

Case Study of Curb Inlet Filters

Prepared for The City and County of Honolulu, Hawaii

AbTech System Servicing Box-Score

	Poor		Fair		Excellent
	1	2	3	4	5
Ease of Attachment/Reattachment to Drain					√
Ease of Handling and Entry Through Manhole			√		
Ease of Cleaning and Filter-Media Replacement			√		
Prevention of Debris Loss During Removal From Drain			√		
Overall Maintenance Turn-Around Time				√	

Total Score = 18

KriStar System Servicing Box-Score

	Poor		Fair		Excellent
	1	2	3	4	5
Ease of Attachment/Reattachment to Drain			√		
Ease of Handling and Entry Through Manhole					√
Ease of Cleaning and Filter-Media Replacement		√			
Prevention of Debris Loss During Removal From Drain			√		
Overall Maintenance Turn-Around Time		√			

Total Score = 15

Hydrocompliance Servicing Box-Score

	Poor		Fair		Excellent
	1	2	3	4	5
Ease of Attachment/Reattachment to Drain	√				
Ease of Handling and Entry Through Manhole	√				
Ease of Cleaning and Filter-Media Replacement				√	
Prevention of Debris Loss During Removal From Drain		√			
Overall Maintenance Turn-Around Time	√				

Total Score = 9

BioClean System Servicing Box-Score

	Poor		Fair		Excellent
	1	2	3	4	5
Ease of Attachment/Reattachment to Drain				√	
Ease of Handling and Entry Through Manhole					√
Ease of Cleaning and Filter-Media Replacement				√	
Prevention of Debris Loss During Removal From Drain				√	
Overall Maintenance Turn-Around Time					√

Total Score = 22 **Highest Score**

Performance matrix for field tested DII systems

Parameter	AbTech	Hydrocompliance	KriStar	BioClean
Initial device cost (10 ft drain inlet)	10	5	15	20
Initial installation requirements	10	2.5	7.5	5
Flow capacity	5	10	2.5	7.5
Turbidity during short term test	5	10	7.5	2.5
Short term RDS retention	10	5	7.5	2.5
Short term organics retention	10	2.5	7.5	5
Long term RDS retention	2.5	10	7.5	5
Long term PAH retention (mg)	5	10	7.5	5
Long term O/G retained (mg)	10	5	2.5	7.5
Long term overall rubbish retention	5	5	10	10
Suitability for Vector Control	5	2.5	7.5	10
Unit durability	7.5	2.5	7.5	10
Media replacement Costs	5	10	15	20
Suitability for Type B basin	2.5	2.5	7.5	10
Servicing Requirements	18	9	15	22
TOTAL SCORE	110.5	91.5	127.5	142

Performance of DII is ranked from one to four, with increasing scores assigned to increasing performance of the device. Ranks for each category are scaled to 10 except initial costs and media replacement costs which are scaled to 20. Servicing requirements are based on a score of 25 as determined in Appendix A. Maximum total possible score is 185.

Highest Score

Table 17: DII Servicing Time Table

Site	DII System	Required Servicing Time (hours)	
15	Hydrocompliance	1.75	105 Minutes
17	KriStar	1.0	60 Minutes
18	AbTech	0.5	30 Minutes
19	BioClean	0.25	15 Minutes

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See Full Report at:
<http://www.biocleanenvironmental.net/stormdrain/products/reports/reports.htm>