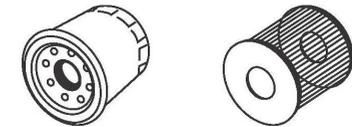


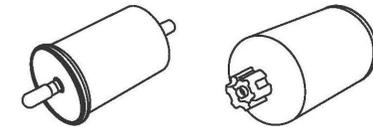
Apply to passenger car, commercial vehicle and construction machinery.



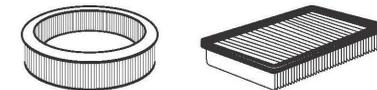
Oil filter



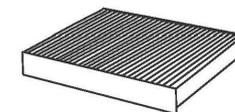
Fuel filter



Air filter

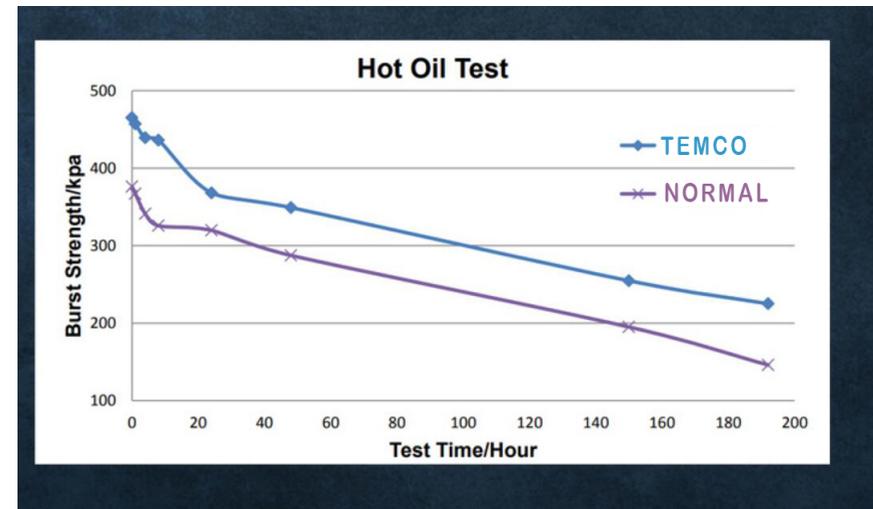
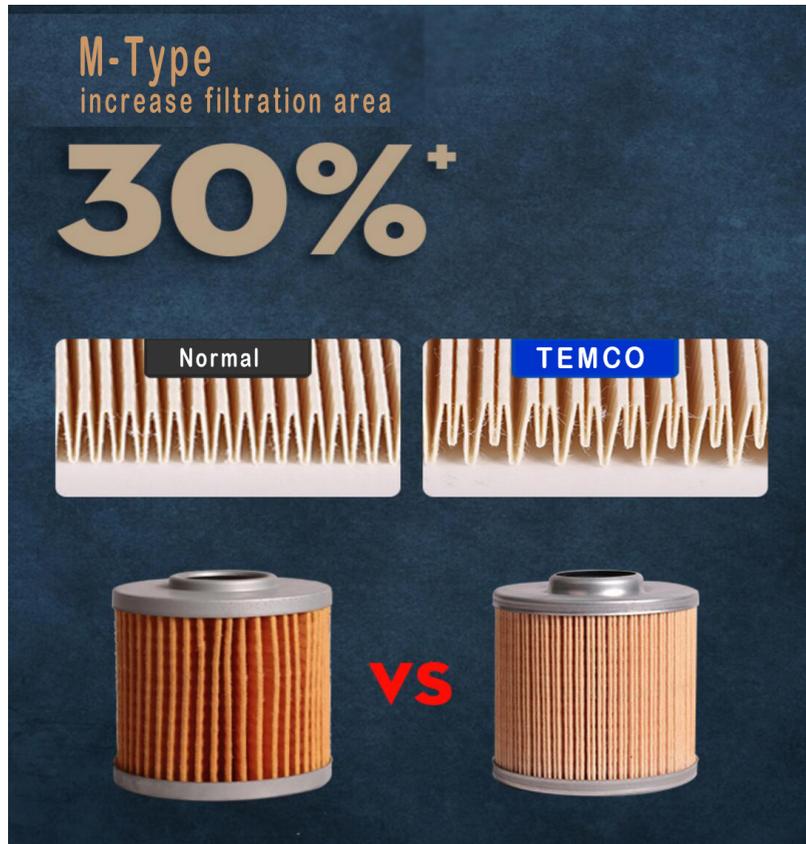


Cabin filter



## Spin-on Oil Filter

M-type filtration oil filters that could reduce oil consumption and prolong engine life.



