

BM Catalysts talks Emissions standards

Quality is essential when it comes to emissions components

Emissions has become a buzzword for the entire automotive industry in recent years. Carmakers need to ensure their CO2 levels are reducing and the aftermarket has a role to play. Lowering vehicle emissions is a necessity. With the decline in diesel vehicle sales, more petrol cars are on UK roads. As this decline started in 2017, now is the time the aftermarket will see an influx in petrol models filtering through into workshops. With this petrol boom increases CO2 levels which is ultimately harmful to the planet. But efforts are underway to ensure that vehicles comply with emissions standards. Mark Blinston, Commercial Director at BM Catalysts, producer of emissions components, including the vital catalytic converter and diesel particulate filter (DPF) to factors and workshops across the UK and Europe spoke to auto:resource to discuss more.



How has the emissions system changed in modern vehicles?

We've seen a big change of late with Euro 6 standards. With the sensitivity of engine management systems and newer vehicles in measuring pollutants, you now have warning lights coming on when there's the slightest deviation in standards. Some of the Euro 6 models turn their warning lights on around 75% sooner than a Euro 4-based vehicle, which would therefore have run for longer before noticing any deviations from the norm. So, any kind of change, whether component failure or how the engine is running, will be picked up much sooner on the newer vehicles.

Why have these changes been necessary?

There has often been an assumption that somehow things will sort themselves out especially when it comes to air quality. The reality is that things must be done to improve the situation it will not get better if we carry on doing things the way we are. We need to do more to be better as an industry. The whole industry needs to be a part of the change, not just the car manufacturers themselves. The industry has been making small steps in the past, and we've seen that with the Euro 4, Euro 5, and Euro 6 regulations, as well as the introduction of the diesel particulate filter (DPF). However, recent events have shown just how bad the situation is. With car usage declining in the last year due to the COVID-19 pandemic, we've all seen CO2 levels drop, and air quality improve as a result. Therefore, hopefully, we are all now awake when it comes to the need to prevent things going back to how they were.

Does the consumer shift from diesel to petrol vehicles bring further challenges?

There will be additional demand as petrol sales outshines diesel sales in the vehicle market. Diesel cars typically were the ones doing the longer journeys, often fleet vehicles that are maintained quite well. So, the strain on the catalytic converter is relatively low, particularly with the DPF also installed. Petrol cars were typically doing the shorter journeys and seeing strain by not getting up to an optimal operating temperature. There has always been quite a significant weight behind requirements for petrol applications. Furthermore, what we've seen now with Euro 6 is that petrol applications have more converters on them than before. The Toyota Aygo, for example, has two catalytic converters, as opposed to the Euro 4 version that has one. So, any kind of issue with the vehicle could now affect two converters rather than one. You also have gasoline particulate filters being applied to vehicles to help emissions reduction from the factory. There is always a different operating temperature operation between petrol and diesel, so any deviation upstream will have a bigger impact on petrol. So, the move towards more petrol cars will generate significant sales we think.

What issues does the aftermarket face when it comes to emissions components?

The immediate thing is the issue of poor-quality parts in the aftermarket from companies who cut corners. The prices of precious metals have risen rapidly – for example, you have Rhodium that controls nitrogen oxides (NOx) in petrol vehicles trading at \$29,500 when it's historically been around \$1,000 on average. So unscrupulous companies may decide to lower the levels of the materials they use to cut costs. We've tested parts and seen some fail the required limits, by up to 400%, on NOx. I believe the government is looking at policing aftermarket suppliers of catalytic converters and DPFs, making sure that they adhere to the regulatory requirements. More needs to be done to stop poor-quality products being fitted to vehicles, and to annually check vehicles and make sure they are not emitting more than they should be. After all, it has only been recently that we have seen the removal of diesel particulate filters (DPFs) outlawed. But there are positive strides into solving the issues and policing the market.

Do the factors need to do more to prevent poor-quality parts making it to garages?

When you have got more materials in the converter, such as precious metals, and the high prices these materials are currently at, there is temptation for a factor to buy on price rather than quality. But businesses need to remember that a cheap product is not necessarily a good quality product. We do a lot of work trying to educate the factors into understanding what they're buying. The buyers and decision makers need to understand this sector is very complicated, and what the risks associated with buying poor quality products are. I think the industry itself needs to get together and make sure we are all singing from the same hymn sheet. We all want better standards and to meet the regulations, and to ensure that the air we breathe is the cleanest it can be.



You can find out more about BM Catalysts by visiting www.bmcatalysts.com



What is BM Catalysts doing to help spread awareness of quality parts?

We have some POS that we send out to garages. We've done surveys of workshops during the last summer, gauging opinions on quality when it comes to emissions components. We are in the process of developing informational material and running an PR campaign to help garages. We're also building an online training platform that will be opened to everyone in the supply chain, and once we get engagement there, we can drive their understanding of quality, what to look for, and why some components may be more expensive than others. We can highlight why prices may be high due to precious metal content, but these prices therefore mean the components are more likely to do the job they are designed for. We do a huge amount of research and development, working with type approval houses across Europe. We have strong relationships with testing sites, and the DVSA, and we always work to the best of our abilities to meet the required standards of development and conformity of production within the type approval process. There is no cutting of corners with our development, we aim to meet the standards set by 103R.

