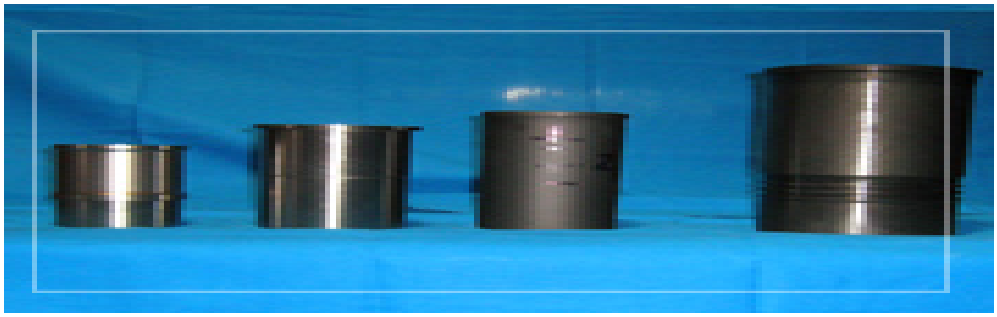
Cylinder Liner

A cylinder liner is a cylindrical part to be fitted into an engine block to form a cylinder. It is one of the most important functional parts to make up the interior of an engine The cylinder liner, serving as the inner wall of a cylinder, forms a sliding surface for the piston rings while retaining the lubricant within.



The most important function of cylinder liners is the excellent characteristic as sliding surface and these four necessary points.

- High anti-galling properties
- Less wear on the cylinder liner itself
- Less wear on the partner piston ring
- Less consumption of lubricant

The cylinder liner receives combustion heat through the piston and piston rings and transmits the heat to the coolant.

A cylinder wall in an engine is under high temperature and high pressure, with the piston and piston rings sliding at high speeds. In particular, since longer service life is required of engines for trucks and buses, cast iron cylinders that have excellent wear-resistant properties are only used for cylinder parts.

Also, with the recent trend of lighter engines, materials for engine blocks have been shifting from cast iron to aluminum alloys. However, as the sliding surface for the inner cylinder, the direct sliding motion of aluminum alloys has drawbacks in deformation during operation and wear-resistance. For that reason, cast iron cylinder liners are used in most cases.

Darton

Cummins

Peugeot

Hino