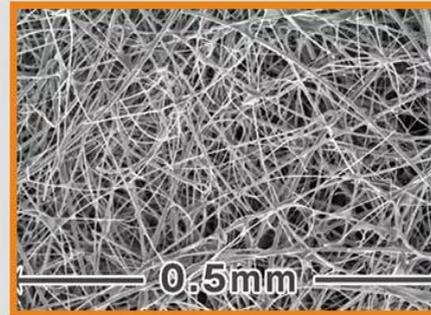
TEMCO

## Oil Filter for Commercial Vehicle

- \* Longer service intervals
- \* Fine particle removal extends engine life
- \* Captures and retains contaminants that can damage the engine
- \* Allows high efficiency throughout the lifetime of the filter



### Filter Media Comparison



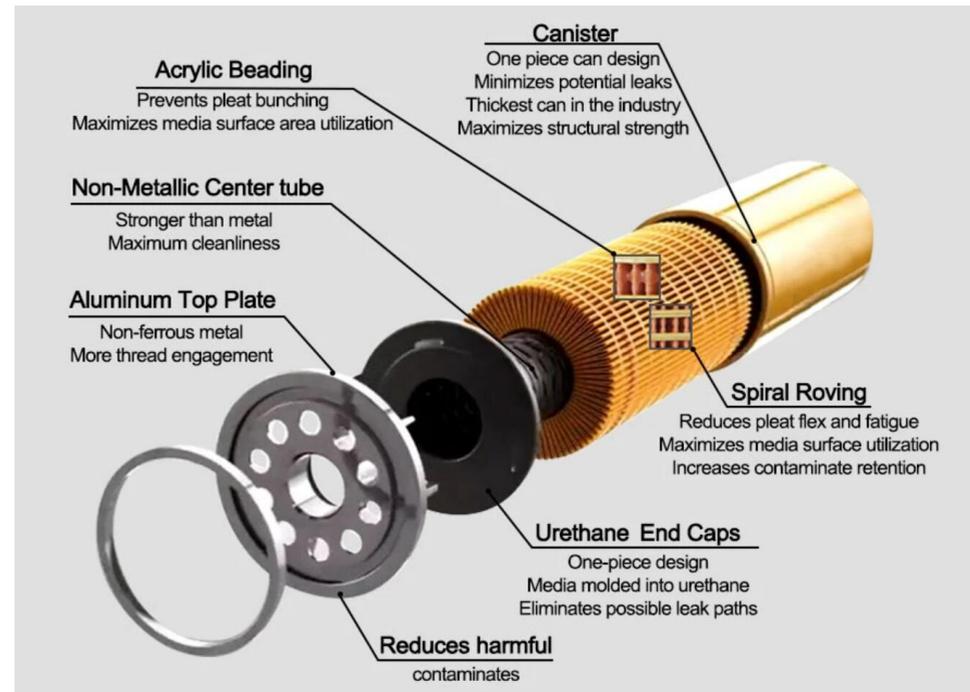
EXPERTISE LEAD EXCELLENCE  
**Temco**



**Company A**

## Diesel Filter Precision Filter

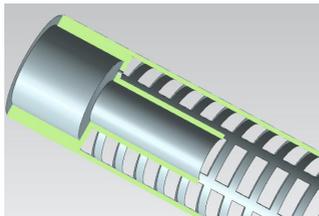
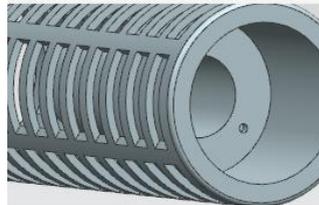
- \* Provides highly efficient and unmatched fuel cleansing performance
- \* Protects advanced fuel injection systems from contaminants
- \* Ensures long and trouble-free fuel system and engine life
- \* Built for the possibility of extended service intervals
- \* Comes with built-in gaskets and brackets where applicable
- \* Easy installation



