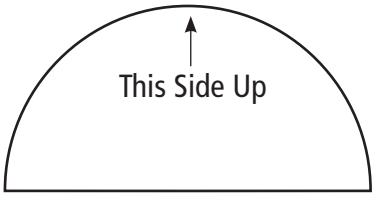
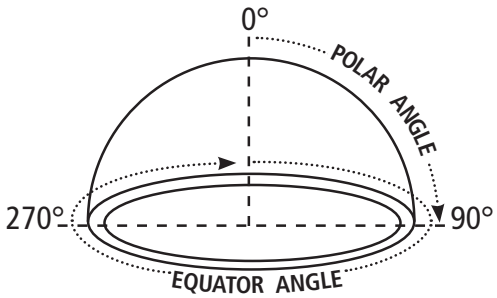
Drill Hole Instruction Sheet

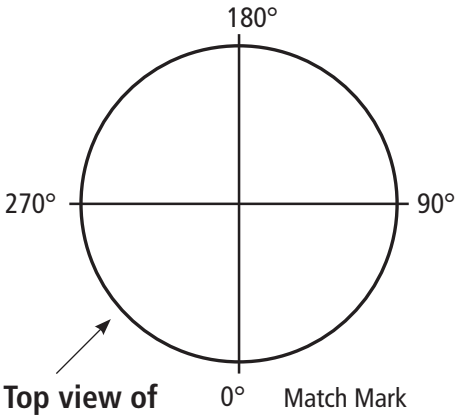
TELEDYNE BENTHOS
Everywhereyoulook™

When measuring for holes, orient hemispheres as shown.

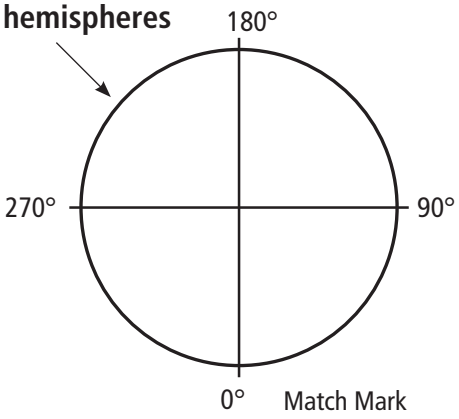




Measure along the Polar and Equator angles to determine the exact location of all holes to be drilled in each glass sphere. Record all necessary information in the grids below.



Top view of hemispheres



TOP HEMISPHERE

Hole Number	A	B	C	D	E	F	G	H
Equator Angle	0 deg							
Polar Angle	25 deg							
Hole Type	1							

BOTTOM HEMISPHERE

Hole Number	1	2	3	4	5	6	7	8
Equator Angle	0 deg	60 deg	90 deg	120 deg	180 deg	270 deg		
Polar Angle	38 deg	40 deg	40 deg	40 deg	38 deg	40 deg		
Hole Type	5	6	5	6	5	5		

Customer: MBARI/Hans Thomas Date: 12/9/2014

Revision: 1

Sales Order: _____ Ship Date: _____ Quantity: 2 Size: 17"

Recommended Polar Angle for Penetrators for Hard Hat Clearance			
13″ SRO	17″ H	17″ HR	17″ SR
30	30	N.A.	25

Typical Vacuum Port Positions	
13″ IH	E=180 P=45, top hemi, per B-500-3
17″ IH	E=0 P=25, top hemi, per B-500-7
TR-6001	E=135 P=25, per B-210-428

Hole Type	Standard Applications	Drill Diameter
1	Vacuum Port, 3/16″	.203″
2	XT/TR Transducer	.281″
3	Bulkhead, 7/16″	.453″
4	Single Pin Penetrator	.156″

Special Applications		
5	Bulkhead, 3/4", Seaconn MIN-K w/ min 1.75" dia flat	
6	Bulkhead, 7/16", 316SS w/ min 1" dia flat	
7		

NOTE: — All customer supplied penetrators must have 1⅜″ stems and be furnished with dummy plugs and mounting hardware.
— When shipping penetrators to Teledyne Benthos, please reference purchase order number and/or sales order number.

Maximum polar angle is 50°