



1-800-553-6257

FLOAT QUALITY CHECKS, REGULAR TESTING AND SPECIFICATIONS

Weekly Quality Checks Ensure Consistency with Manufacturer and Industry Guidelines Factory quality procedures dictate testing of all raw materials and weekly random sampling of production floats to ensure the consistent of roto-molded shells for wall thickness and puncture resistance; and foam filled floats for water absorption characteristics within accepted industry specifications (see sample quality test document below). Test results are available on request.

Wall Thickness Test... Sampled floats are tested at 20 or more spots to ensure a nominal wall thickness of 0.150", 0.175", 0.180" and 0.375" depending on the size of the standard float selected. An average wall thickness and minimal wall thickness are measured. For 0.150" nominal wall floats the minimal acceptable wall thickness is 0.125"

ASTM Falling Dart Puncture Test... Sampled floats first are subjected to -20°F and then tested using a steel dart with a pointed leading edge that is dropped from ASTM specified height to determine the cracking and puncture resistance of the outer shell. Premier dock floats exceed the requirements of this test.

Hunt 7-Day Water Absorption Test... This industry standard test measures the water absorption of foam block formed by injecting raw EPS beads, under steam, into a float shell. The acceptable absorption level is 3 lbs/Cu.Ft or less.

Weekly Factory Quality Assurance Checks and Testing (example)						
Q 07000A	Data For Week	2/22/04	To	2/28/04	Drum Date Code 0204	
Hunt 7-Day Water Absorption Test						
Test Beg. Date	Test End Date	Date Steamed	Supplier	Lot Number	Drum Size	Result (lb/Cu.Ft.)
2/22/04	2/28/04	2/17/05	Huntsman	9776	4x8x20	2.95
ASTM Falling Dart Puncture Test						
Test Date	Supplier	Material	Drum Size	Wall Thickness	Ft-Lbs Test	Result
2/22/04	Exxon Mobil	625	24x48x12	0.18	90	Pass
Encasement Wall Thickness Test						
	Test Date	Drum Size	Average	Std. Deviation	Low	
	2/22/04	3x6x20	0.2100"	0.0152	0.179"	
	2/22/04	4x6x20	0.2004"	0.0141	0.172"	

Float Encasement Specifications: All units are manufactured from linear virgin polyethylene resin containing UV ray inhibitors and carbon black pigment to protect against ultra-violet deterioration. These resins offer toughness, rigidity, environmental stress crack resistance and low temperature impact performance; and compliance with the FDA title 21(will not contaminate the waterways and is recyclable). All units are rotationally molded for seamless, one piece construction, with a .150" nominal wall thickness standard on all encasements (see float size chart for variances) Custom wall thicknesses can be specified. All units are resistant to damage by animals, ice, bumps by watercraft and contact deterioration from petroleum products. They are suitable for outdoor use with respect to exposure to ultra-violet light, water exposure, immersion and fire in accordance with the Underwriters Laboratory's class 746C and flame class UL-94HB. The encasements also meet the Hunt 7-Day Water Absorption and ASTM Falling Dart puncture and thickness test. All units will exhibit the following ASTM test methods:

Properties	ASTM	Units	Typ. Units	Properties	ASTM	Units	Typ. Units
Density	D-1505	b/cc	0.937	Elongation at Break	D-638	%	600
Melt Index (190c//21.6kg)	D-1238	g/10 min.	5.00	Flexural Modulus (1% Secant)	D-790	psi	109,000
Melt Index (190c//21.6kg)	D-1238	q/10 min.	125	Low Temperature Impact	ARM-STD-40F	ft-lbs.	68
ESCR (100/gelpad, F-90)	D-1693(B)	Hrs.	1000	Brittleness temperature	D-746	0 deg. C	-90
Tensile Strength at yield, 2"/min.	D-638	psi	2750	Heat Distortion Temperature	D-648	0 deg. C	63

Float Drum Contents: All encasements are filled with virgin polystyrene (EPS) beads. The EPS beads are steamed together to provide less water absorption and solid core for structural strength. The EPS contents have a 0.9 to 1.2 lbs. per cubic foot density with water absorption not to exceed three pounds per cubic foot in accordance with the Hunt 7-Day Water Absorption Test. It will not sink or contaminate the water when punctured. The EPS contents conform to the ASTM C-578 and the Underwriters Laboratory standards. Regarding fire resistance; it passes the UL723, UL1975 and ASTM E84 tests. Below are other ASTM test results:

Properties	ASTM Test	Units	Value
Density	C-303	Min lb./ft3	0.90
Thermal Resistance @ 25° F (-3.9° C)	C-177 or	Min R for 1" Thickness	4.20
40° F (4.4° C)	C-518		4.00
75° F (23.9° C)	C-158		3.60
110° F (43.3° C)			3.25
Compressive resistance at Yield or 10% Deformation	D-1621	Min psi	10.0
Flexural Strength	C-203	Min psi	25.0
Water Vapor Permeability	E-96	Max perm-in	5.0
Water Absorption	C-272	& by Vol Max	4.0
Dimensional Stability		Max %	2.0
Oxygen Index	D-2863	Min %	24.0
Coefficient of Thermal Expansion	D-696	In/in/°F	0.000035
Flash Ignition Temperature	D-1929	°F	824
Auto-Ignition Temperature	D-1929	°F	896
BTU Content	NFPA 259	BTU/lb.	17,425