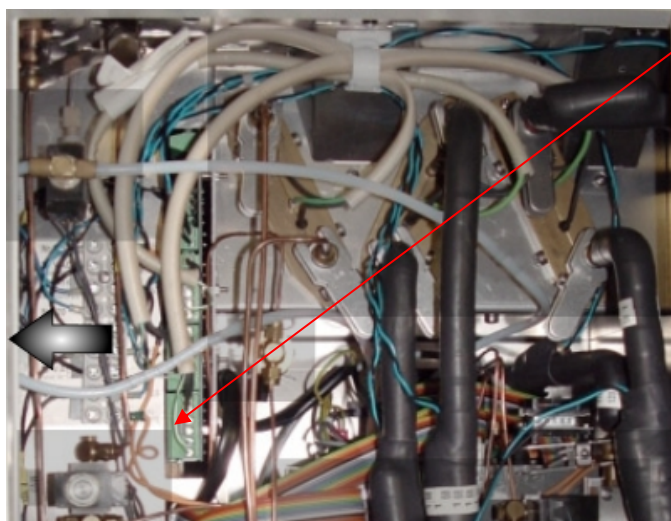


No.5 SO₂ 柱
No.4 H₂O 柱
No.6 CO₂ 柱
No.3 SO₂ 柱连接电缆插座

- Remove the green blind plug from slot 3 and plug in the connector for the SO₂ column (see illustration 9.3) instead.

