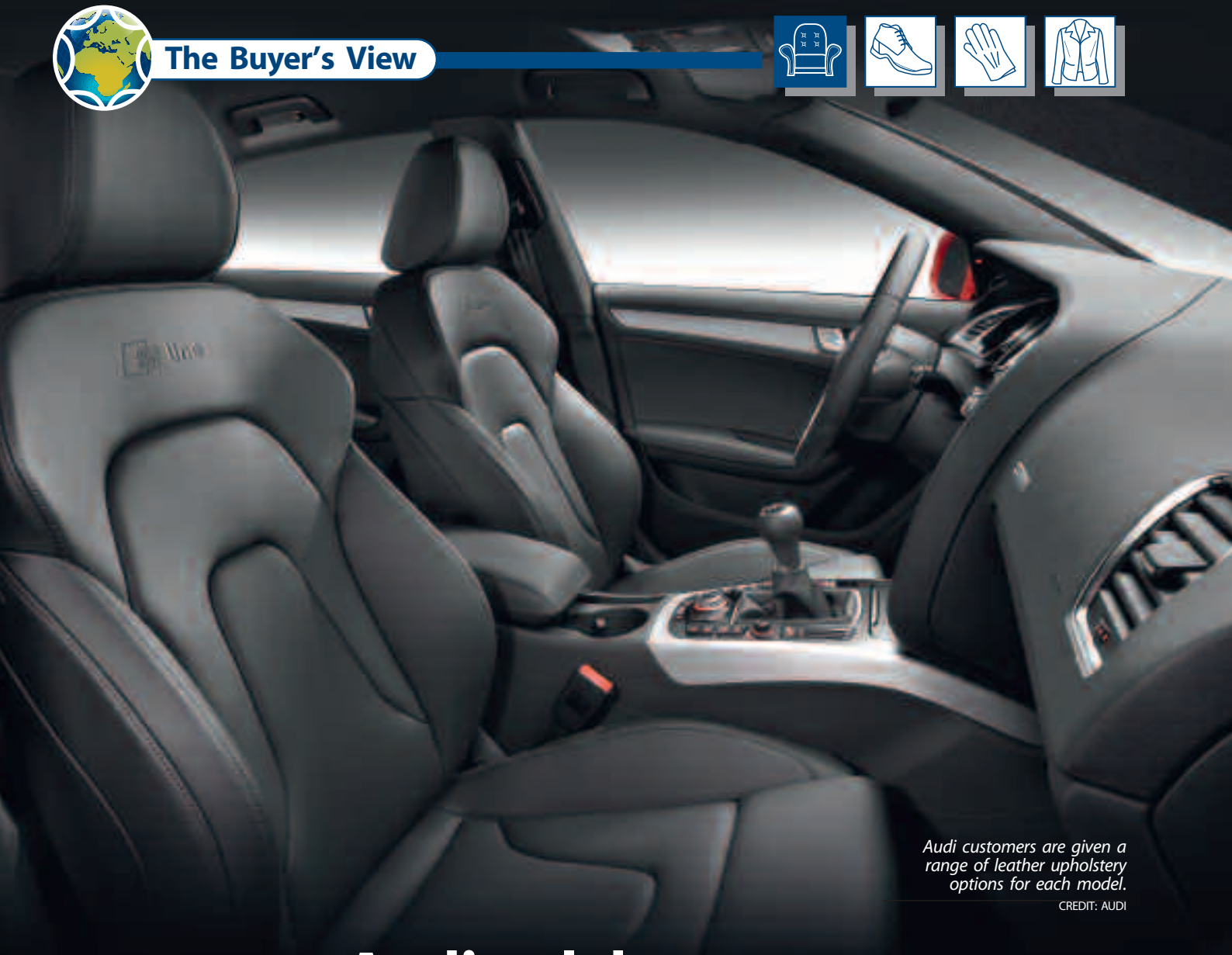




Audi customers are given a range of leather upholstery options for each model.

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Audi celebrates a century of leather

This year, German carmaker Audi is celebrating 100 years of using leather in its cars. The company takes its relationship with the luxury material very seriously, carefully monitoring the way it performs, looks, feels and even smells.

