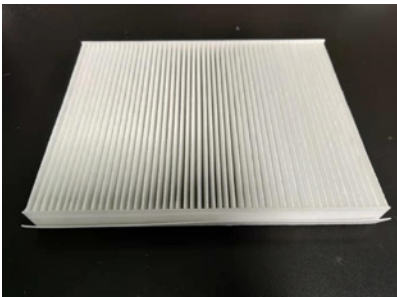
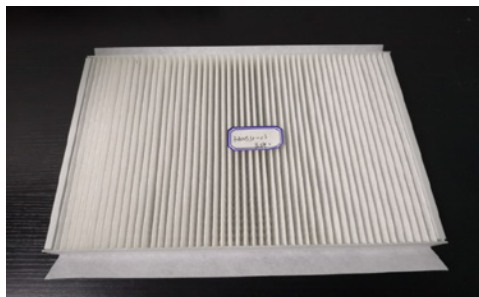


Name of Parts:	Cabin Filter	Part No:	HC49084	Sample Receive Date	11/15/20
Test Basis	ISO/TS 11155-1:2001 Part 1. Dust filtration test			Test Date:	11/15/20
Testing Items	Filtration Efficiency	Test Humidity	50±5%		
	Dust Hold Capacity	Atmospheric Pressure	Standard Atmospheric Pressure		
	Pressure Drop	Test Temperature	23±3°C		

SAMPLE PHOTOS BEFORE TESTING

Premium Guard - HC49084*	Competitor #1	Competitor #2
		

*Comparable filter tested in each brand - HC49084 primarily fits: Volvo Trucks - VAH, VHD, VN, VNL, VNM, VNX and VT

1) FILTRATION EFFICIENCY

1.1	Flow	300m³/h	Media	Clean Air	Dust	ISO 12103-1 A2 dust	
1.2 Test Data	Dust (µm)	≥0.3µm	≥0.5µm	≥1.0µm	≥3.0µm	≥5.0µm	≥10.0µm
	PG - HC 49084	70.89%	77.05%	83.99%	95.25%	98.53%	99.03%
	Competitor #1	17.09%	18.65%	28.56%	70.34%	85.64%	91.11%
	Competitor #2	49.35%	50.65%	75.03%	77.98%	85.46%	91.72%

2) DUST HOLD CAPACITY

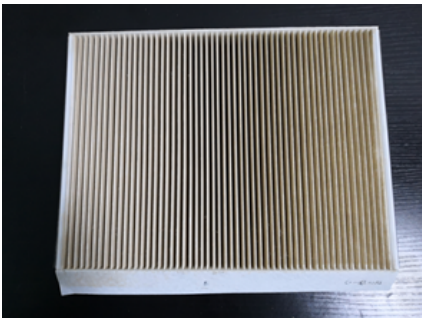
2.1	Flow	300m³/h	Media	Clean Air
	Dust	ISO 12103-1 A2	Terminal Condition	200Pa - Resistance rise 200Pa
2.2 Test Data	Sample #	(g) Weight before test	(g) Weight after test	(g) Dust Hold Capacity
	PG - HC 49084	116	144.1	28.1
	Competitor #1	135.2	150.1	14.9
	Competitor #2	141	158.3	17.3

3) PRESSURE DROP

3.1	Flow	300m ³ /h	Media	Clean Air
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PRESSURE DROP			
3.2 Test Data	Flow rate(m ³ /h)	150	300
	HC 49084	10.5	28.6
	Competitor #1	10.3	23.8
	Competitor #2	9.8	23.3

4) SAMPLE PHOTOS AFTER TESTING

Premium Guard - HC49084*	Competitor #1	Competitor #2
		

*Comparable filter tested in each brand - HC49084 primarily fits: Volvo Trucks - VAH, VHD, VN, VNL, VNM, VNX and VT

5) TEST EQUIPMENT

Equipment Name	Model #	Machine #	Test Range
Air filter performance test bench	N/A	AC01	Flow: 100m ³ /h~5500m ³ /h
Optical Partical diameter test machine (A)	TSI 3330	AC01-02	Diameter: 0.3µm~10.0µm
Optical Partical diameter test machine (B)	TSI 3330	AG01-03	Diameter: 0.3µm~10.0µm
Electronic Scale	NS12001L	AG02	5g~12200g
Electronic Scale	FA2004B	BC03	0~200g

6) TEST RESULT

Description	Filtration Efficiency	The filtration efficiency of the Premium Guard Cabin filter, HC49084, is higher compared to Competitor 1 and Competitor 2.
	Dust Hold Capacity	The dust hold capacity of the Premium Guard sample is significantly higher compared to Competitor 1 and Competitor 2.
	Pressure Loss	The pressure drop of the Premium Guard sample is slightly higher than the other two samples, but the data is controlled within standard.