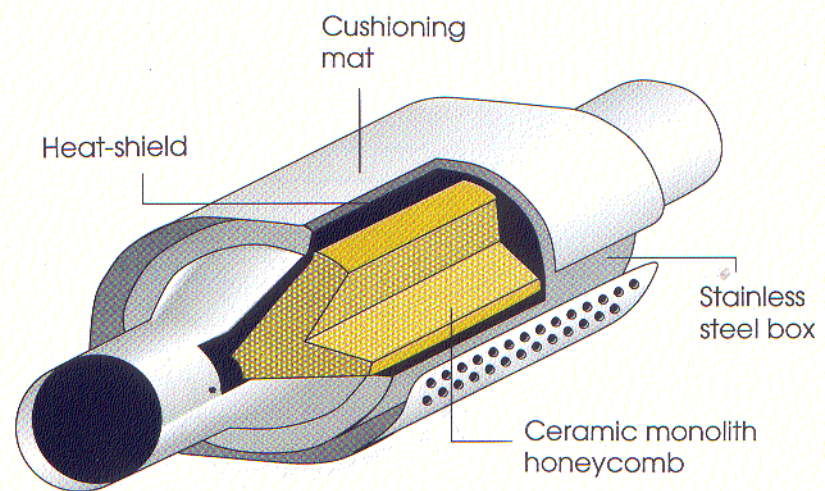




What the catalytic converter is made of

The catalytic converter is built to diminish the polluting elements in the exhaust fumes of a vehicle by catalysis. It is a device installed in the exhaust tube near the engine where the gases are still at high temperatures. This heat energy passes to the catalytic converter and increases its own temperature. This is necessary for the converter to have optimum output, reached between 400-700 degrees centigrade.



On the outside, the catalytic converter is a stainless steel recipient frequently covered with a metallic anti-thermal shield, also stainless, that protects the lower parts of the vehicle from the high temperatures reached.

Inside, there is a ceramic support or monolith of oval or cylindrical shape with a structure made up of multiple cells in a panel with a density of approximately 450 cells per square inch (70 per square centimetre). Its surface is coated with a resin that contains Noble metals like Platinum (Pt) and Palladium (Pd) that allow oxidation and Rhodium (Rh) that is used in reduction. These precious metals behave as active catalytic converters, that is, they initiate and accelerate the chemical reactions between other substances with which they come into contact, without participating in these reactions. The contaminating exhaust fumes generated by the engine are partially transformed into innocuous elements once they come into contact with the active surface of the catalytic converter.