



**ENGINE OIL FILTER**  
KOMATSU GENUINE PARTS

**IMPORTANT OF ENGINE OIL FILTER**



The importance of oil filters cannot be ignored. Engine parts are depended on enough quality oil providing lubrication to them by flowing through the engine. If the oil contaminated, then a number of engine parts are at risk of failing and would require expensive repairs.



**Real World Contamination**

**Wear Causing Agent**

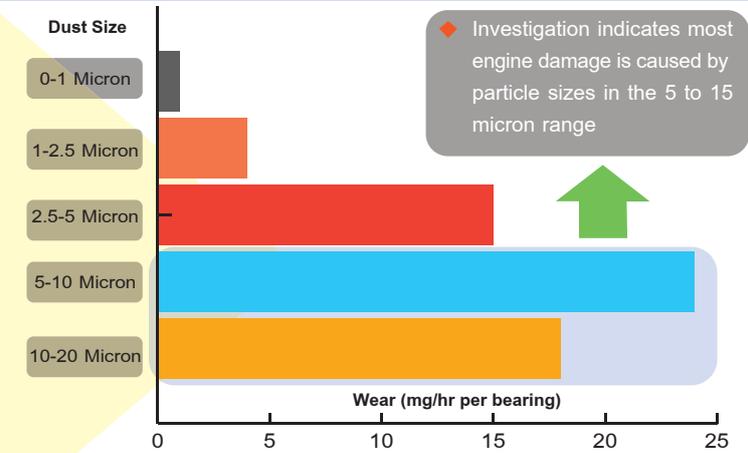
Soot      Wear Metal

**Filter Plugging Agent**

- Fuel
- Solvent
- Sludge



**Dust Size vs. Wear Effected to Engine**



**Failure when Using Non Genuine Filter**

Particles entered into engine oil system, will result in wear on the piston rings, and also cam shaft mechanism. This wear will increase the oil consumption and become the cause of higher cost. Although you may save cost from buying the non genuine oil filter but this will result to your repairing cost which will be much higher in several times.

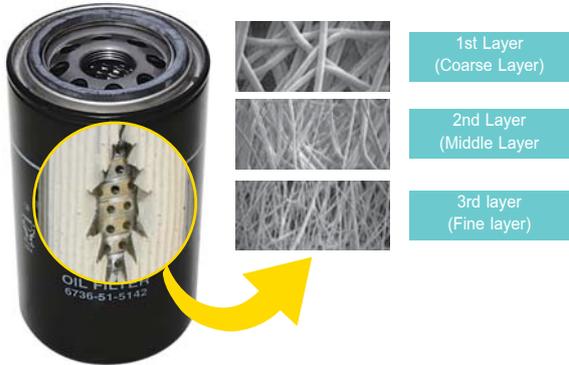
**Failure Example**



Problem	Cause	Example of Failure
Clogging, damage	Improper replacement interval	Piston ring sticking
	Improper oil usage	Crankshaft seizure
	Non-genuine filter usage	Piston seizure
	Improper filter storage	Bearing pitting / peeling
	Improper oil storage	

## FULL FLOW FILTER MEDIA (PC200-7, -8)

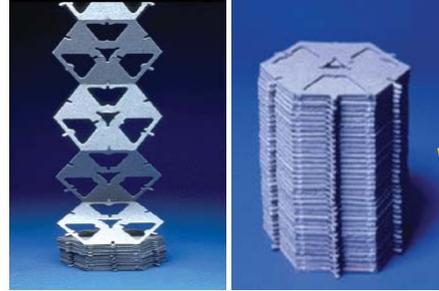
This type of filter is made of polymer fibers and composed of three different types of layer. Dust and sludge is caught not only on the media surface but also in the internal fibers.



A multi-layer polyester filter media is used to achieve higher filtration efficiency and capacity. The new filter media has a 60% filtration efficiency on 10 micron size particle, as compared to cellulose, or paper, filter media.

## COMBINATION FILTER (PC300-7, -8)

Type of combination filter contains full-flow filter and bypass filter. Full-flow filter provides general filtration function. Bypass filter uses mesh type filtration paper that is finer than full-flow type and its filtration passage rate is between 3% ~ 5% for proper contamination control.

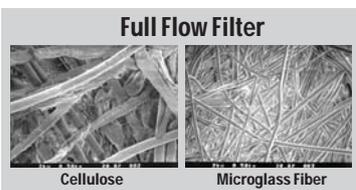


## Genuine Vs. Counterfeit Products



<b>Model</b>	PC200-7, PC200-8
<b>Engine Size</b>	Φ107
<b>Filter Type</b>	Full Flow
<b>Filter Media</b>	Blending of Polyester & Adhesive Polymers

Full Flow Filter: its function is to get rid of wear metal and soot contained in the oil. However, its function is the same as conventional filter except for its media (Cellulose - Polyester & Polymers)



Efficiency *	Cellulose	Polyester & Polymers
30μm	98.7%	98.7%
10μm	30.0%	60.0%

As above table, Microglass fiber is more efficient to capture smaller particles than cellulose



<b>Model</b>	PC300-7, PC300-8
<b>Engine Size</b>	Φ107
<b>Filter Type</b>	Combination
<b>Filter Media</b>	1. Blending of Polyester & Adhesive Polymers 2. Bypass Filter

It is Integrated filter of full-flow filter and bypass filter. That is, bypass filter portion through which 3-5% of the oil passed has filter paper with finer mesh than that of full-flow to increase mainly filtration performance filtering carbon particles.



Komatsu Genuine Filters can reduce downtime, save on costly component replacement and improve fuel economy.

Modern mining and construction equipment has incorporated sophisticated technology that requires superior filtration to maximize performance and reliability. Komatsu OEM filters are designed to achieve superior protection at the number of extended maintenance intervals. Komatsu filters incorporate many patented designs and filtration media not found in aftermarket filters.

# KOMATSU

**Komatsu Parts Asia Co., Ltd.**

Amatanakorn Industrial Estate  
700/21 Moo 5, Bangna-Trad Road,  
T.Klongtamru, A.Muang, Chonburi 20000 Thailand  
Tel: +66 (0) 3846 5824 Fax: +66 (0) 3846 5830  
E-mail: kpac\_marketing@kpac.co.th