Samples of the correct type of leather, plus soiling from the right source (denim, grease, coffee and so on), are essential for accurate testing of the anti-soiling capabilities of automotive leather. IMAGE: GSC GROUP

Options on anti-soiling

Consumers are becoming more and more demanding and want protection in their car interiors against soiling from everyday items such as denim jeans and coffee. OEMs are picking and choosing what type of protection they want their automotive leathers to have, which makes it hard for tanners to test effectively. Here, the international sales director of Italy's leather chemicals group GSC, Diego Cisco, points to the help that tanners can secure from their supply chain partners in addressing this complex question.

Customers in the automotive market, as in other areas of the economy, are becoming increasingly demanding, making the challenge that original equipment manufacturers (OEMs) and their suppliers face in keeping up with the times a continuous battle.

One positive aspect of this is that OEMs, in spite of competition among them and among their suppliers, have worked with each other and with their upstream supply chain partners to develop cars and components with higher and higher levels of technical functionality and performance. This also applies to the car interior and, therefore, to leather. Leather, of course, is a natural material, but it is now possible to endow it with technical capabilities that until a few years ago seemed unattainable.

Among the areas that have had to be addressed and to which the automotive leather sector has responded well is protection against soiling. Resistance to soiling is a sensitive issue in the world of car interiors and the leather on seats, on steering-wheels, on dashboards and other areas now has to be resistant to dirt and easy to clean.

There are OEMs that have, for years, included requests for anti-soiling functionality in their specifications for leather. However, in the last two or three years, we have noticed that all car manufacturers are including requirements of this kind, sometimes for protection against soiling of a specific type. It is not always easy for tanners to meet all these requirements on their own and it is a good idea for them to work closely with their chemical suppliers to find a suitable response.

At GSC Group, this is something we have studied closely for many years and we feel we have a high level of know-how that can probably help give automotive tanners an advantage. Some of the most common examples of the specific types of soiling for which automotive tanners have to provide protection include markings from denim clothing, grease or oil and coffee.

After studying anti-soiling in automotive leather for many years, GSC is now able to carry out a wide range of testing, including, when necessary, ad hoc tests of its own devising. IMAGE: GSC GROUP

These challenges are all familiar and there are well established ways of dealing with them appropriately. When it comes to testing, it is important to have samples of the right kind of material with the right kind of soiling to meet the needs of each car brand and for each model of car. You have to follow their specifications, and that means that the material and the substance that has made the material dirty have to be right. In addition to this, GSC has found it necessary sometimes to improvise and make ad hoc machines to carry out these tests.

Resulting from this experience is the insight that finding a leather finishing system that provides resistance to all these different types of stain, simultaneously, is very difficult to achieve. All the more so if you want to use sustainable chemistry, with products that are free from hazardous substances and that present no potential danger to health. The fact is that OEMs impose some of these restrictions rigidly and insist on eco-friendly finishing systems. It is also true that they tend to put more emphasis on certain tests than on others.

In the face of this, GSC Group has come up with a set of finishing systems that will help automotive tanners meet a series of specific OEM requirements. This paper presents a summary of that work, with images in which four different finishing systems are shown, each one offering specific solutions and advantages.

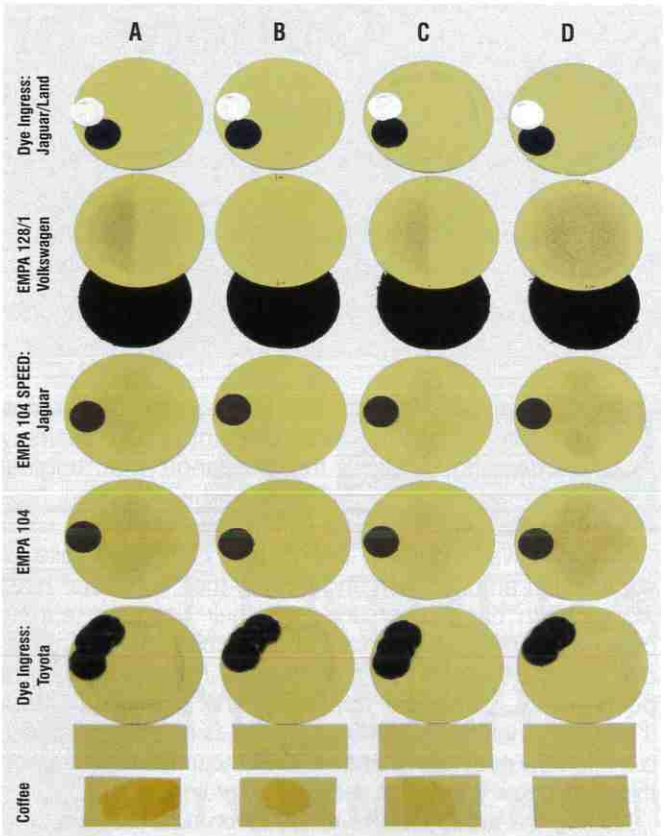
Finishing system A is suitable for providing resistance to soiling caused by denim jeans.

Finishing system B combines a low emission of noise, usually identified by the parameter called 'squeak', with resistance to soiling from denim, grease or soot.

Finishing system C combines resistance to denim stains and coffee stains.

Finishing system D is for when the main requirement is to make the leather resistant to coffee stains.

Each of the finishing packages has the capacity to include protection against other types of soiling as required. Concrete solutions to the specific anti-soiling challenges that different OEM specifications present seems to be a good way of addressing the needs of automotive leather manufacturers in the present business climate.



A sheet showing tests for four common combinations of soiling, taking into account the specifications of different OEMs, including Jaguar Land Rover, Volkswagen and Toyota. IMAGE: GSC GROUP