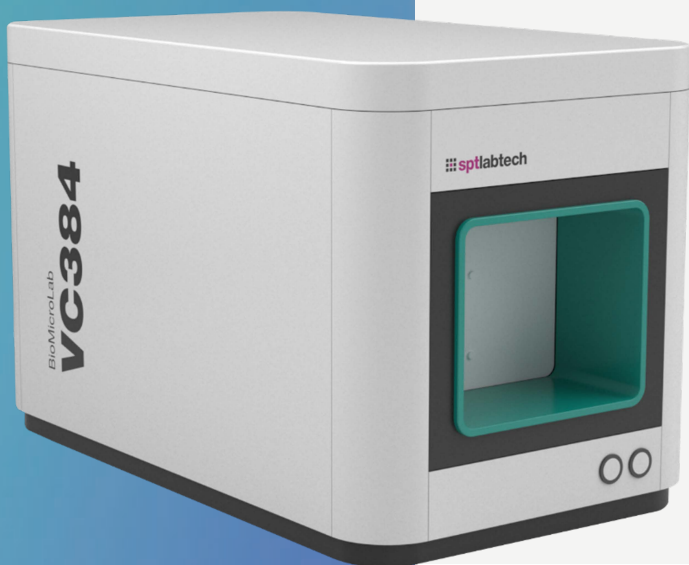




VolumeCheck

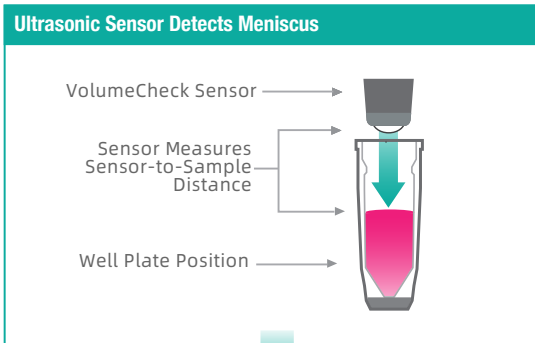
液体体积检测

SPT Labtech的VolumeCheck 100/384系列是一款专门用于样品快速体积检测的设备，最快仅需30秒即可完成多达384个样品的体积检测，兼容24,96和384孔板，包括各类0.5 mL~10 mL的冻存管和离心管，检测误差最低可至 $\pm 3 \mu\text{L}$ ，在速度与精度之间实现了良好的平衡。

检测原理

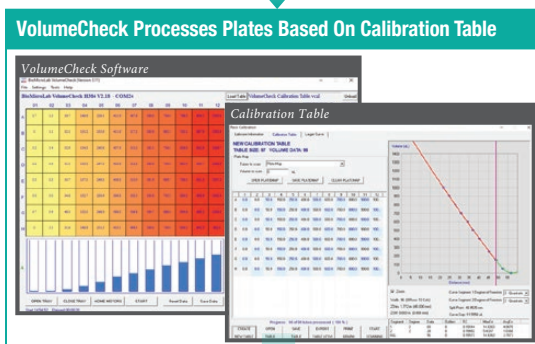
首先，声波探测：

VolumeCheck通过非接触式的声波探头发出声波，并检测声波从到达液面到返回的时间，从而换算得到声波探头到液面的高度。



其次，标准曲线建立：

通过检测声波到一系列不同体积样品的距离，VolumeCheck会自动生成样本体积-液面高度的标准曲线。



最后，样品检测和数据导出：

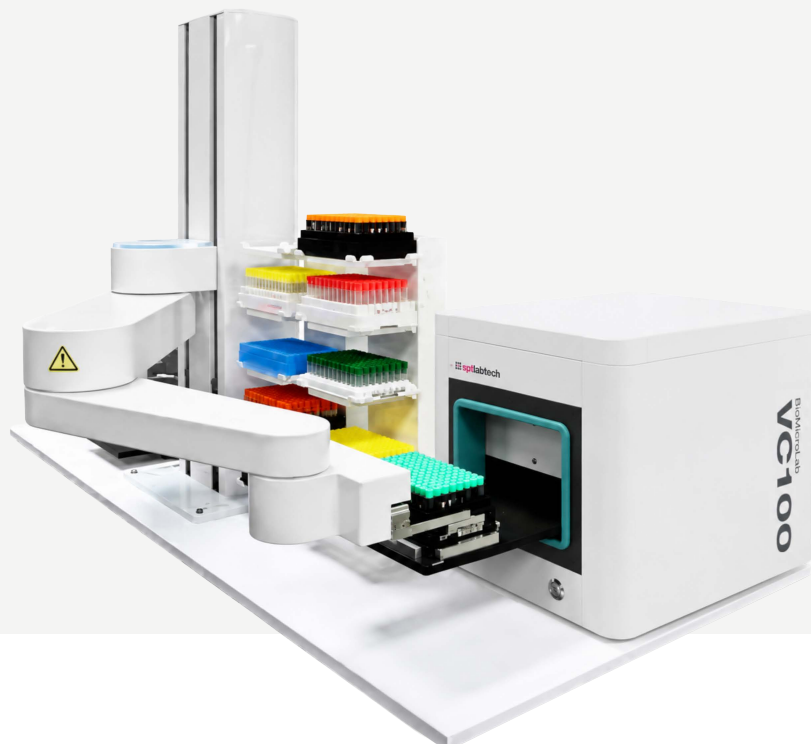
VolumeCheck软件会根据检测待测样品声波探头到其液面的高度，代入标准曲线，从而换算出待测样品的真实体积，并随之生成一份csv格式的样本体积检测报告。

