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MVE TECH TIPS



PrincetonCryo.com
Cryogenic Delivery and Storage Systems

MVE Tech Tips May 2006

DIFFERENCES IN HE VERSIONS

There has been some confusion about the different HE versions, these differences are outlined below.

HE – Operates at -150°C, stainless steel turntable with pie shaped divisions

HE+ – Same as HE except has more usable height and aluminum turntable

HE Gen 2 – Same as HE except the turntable has rectangular divisions

HE+ Gen 2 – Same as HE Gen2 except has more usable height

ETERNE – Operates at -190°C, aluminum turntable with pie shaped divisions

See the table on next page for more detailed information.

MVE SS Freezer Specifications

Specifications	810 Eterne	810 HE*	810 HE+	1520 Eterne	1520 HE	1520 HE+	1520 HE Gen 2	1520 HE Gen 2+	1830 Eterne	1830 HE	1830 HE+	1830 HE Gen 2
LN2 Holding Capacity												
Liquid Capacity	370	370	377	756	756	797	756	797	1,672	1,612	1672	1612
Vapor Capacity	52	52	52	133	133	133	113	113	296	260	296	260
Static Evaporation Rate	4.5 ltr/day	4.5 ltr/day	4.5 ltr/day	6 ltr/day	6 ltr/day	6 ltr/day	6 ltr/day	6 ltr/day	11	11	11	11
Container Dimensions												
Neck I.D.	12.5	12.5	12.5	17.5	17.5	17.5	17.5	17.5	25	25	25	25
OAH Basic	49	49	53.28	54.9	54.9	56.9	54.9	56.6	62.1	60.6	67.1	60.6
OAH Auto	56.56	56.56	60.81	60.8	60.8	62.8	60.8	62.5	70.2	68.7	75.2	68.7
Liftover Height	47.3	47.3	51.6	53.2	53.2	55.2	53.2	55.2	40.2	38.7	40.2	38.7
Outside Diameter	32	32	32	42	42	42	42	42	60	60	60	60
Useable Height	26.5	26.6	31.75	28.8	28.8	30.8	30.3	31.3	29.5	28.8	34.5	29.2
Internal Diameter	28.78	28.78	28.78	38.47	38.47	38.47	38.47	38.47	56	56	56	56
Weight Empty	350	400	378	1,367	1,386	1,386	1,367	1,389	1,485	1,500	1545	1500
Weight Full	1009	1059	1049	2,714	2,807	2,807	2,714	2,736	4463	4373	4803	4373
Storage-Working Capacity												
Racks LG - 100 cell	12	12	12	24	24	24	26	26	54	54	54	60
Racks SM - 25 cell	4	4	4	8	8	8	16	16	30	30	30	12
Racks	12-2	12-2	14-2	13-2	13-2	14-2	13-2	14-2	13-2	13-2	15-2	13-2
2ml vials in LG Racks	14,400	14,400	16,800	31,200	31,200	33,600	33,800	36,400	70,200	70,200	81,000	78,000
2ml vials in SM Racks	1,200	1,200	1,400	2,600	2,600	2,800	5,200	5,600	9,750	9,750	11,250	3,900
2ml vials Capacity	15,600	15,600	18,200	33,800	33,800	36,400	39,000	42,000	79,950	79,950	92,250	81,900
Temperature at Top	-190	-150	-150	-190	-150	-150	-150	-150	-190	-150	-150	-150
		*810HE Gen 2 has been renamed 810HE since the "Gen 1" 810HE has been obsoleted.										

CHANGES TO MVE 511 & MVE 1841

MVE 511 and MVE 1841 units have been modified and Generation 2 models are now available. The newer version is essentially a scaled up version of the 611/1411. They now use a back enclosure similar to the 611/1411 which is deeper than the old version necessitating a slight change to the lid and longer tubes from the lid to the hinges. The enclosure on the 511/1841 contains the same plumbing, battery backup, and gas bypass assemblies as the 611/1411. The inner and outer cylinders of the 511 have slightly shrunk in height and there were no changes 1841. The internal volume of both remains unchanged.

NEW MVE/CHART RETRIEVAL DEVICE

The Cryoclaw (P/N 11068705) retrieval device is no longer available and has been replaced by the Cool Reach model (P/N 13051579). Both models use the same cups so continue using part number 11854714 for ordering pairs of replacement cups.