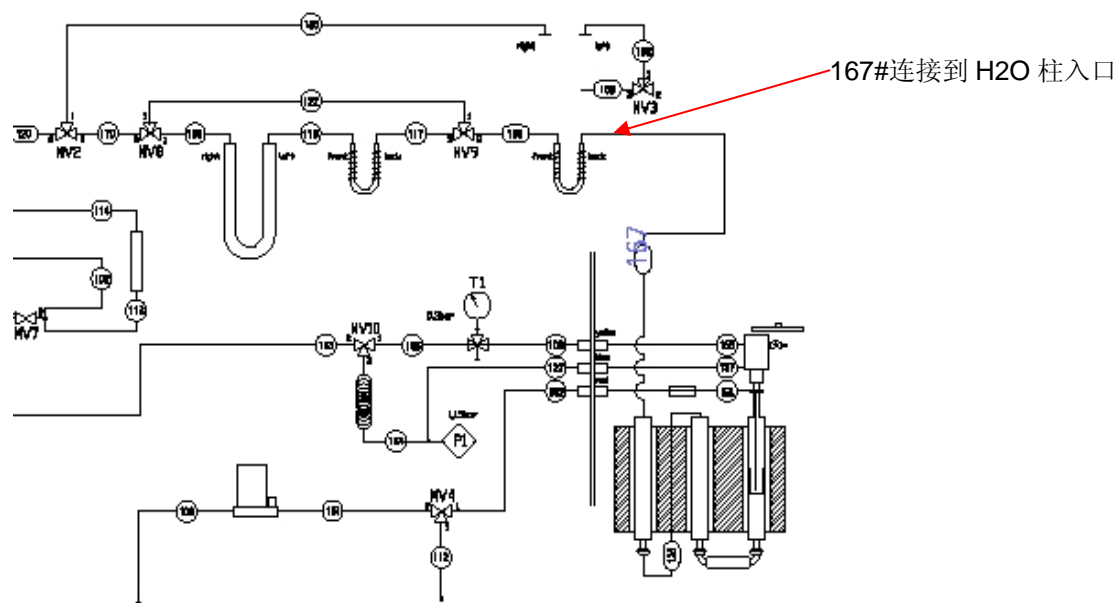


CHN 模式：无 SO₂ 柱连接电缆

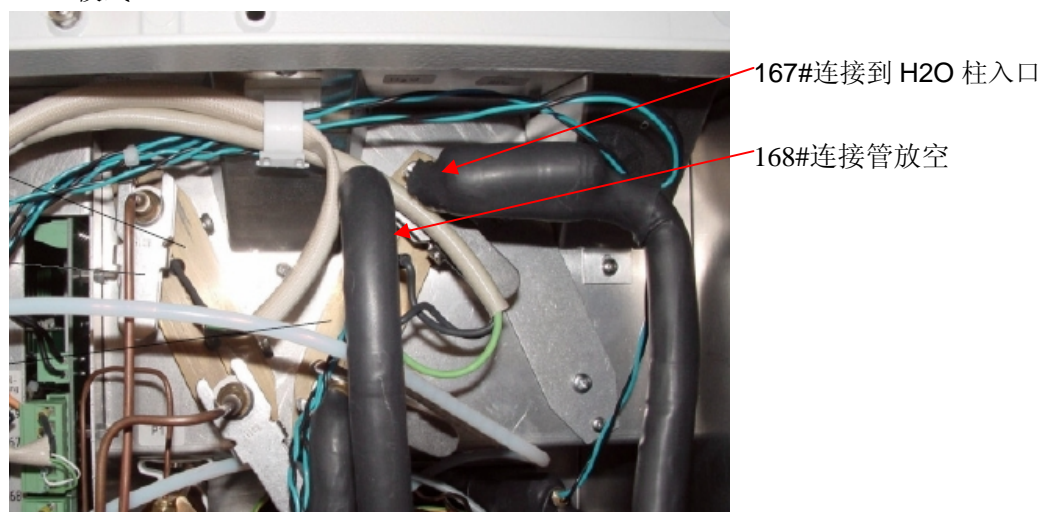


CHNS 模式：插入 SO₂ 柱连接电缆

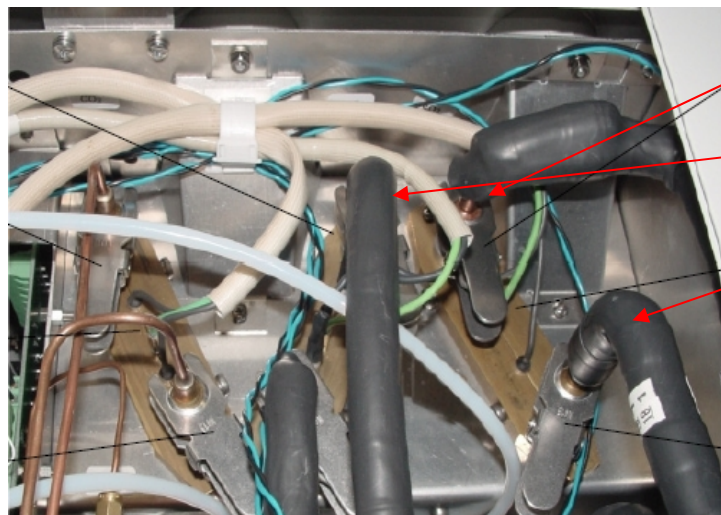
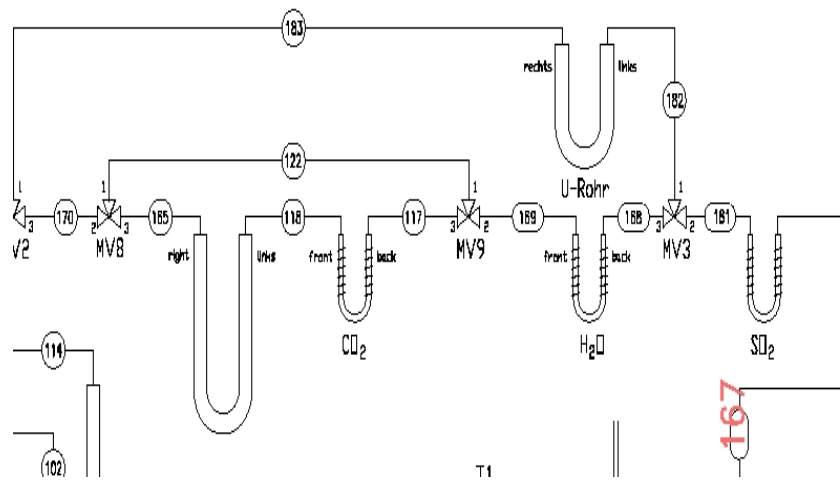
• CHNS 吸附柱连接图
CHN 模式吸附柱的连接