## Diesel Filter Pre-filter Product



Standard vent  
Reverse flow center tube



## H&V high-end filter material:



**FILTER MEDIA**

**EXPERTISE LEAD EXCELLENCE**  
**Temco** **FILTER MEDIA** **MICROGLASS FILTER MEDIA**

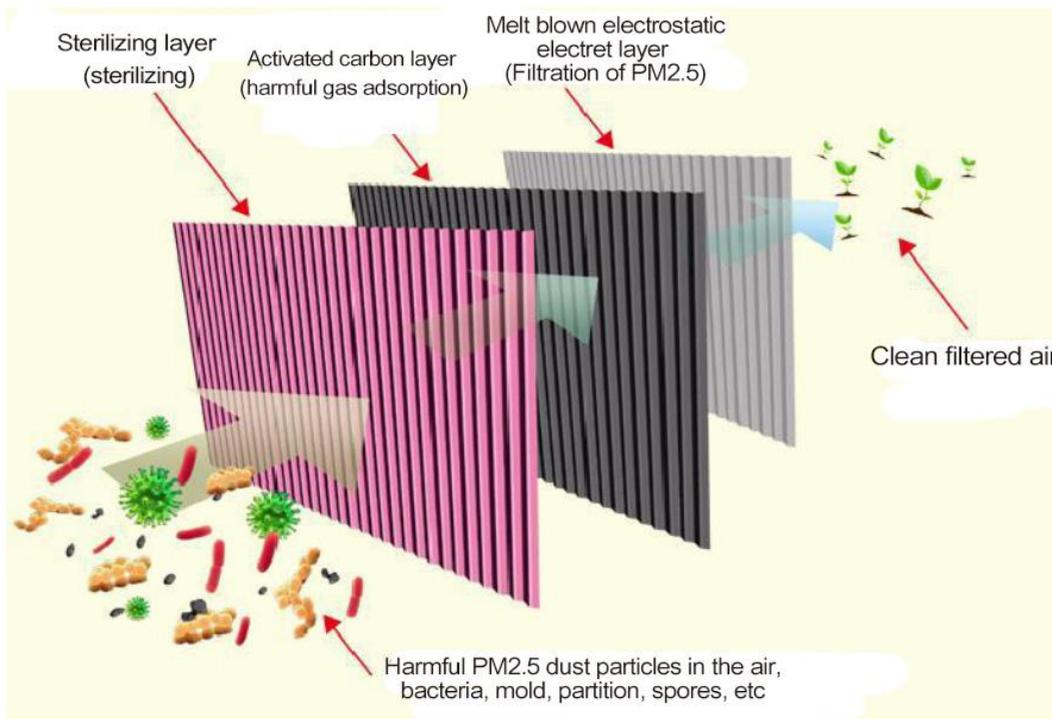
TEMCO

## Air Filter for Passanger Car



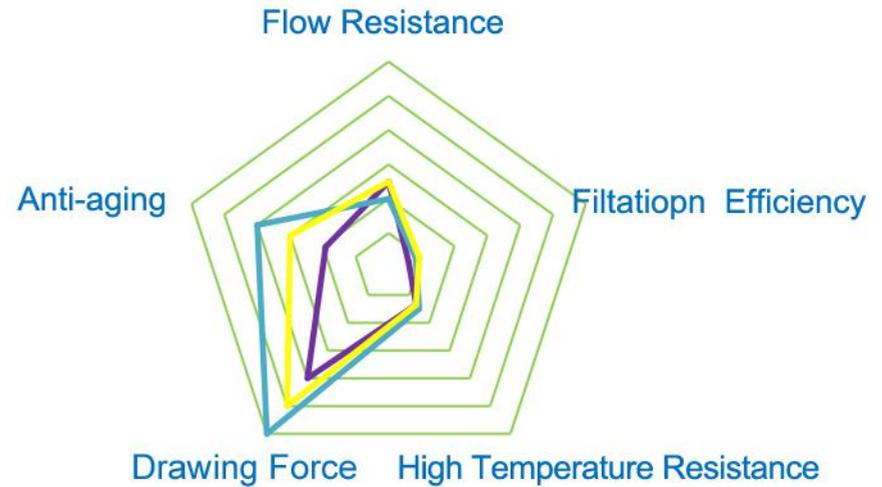
	Test Item	Sample No.	Require
a	Initial resistance GB/T 28949-2012	1	Test pressure: $\leq 0.5\text{KPa}$
b	Initial filtration efficiency GB/T 28949-2012	1	Filter paper: initial filtration efficiency $\eta \geq 98.5\%$ Filter fabric: initial filtration efficiency $\eta \geq 97.5\%$