STAND ALONE FREEZER SENSOR ASSEMBLY LENGTH

CHART/MVE Freezers

Models	Length	Dual Tube Sensor Assemble P/N	Three Tube Sensor Assembly P/N
MVE 1830	26"	11747450	11793341
MVE 810HE/1520HE	39"	11747468	11793350
MVE 1830HE	44"	11747476	11793368
MVE 1841	33"	11743580	
MVE 810/1370	8 _ "	11743571	
MVE 600/611/1400/1411/1211	33"	11513101	

SKID/CRATE IMPROVEMENTS

Effective immediately, all MVE freezers will be shipped in wooden crates fastened with screws on the front and top panels. The use of screws instead of staples will allow service technicians to remove the freezer without excess damage to wooden panels enabling greater opportunity for the end-user to reuse the skid/crate if necessary.

REFURBISHED BIOLOGICAL UNITS

SALE PRICES – NO OTHER DISCOUNTS APPLICABLE

ALUMINUM UNITS IN STOCK AS OF 5/12/06

WARRANTY – 1 YEAR VACUUM

Qty	P/N	Description	Price (\$)
8	11798273	Cryo Shipper XC Dewar (no C/C or protective carton)	Contact Bruce or Dino
1	11052674 R	RPL Cryo System 8	500.00
1	11015195 R	RPL Cryoshipper EX	1265.00
1	11082646 R	RPL XC 20	358.00
1	10829621 R	RPL SC 36/32	512.00
4	11837869 R	RPL ET 23	390.00
1	991809R	RPL LAB 30	415.00
1	11498684 R	RPL DOBLE 47/6	747.50
1	10756338 R	RPL LAB 20	363.00
4	11837869 R	RPL ET 23 JLM	390.00
1	11901162 R	RPL MILL II	384.50
1	991803R	RPL XC 43/28	602.50
4	991849R	RPL SC 11/7	378.00

NEW UNITS – SLOW MOVERS or OBSOLETE

WARRANTY- 5 YEAR VACUUM

Qty	P/N	Description	Price (\$)
3	11702745	SC 16/11 No Labels	610.96
1	9920829	TECH 35	1783.00
4	10979435	Cryo Shipper Mini	1742.00
10	11647432	Cryo Shipper w/o blocks or Shipping Container	1349.00
3	9918519	SC 16/11	1250.00
8	10531155	SC 2/1	599.00
4	12923591	EZ Shipper	1165.00
1	11534593	SC 3/3 No Labels	420.84

DATA LOGGER CORK/COVERS PARTS

Product	P/N
CryoMoover	11554383
Cryoshipper & XC	11371181
SC 4/2V	11554341
SC 4/3V	11554367
XC 20/3V	11554375

All of the above cork/covers have a detachable temperature probe (P/N 11878353) allowing the end user to adjust the length of the probe for placement in the sample area

Product		P/N
Data logger only + accessories without cork/cover		11554324
Accessories include:	Software	11878337
	Magnetic Key	11878345
	Connector cable 9F-9M	11804485

DATA LOGGER CALIBRATION

Logger calibration and battery replacement	\$300.00
Logger calibration only	\$200.00

If battery life is below 30% the technician will contact the customer. If the customer decides not to replace battery, the technician will not calibrate the logger since it must be recalibrated every time the battery is replaced.

We cannot warranty item if serial number is not included. Also, all parts must be returned with data loggers if credit is to be issued.

A 90 day warranty applies on all new and repaired loggers.

STAND ALONE PART NUMBER CHANGES

With the advent of the symbolic front panel required for Europe, we have been forced to create some new part numbers for panels and controllers used in the stand alone TEC-2000. The front panels are separate from the stand alone bill of materials so the list below is important in determining replacement parts.

Part description	P/N
New stand alone controller-no front panel included.	11800329
Numeric front panel LED display board	10713434
Symbolic front panel LED display board	11857659
Stand alone TEC-2000 complete-numeric panel	12997231
Stand alone TEC-2000 complete-symbolic panel	12997223

CUSTOMER/TECHNICAL INFO

For copies of past Tech Tips or for more information on maintaining nitrogen storage system please contact Technical Service:

USA: 800 482 2473

Europe : +44 1344 403100

Asia/Australia: +61 297 494333

