

# Tips & Technology

## Bosch air filters

Terminus for particles of dirt of all kinds



### Tasks of the air filter

- ▶ To protect the motor from particles of dirt in the entrained air
- ▶ To protect the motor from abrasive wear
- ▶ To assure the supply of air for air/fuel mixture preparation

### Regularly change the air filter according to the vehicle manufacturer's instructions.

Consequences of a clogged filter:

- ▶ Reduced air intake, leading to decreased engine output and increased pollutant emission
- ▶ Higher fuel consumption
- ▶ Problems when starting the engine
- ▶ Premature oil contamination

### Sales arguments at a glance

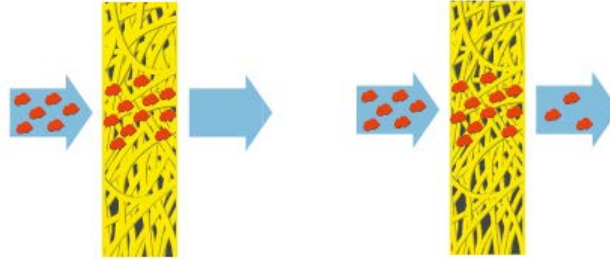
| Customer benefits:                                                                               | Product characteristics:                                 |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>Long service life, high particle collection rate, wet strength, and high tensile strength</b> | Multi-layer, specially impregnated filter medium         |
| <b>High level of dirt absorption capacity and low flow rate resistance</b>                       | Large filter surface area                                |
| <b>Stable pleat geometry</b>                                                                     | Specialist impregnation of the filter medium             |
| <b>Perfect fit</b>                                                                               | Precisely adapted shape and high-quality gasket material |

# A comparison of Bosch air filters:

## Quality is worth paying for

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Peace of mind with Bosch filters → | ← Cheap air filters – expensive consequences! |
|------------------------------------|-----------------------------------------------|

High particle collection rate with micro-porous filter medium



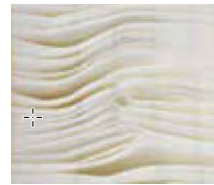
Low-quality filter medium  
 ➤ Increased wear in engine  
 ➤ Dirt buildup in the mass airflow sensor

High level of dirt absorption capacity due to large number of pleats



Smaller number of pleats  
 ➤ Shorter service life

Wet strength due to special resin impregnation



Pleats stick together when wet  
 ➤ Reduced engine output  
 ➤ Increased fuel consumption

Special coating to protect against catching fire



Risk of fire from sucked in cigarette butts or backfiring  
 ➤ Vehicle fire

Durably stable pleat geometry from sufficiently sized adhesive beads



Unstable pleat geometry  
 ➤ Shorter service life  
 ➤ Reduced engine output  
 ➤ Increased fuel consumption

No bypassing of unfiltered air thanks to high-quality polyurethane seal



Defective quality of finish, low-quality seal material  
 ➤ Increased wear in engine  
 ➤ Dirt buildup in the mass airflow sensor

No loss of filter surface area thanks to careful processing of the gasket material



Use of too much gasket material  
 ➤ Shorter service life  
 ➤ Reduced engine output  
 ➤ Increased fuel consumption