c	Termination filtration efficiency GB/T 28949-2012	1	Filter paper: termination filtration efficiency $\geq 99.0\%$ filter fabric: termination filtration efficiency $\geq 98.0\%$
d	Dust capacity GB/T 28949-2012	1	Filter paper (specific load is 1,500 ~ 2,500 $\text{cm}^2/\text{m}^3/\text{min}$ ): dust capacity per unit area $\geq 150 \text{ g}/\text{m}^2$ filter fabric (specific load is 300 ~ 500 $\text{cm}^2/\text{m}^3/\text{min}$ ): dust capacity per unit area $\geq 400 \text{ g}/\text{m}^2$

## Cabin Filter



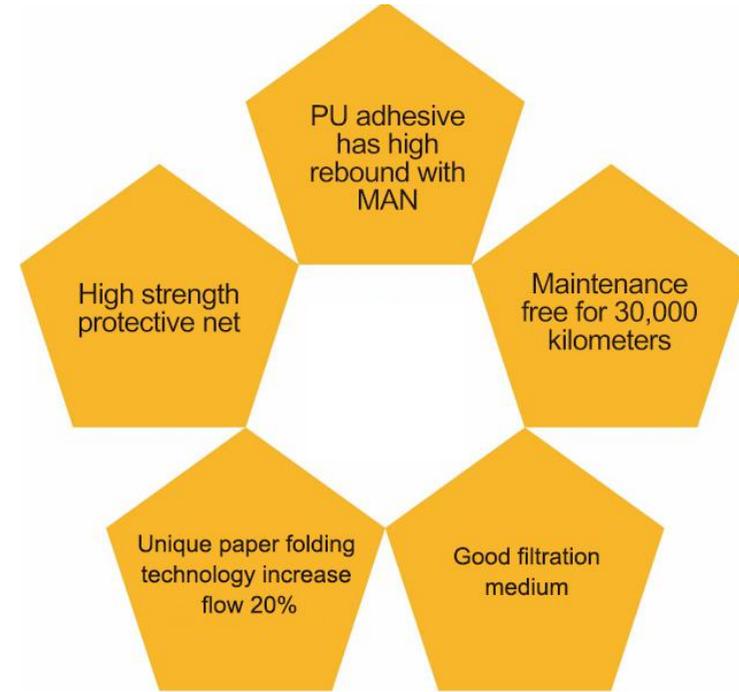
Dust removal - PM2.5 filtration efficiency 92%;  
Sterilization - antibacterial rate up to 99%;  
Remove odor - harmful gas adsorption efficiency is more than two times the ordinary