The company recently announced it would only use male hides for its leather seating and surrounds, mainly because the hides are larger and more homogenous than female hides. Furthermore, cow hides sometimes fail to meet the company's stringent quality controls. The male hides mainly come from southern Germany because, according to the company, the pastures there are almost entirely devoid of barbed wire fences on which the animals could injure themselves and damage the hide.

Quality cuts

Although the average bull hide measures between four and five and a half square metres, the company uses only a small part of each hide. It divides the hide into three quality zones and uses only the back piece or the croupon, the highest quality area as the grain is at its most even and there are few cracks or tears.

The leather from the centre of the croupon is used for all areas of the car seat where appearance and durability are most important, for example, the headrest, in the shoulder area, in the seat area and on the side bolsters and seatbacks. Leather taken from the directly adjacent areas of the croupon are used for all other parts of the seat, while the outermost pieces are discarded. The tanning process used for Audi hides is chrome-free and has been for 15 years.

The car company offers customers a range of leather upholstery options for each of its models. The leather offered is divided into three levels. The first is a basic leather, which is machine embossed and finished. The coating covers the hide structure and seals the pores, making the seat more durable. The mid offer involves less finishing, so the leather is more natural, more breathable and is softer for added comfort.

The third, and top, level is pure aniline leather. It is not machine embossed or coated. Because this leather shows its natural surface and grain, it requires a greater level of care. Unlike coated leather, it shows authentic characteristics, such as tiny scares, light rough patches and mosquito bites, in some areas. According to Audi, these are a "visible expression of



The Nose Team is employed to ensure car components do not give off any unpleasant odours.

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natural processing” and “underscore the authentic character of the material”.

Not only is the type of leather used considered important by the company, but the way it is applied and stitched is also a major concern. Because of their round and concave shapes it can be difficult to cover seats, particularly in sports cars, without causing wrinkling. However, Audi claims it is able to achieve this and that the seams on all of its seats and trims are “exactly straight, even and parallel”. It says this is largely attributable to the special needles it uses when sewing the leather. The needles minimise the “sawtooth” effect in the cap seam region which often occurs when the leather is drawn into the needle mark.

A nose for leather

Whichever type of leather is used, the company carries out rigorous tests to ensure it meets its high quality standards. It performs 45 tests on each grade of leather to determine its durability, among other properties. Samples are mounted in automatic fixtures to test whether they stretch evenly, their tensile strength, wrinkling and how resistant they are to abrasion and fire. The way they react to sunlight exposure and water vapour are also important.

Perhaps one of the most interesting tests it performs, however, is its “sniff” test. Its special Nose Team is employed to ensure that the leather appeals to the customer’s sense of smell as well as to their other senses. According to Audi, the smell inside a car is of “fundamental” importance, even though it is normally perceived subli-

minally. It claims smells generate positive and negative associations, so if the vehicle interior does not have the right odour, the customer may subconsciously develop negative feelings about other elements of the car.

For this reason, the company set up the Nose Team. The professional sniffers meet daily at the company’s Ingolstadt quality assurance laboratory. Chosen for their particularly sensitive noses, team members must adhere to some strict rules: smoking is prohibited, team members cannot work if they have a cold, and they must not give off any scents, including perfume, shower gel, after shave and even garlic during testing.

Performing the tests

Small samples of each component—ranging from the wood inlays to the leather upholstery—are taken to be tested. The specimens are placed in a bottling jar equipped with an odourless seal. An oven heats the sealed jar to 80°C for two hours. Each tester then lifts the cover slightly, sniffs the contents of the jar, reseals it and passes it to his or her colleague. They each grade the smell in secret. After five or six tests, team members take a one to two hour break before they can perform any more tests.

The team analyses roughly 500 different components from the passenger compartment for each model. It also examines complete components such as dashboards to test the interaction of the materials. The last step is to evaluate the vehicle as a whole. This is done by heating the interior in a climate chamber with large heat lamps. When a car sits in the sun for a long period of time, the interior can easily reach temperatures of up to 80°C. The Nose Team evaluates the overall impression and also attempts to identify any components with dominant smells.

According to Audi, leather is a natural material with a unique exterior and an incredibly special feel. It believes each piece of leather has very sensual properties and, as a result, says it handles the material with “kid gloves” in order to consistently meet its high quality objectives. The company is constantly developing new leather grades, and it is always looking for new ways to improve its breathability, softness and natural appearance. 🐾



Audi sees leather as a sensual material that should look, feel and smell good.

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