MVE Doble Series

The traditional method of export shipment and distribution for biological products such as semen and vaccines has involved wet shipment under liquid nitrogen. In recent years, many traditional shipping companies have either prohibited the shipment of liquid nitrogen, or placed hazardous material surcharges on shipments, making this method of transport uneconomical.

In many cases, vapor shippers have become the method of choice for cryogenic shipment. These shippers hold samples at cryogenic temperature and allow a wide variety of shipping methods to be employed, even export shipments. Regarding transport, this is a perfect solution, regarding distribution, it is not. Once at the destination, the samples have to be

transferred into a liquid storage tank. Meanwhile, the shipping container must be recovered by the shipping company, incurring an additional "return shipment".





Product Specifications

MODEL	Doble 11	Doble 20	
Number of Canisters	6	6	
No. of 1/2 cc Straws 10/cane	660	660	
PERFORMANCE			
Liquid Nitrogen Capacity I	10	18.5	
Vapor Capacity I	3.1	2.8	
Static Evaporation Rate I/day	0.17	0.1	
Normal Working Duration days for liquid	37	116	
Normal Working Duration days for vapor	17	21	
UNIT DIMENSIONS			
Neck Opening in (mm)	2.18 (55.4)	2.18 (55.4)	
Overall Height in (mm)	21.6 (549)	25.7 (652)	
Outside Diameter in (mm)	10.2 (260)	14.5 (368)	
Canister Height in (mm)	11 (279)	11 (279)	
Canister Diameter in (mm)	1.65 (41.9)	1.65 (42)	
Weight Empty Ib. (kg)	17 (7.7)	25.2 (12)	
Weight Charged vapor Ib. (kg)	22.5 (10.2)	30.2 (14)	
Weight Full liquid lb. (kg)	36 (16)	60 (27)	
Cabosil <i>Ib. (kg)</i>	1 (.45)	1 (.45)	

THREE Year Vacuum Warranty

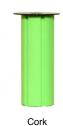
Conforms to MDD 93/42/EEC, the Medical Device Directive for the EU.











Measuring Stick

Roller Base

The Doble Series tanks are the first units to be designed for both vapor shipment and liquid storage. A unique absorbent layer in the base of the storage tanks enables them to be charged with nitrogen and employed as dry shippers with hold times of up to 30 days. Once at the final destination, the tanks can be filled with liquid and used for long term storage, therefore avoiding the need for return shipments.









Doble 28	Doble 34	Doble 47	Doble 47-10	
6	6	6	10	
2400	2100	4500	3500	
28	32	46	46	
8.4	6.7	8.4	9.6	
0.35	0.2	0.4	0.4	
50	100	74	72	
24	30	21	21	
3.81 (97)	3.5 (89)	5 (127)	5 (127)	
22 (559)	26.6 (676)	26.5 (673)	26.5 (673)	
18.2 (462)	18.2 (462)	20 (508)	20 (508)	
11 (279)	11 (279)	11 (279)	11 (279)	
3.09 (78)	2.81 (72)	4 (101.6)	2.81 (72)	
34 (16)	39.2 (18)	47 (21.3)	48 (21.8)	
49 (22)	51 (23)	63 (28.6)	64 (29)	
84 (38)	95 (43)	125 (57)	120 (54.5)	
3.5 (1.58)	2 (.9)	2.5 (1.2)	3.4 (1.6)	



Phase Separators



Gloves







Vapor Inserts

25 Vial Boxes