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TECHNICAL REPORT

Fuji Films testing procedures for Ajusa gaskets



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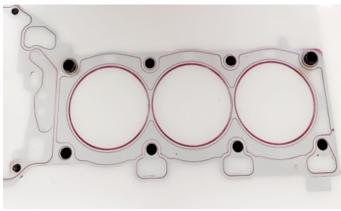


introduction

In order to ensure the **quality and precision** of Ajusa gaskets, all of our designs are subjected to rigorous studies of surface pressure and pressure distribution.

For this, the most used method is the FujiFilm® validation test. Using this method, it allows us to quickly and easily verify the **uniformity of the pressure** on the surfaces of the joint, or measure the **pressure at a specific point.**





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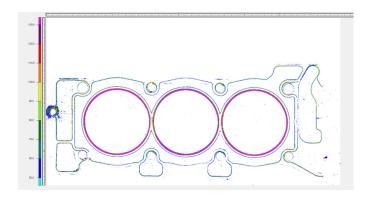


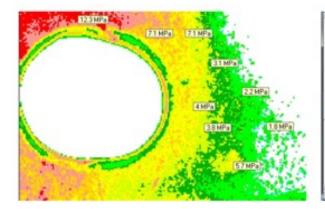


The test is carried out using FujiFilms[®] which can be 1 or 2 layers that have small **microcapsules filled** with red ink.

The films can be placed on the top, bottom or both sides of the joint. When pressure is exerted on the **paper these microcapsules** burst and release the ink.

The higher the pressure, the more intense the color will be. The footprint left after testing allows our engineers to see where the gasket load is good and the areas that need attention. Using specific software and scanner tools.







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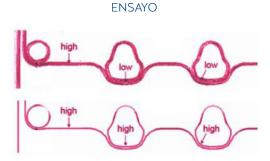
development

Each design of an Ajusa gasket is simulated using computer software and the FujiFilm® test is carried out again to verify the results and contrast the information. The results allow us to see where we may need to add, remove, or change the shape/height of the rib to create uniform sealing stress across the cylinder head.

The images of the print on the paper are scanned to **measure the intensity of the color** and create a color pattern with the pressure pins on the surface. The test must be performed at a specific temperature and humidity to allow the program to accurately create the standards.

These tests are carried out on both OE gaskets and Ajusa gaskets, in order to evaluate the design and correct certain areas to achieve a better seal.

This is one of the many tests carried out by Ajusa engineers to ensure that each Ajusa gasket **meets the highest quality standards**.



ANÁLISIS POR SOFTWARE





Figure 5: Gasket contact pressure obtained from Fuji film test.

Figure 6: Gasket pressure pattern obtained fror ANSYS