## ECO Filter



— National Standard — TEMCO — Famous Company

## Air Filter for Commercial Vehicle



High efficiency, long life and maintenance free



Oil filter Technical requirement			
NO	Test Items	Standard	TEMCO Standard
1	Burst Pressure testing JB/T 5088.2	Burst pressure $\geq$ 15bar,keep 5mins	Burst pressure $\geq$ 19bar, keep5mins
2	Filter element collapse test JB/T 5088.2	Only for filter element, P $\geq$ 3.5bar	Only for filter element, P $\geq$ 3.5bar
3	Low frequency pulse permanent test JB/T 5088.2	With a peak of 8bar, after 50000 pulse cycles, there is no deformation of the filter housing, oil leakage is not allowed at the joint, and the parts are not damaged.	With a peak of 13bar, after 150000 pulse cycles, there is no deformation of the filter housing, oil leakage is not allowed at the joint, and the parts are not damaged.
4	Leakage test	At pressure P=6bar, no bubble to occur within 1 min.	At pressure P=6bar, no bubble to occur within 1 min.
5	Element integrity test ISO 2942	The pressure of the first string bubble $\geq$ 1.0KPa	The pressure of the first string bubble $\geq$ 1.0KPa
6	Pressure difference ISO 4548-2	Dp<0.325bar@rated flow (L/h) =(filtration area cm <sup>2</sup> x1.2),Viscosity: 24 cst	Dp<0.2bar@rated flow (L/h) =(filtration area cm <sup>2</sup> x1.2),Viscosity: 24 cst
7	Filtration efficiency	Full flow filter :50% $\leq$ 18 $\mu$ m(c), volume flow coefficient is 1.2 L (cm <sup>2</sup> )h	Full flow filter :57% $\leq$ 15 $\mu$ m(c), volume flow coefficient is 1.2 L (cm <sup>2</sup> )h
8	Life test ISO 4548-12	The dust capacity per unit area of the filter material of the full flow filter (90g/m <sup>2</sup> ) x(Minimum filtration area)	The dust capacity per unit area of the filter material of the full flow filter (115g/m <sup>2</sup> ) x(Minimum filtration area)
9	By pass valve test JB/T 5088.2	opening pressure p=1.2 $\pm$ 0.4bar,or as clients' requirement	opening pressure p=2.0 $\pm$ 0.5bar,or as clients' requirement
10	Inner gasket leakage test JB/T 5088.2	Under 600 $\pm$ 10mm oil pressure, leakage $\leq$ 0.1 L /6h	Under 600 $\pm$ 10mm oil pressure, leakage $\leq$ 0.06 L/6h
11	Filter element end cap drawing force JB/T 5088.2	$\sigma \geq$ 0.12 N/mm <sup>2</sup>	$\sigma \geq$ 0.17 N/mm <sup>2</sup>



Air filter Technical requirement			
NO	Test Items	Standard	TEMCO Standard
1	Initial resistance GB/T 28949-2012	Test pressure≤0.7kpa	Test pressure≤0.5kpa
2	Initial filtration efficiency GB/T 28949-2012	Filter paper:	Filter paper:
		Initial filtration efficiency $\eta \geq 97.5\%$	Initial filtration efficiency $\eta \geq 98.5\%$
		Filter fabric:	Filter fabric:
		Initial filtration efficiency $\eta \geq 97.5\%$	Initial filtration efficiency $\eta \geq 98.5\%$
3	Final Filtration efficiency GB/T 28949-2012	Filter paper:	Filter paper:
		Final filtration efficiency $\eta \geq 99.0\%$	Final filtration efficiency $\eta \geq 99.7\%$
		Filter fabric:	Filter fabric:
		Initial filtration efficiency $\eta \geq 98.0\%$	Final filtration efficiency $\eta \geq 98.5\%$
4	Dust holding capacity GB/T 28949-2012	per unit area $\geq 120\text{g/m}^2$	per unit area $\geq 150\text{g/m}^2$



## Laboratory Equipments

- ◆ Pulse fatigue test bench
- ◆ Flow resistance test bench
- ◆ Pressure test bench
- ◆ Bubble test bench
- ◆ Electronic stiffness tester
- ◆ Paper breaking resistance tester
- ◆ Air permeability tester
- ◆ Environmental chamber
- ◆ By pass valve test bench
- ◆ Rubber high and low temperature test bench
- ◆ Data electronic tension tester
- ◆ Multifunctional sealing edge test bench