Output Data File Created (.csv)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	2005 A01	1	1	1.8678	1.8678	1.8678	1.8678	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
2	2005 C01	1	1	0.3220	0.3220	0.3220	0.3220	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
3	2005 G01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
4	2005 H01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
5	2005 I01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
6	2005 J01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
7	2005 K01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
8	2005 L01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
9	2005 M01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
10	2005 N01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
11	2005 O01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
12	2005 P01	1	1	0	0	0	0	0	37.432	37.432	37.432	37.432	0	6/20/2014	954636
13	2005 A02	1	1	94.3433	94.3433	94.3433	94.3433	0	52.475	52.475	52.475	52.475	0	6/20/2014	954637
14	2005 B02	1	1	100.65	100.65	100.65	100.65	0	52.4	52.4	52.4	52.4	0	6/20/2014	954637
15	2005 C02	1	1	97.277	97.277	97.277	97.277	0	52.434	52.434	52.434	52.434	0	6/20/2014	954637
16	2005 D02	1	1	99.3227	99.3227	99.3227	99.3227	0	52.401	52.401	52.401	52.401	0	6/20/2014	954637
17	2005 E02	1	1	93.6563	93.6563	93.6563	93.6563	0	52.483	52.483	52.483	52.483	0	6/20/2014	954637
18	2005 F02	1	1	96.3769	96.3769	96.3769	96.3769	0	52.471	52.471	52.471	52.471	0	6/20/2014	954637
19	2005 G02	1	1	96.5151	96.5151	96.5151	96.5151	0	52.462	52.462	52.462	52.462	0	6/20/2014	954637
20	2005 H02	1	1	90.3098	90.3098	90.3098	90.3098	0	52.054	52.054	52.054	52.054	0	6/20/2014	954637
21	2005 I02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
22	2005 J02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
23	2005 K02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
24	2005 L02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
25	2005 M02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
26	2005 N02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
27	2005 O02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
28	2005 P02	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
29	2005 A03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
30	2005 B03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
31	2005 C03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
32	2005 D03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
33	2005 E03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
34	2005 F03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
35	2005 G03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
36	2005 H03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
37	2005 I03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
38	2005 J03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
39	2005 K03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
40	2005 L03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
41	2005 M03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
42	2005 N03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
43	2005 O03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637
44	2005 P03	1	1	100.257	100.257	100.257	100.257	0	48.129	48.129	48.129	48.129	0	6/20/2014	954637

BioMicroLab

VC100



VolumeCheck的应用场景

- 1. 收发货的质控：**用于IVD及商业化试剂的发货前终检，确保装量准确，规避标示值与实际含量不符引发的客户争议。
- 2. 样本库存管理：**用于化合物样本库的日常库存监控，精准记录每孔/每管残留体积，保障高通量筛选等关键实验的样本可用性。
- 3. 实验体系验证：**用于对体积精准度要求较高的生化和细胞实验，确保每步反应体系的加液量精准可控，保障实验结果的可靠性。
- 4. 移液设备校准：**用于半自动移液枪及自动化移液工作站的精准度验证与通道一致性验证，简化日常校准流程。

特点	VC100	VC384
兼容样本管类型	各类离心和冻存管以及12, 24, 48, 96 孔板	各类离心和冻存管以及12, 24, 48, 96 孔板
样本管兼容高度	≤ 92mm	≤ 92mm
检测速度	30秒/96孔板	30秒/96孔板 2.5 分钟/384 孔板 30秒/384孔板（快速模式）
3Q认证	IQ/OP/PQ	IQ/OP/PQ
尺寸	28 cm x 68 cm x 32 cm （W x D x H）	28 cm x 68 cm x 32 cm （W x D x H）