

MAESTRO IN MINI

Only four people in the world have the manual skill to shrink an automobile from fullsize to a perfect miniature model. One of them is Klaus Göpfert. A quiet man who inhabits a car-manufacturing microcosm, he works for Schuco.

Whatever you do, don't sneeze just this minute, or you'll blow away the gear levers and the steering wheels. One breath of wind or a deep sigh could wipe out a day's work. Because the materials that Klaus Göpfert uses to build his cars are as delicate as a butterfly's wing. The 57-year-old model-maker is busy with incredibly fine tweezers and sensors and tiny screwdrivers that remind you of your latest visit to the dentist. "My most important tools were given me by doctors,"

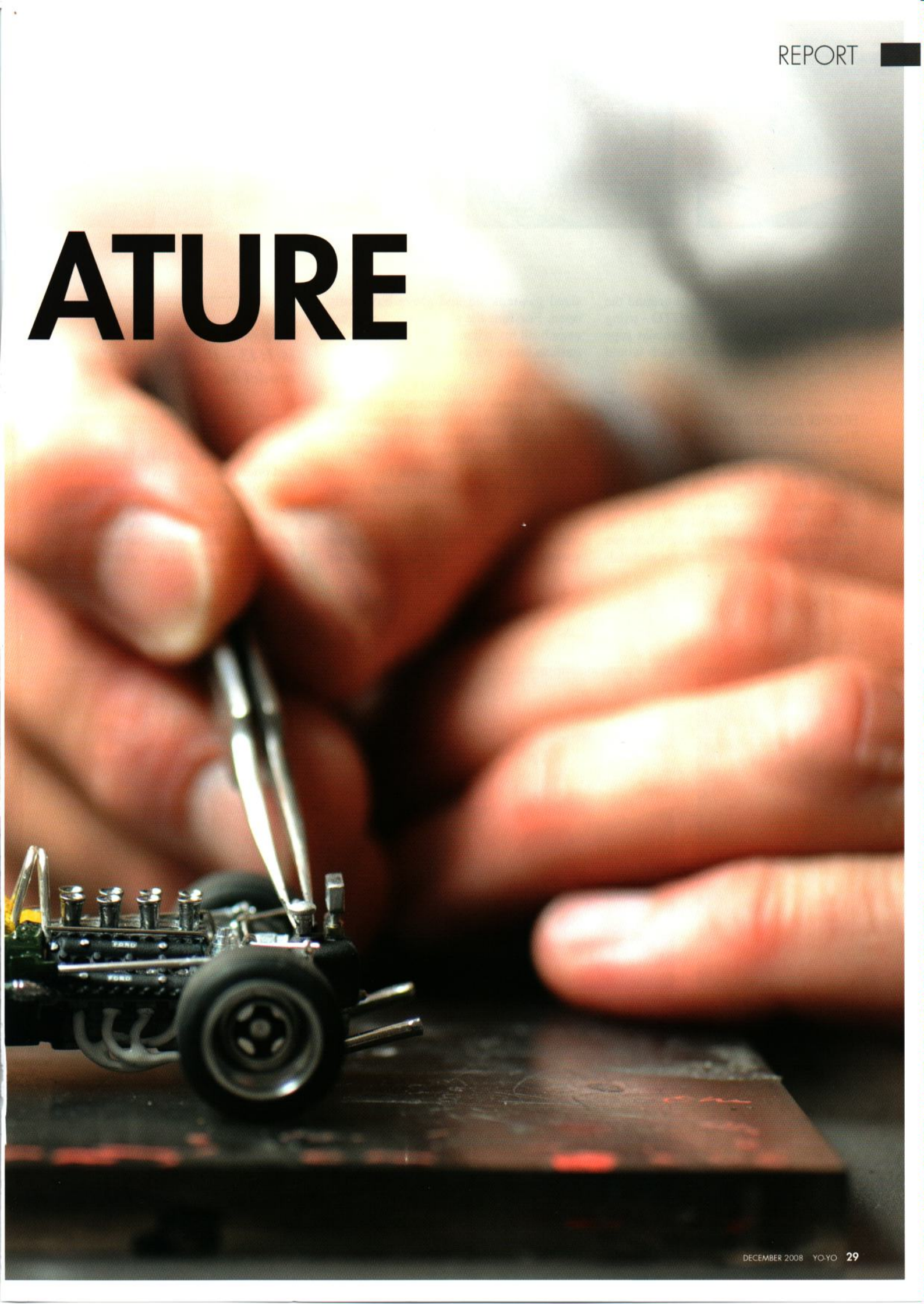
says Göpfert. For example, the needle and thread he uses to stitch seat cushions came from an eye surgeon. Visiting the little workshop in Bobingen, Bavaria, that Göpfert has christened his "one-man factory," one scarcely dares to breathe, much less touch any of the minuscule parts that mean the world to a miniature model maniac. The magic measurement is 1:43: fascinating! This rather strange ratio originates in imperial measurements, since the British were the first to