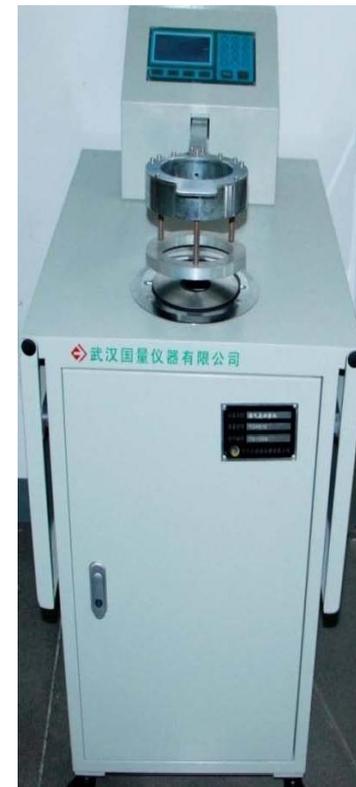
## Incoming quality control



Paper breaking resistance tester to test the strength of filter media/ paper under pressure



Electronic stiffness tester to test the tension generated by bending filter paper at a certain angle



Air permeability tester to test filter media/paper air permeability



Automatic spring testing machine to test spring compression and tensile



Quadratic image measuring Instrument to test rubber sizes



High oil temperature resistance test tank to test high oil temperature resistance of products and parts



High and low temperature alternating humid heat test chamber to test the performance of filter and filter parts at high temperature 150°C or low temperature -40°C



Bubble test bench to test the integrity of the oil filter element, and the maximum aperture and average aperture of the filter paper.



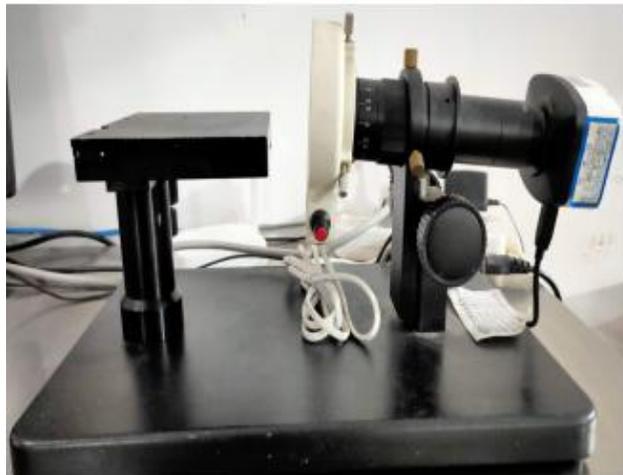
Fuel filter integrated test bench to test cleanliness and pressure drop flow characteristics.



Flow resistance test bench to test filter rated flow resistance and bypass valve opening pressure.



Salt spray corrosion test machine to test material corrosion resistance



Multifunctional sealing edge test bench to test the edge sealing rate of finished products



Pressure test bench to test the pressure when the filters are destroyed.



Anti drain back valve bench  
to test the sealing



Air filter performance test bench

Test item:

- 1、 Original filtration efficiency test.
- 2、 Original inlet resistance, pressure loss and pressure drop test.
- 3、 Full life filtration efficiency, dust holding capacity, laboratory life test.
- 4、 Air intake resistance recovery rate test;
- 5、 Variable flow test

NO.	Equipment Name	QTY.
1	8 series four column double acting hydraulic drawing machine	22
2	Punch machine SEYI Taiwan 400 tons	10
3	Punch machine SEYI Taiwan 300 tons	15
4	Punch machine SEYI Taiwan 250 tons	20
5	Punch machine 200 tons	30
6	Single station punchmachine	60
7	Center tube winding machine	8
8	Bypass valve 8 positions welding machine	6
9	Riveting machine	10
10	Medium frequency convex welder with screw plate	5
11	Single station welding machine with screw plate	6
12	Screw plate cleaning phosphating	4
13	6 station screw plate tapping machine	6
14	Drum-typepaper folding machine	4
15	Filter element production lines	3
16	Glue-injection machine	3
17	Sealing machine	6
18	Clean and phosphatingfor filter housing	4
19	Leakage test machine	8
20	Silk-screen printing machine	8
21	Electric roller printing machine	4
22	Filter housing painting lines	4

- ◆ Professional team, to provide professional filtration solutions and professional after-sales service;
- ◆ Complete testing equipment, product full performance testing, product are fully monitored from production to after sales
- ◆ Advanced and efficient production equipment, to ensure that each part meets the technical standards. High efficiency can provide customers with cost-effective, high-speed response
- ◆ Supported by universities and research institutes, product research and development has always walked in the forefront of the industry