CHN 模式

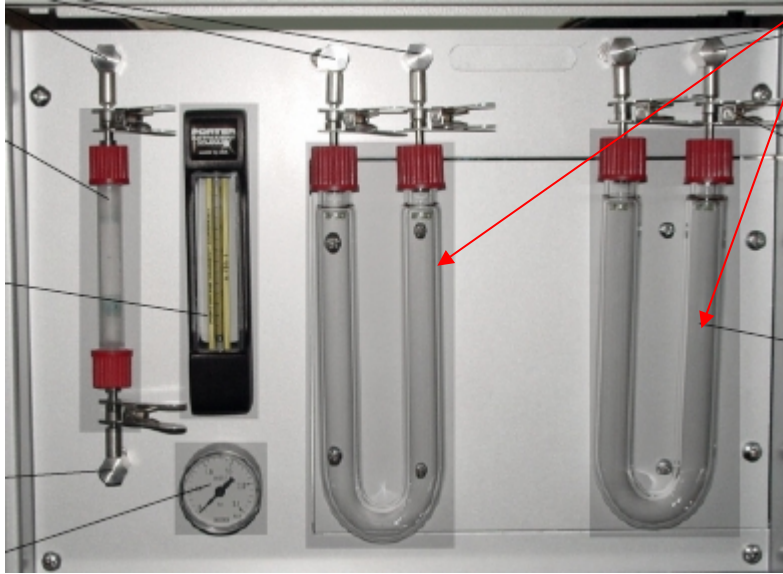


CHNS 模式：167#管连接到 SO₂ 柱的入口，168#连接到 H₂O 的入口



181# 管从 MV3 电磁阀连接到 SO₂ 柱的出口

- 打开仪器左侧前面板，填充干燥剂（带指示剂的 P_2O_5 ）于 2 根 U 形管



- 打开仪器右侧面板，CHNS 连接示意图

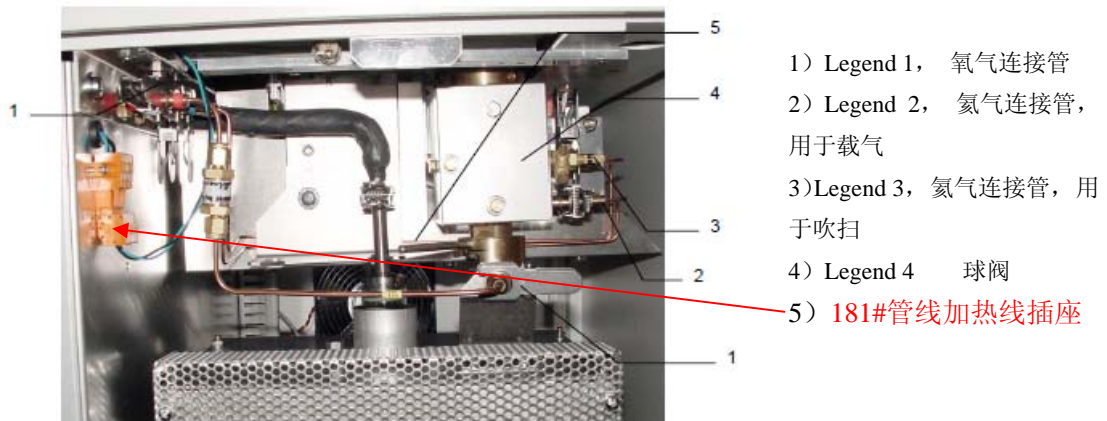
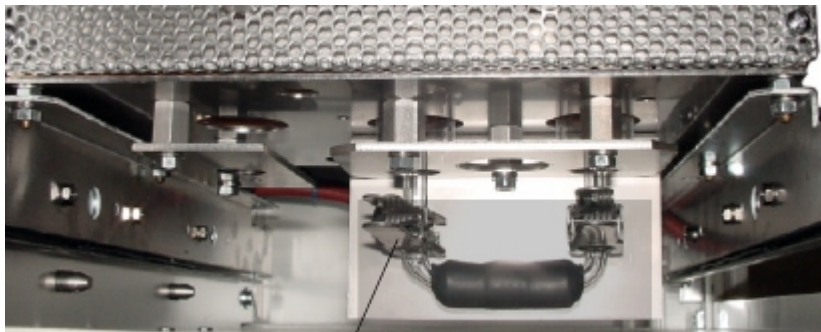


Illustration 8.18: Furnace chamber vario MACRO, CHNS mode

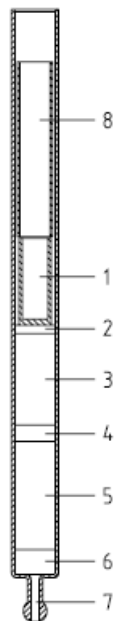
Legend:	
1	ground-in clamps O_2 -supply
2	He supply line (carrier gas)
3	He supply (flush gas)
4	ball valve
5	handle for bayonet catch



• CHNS 燃烧管和还原管的填充：

燃烧管的填充：（石英） 设定温度 1150℃

Legend 1, 灰分坩埚	order no.11.02-1036
Legend 2, 刚玉球 3 mm	order no.50 008 467
Legend 3, 颗粒状氧化钨 55mm, 60 g	order no.11.02-0008
Legend 4, 石英棉 10 mm 约 0.2g	order no.03 679 908
Legend 5, 支撑管	order no. 11.00-1150/4
Legend 6, 石英棉 10 mm	order no.03 679 908



Legend		
	ident.-no.	
1	11.02-1036	ash crucible
2	50 008 467	corundum balls 3 mm \cong 2 g
3	11.02-0008	WO ₃ granulate 55 mm \cong 60 g
4	03 679 908	quartz wool 10 mm \cong 0,2 g
5	11.00-1172/4	support tube 65 mm
6	03 679 908	quartz wool 15 mm \cong 0,2 g
7	11.00-1150/4	quartz combustion tube
8	11.00-1317/4	protective tube

Illustration 8.5: Combustion tube CHNS operation
Temperature setting 1150°C

有关还原管的填充 （石英） 设定温度 850℃

- Legend 2, 石英棉 5 mm

order no.03 679 908
- Legend 3, 刚玉球 55mm 大约 19g

order no.50 008 457
- Legend 4, 石英棉 5 mm ,

order no.03 679 908
- Legend 5, 线状铜, 4 层, 每层 50mm=60g ,各层之间用 5mm 石英棉隔开

线状铜 no.05 000 699
- Legend 6, 刚玉球 20mm 大约 7g
- Legend 7, 银丝 25 mm,14g,

order no. 22 131 365

Legend:		
↑	gas inlet	
	ident.-no.	
1	11.00-1150	reduction tube
2	03 679 908	quartz wool 5 mm
3	50 008 457	corundum balls 55 mm, approx. 19 g
4	03 679 908	quartz wool 5 mm
5	05 000 699	4 x copper à 50 mm = 60 g, separated each by 5 mm quartz wool
6	50 008 457	corundum balls 20 mm, approx. 7 g
7	22 131 365	silver wool, 25 mm, 14 g
8	03 654 627	o-ring, 20 x 2
9	11.01-1004/4	plug
10	05 000 353	quad-ring 7.65 x 1.78

Illustration 8.6:
Reduction tube CHNS operation
Temperature setting 850°C