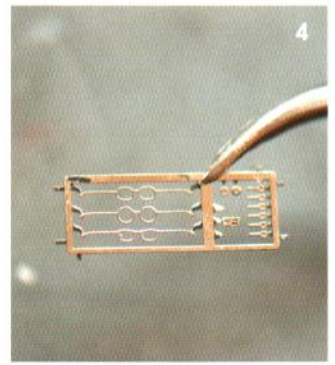
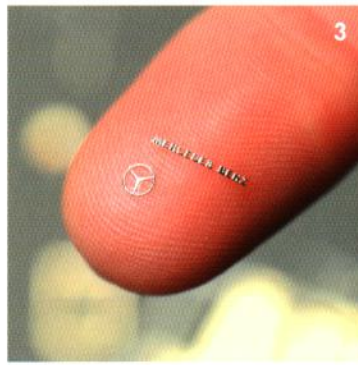
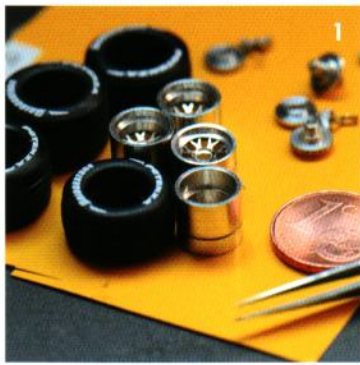
build these delicate models after World War II. The larger 1:18 ratio looks crude and awkward by comparison and Göpfert would disdain it as banal. He's known as the Stradivari of his craft: his manual dexterity is incomparable. Over the years he has developed car parts that are almost invisible to the naked eye. His windshield wipers contain seven separate parts, some finer than a hair from a man's beard. His wooden steering wheels are only millimeters thick, but made of real wood. ▶



Scarcely visible to the naked eye: every separate part of this Lotus 69 is hand-made.

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He also fixes chromium rings around the headlights of his Ferrari 250 GTO – using 0.3-millimeter screws. An exhaust pipe has 13 tiny parts, some of which would fit under a fingernail.

FILIGREE FUNCTIONALITY

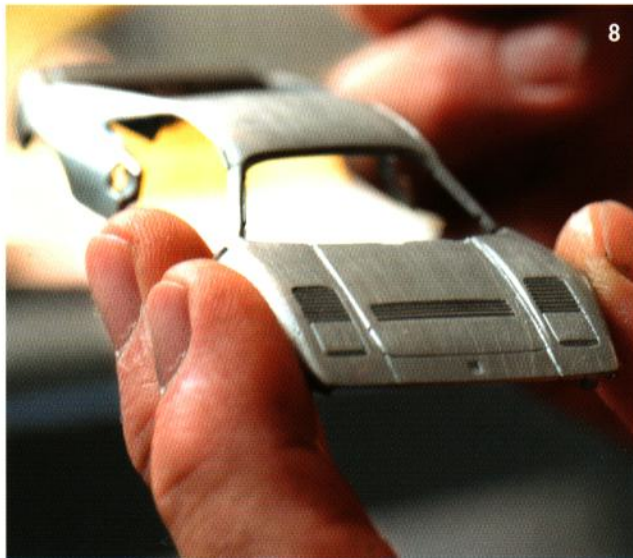
The crazy thing is that everything Klaus Göpfert builds works just like the original: the steering is precise, the headlights switch on and off, and the inside lights even come on when you open the doors, each as tiny as a mouse's tooth. You can feel and see the gears working when you shift the lever. And, of course, the pinhead-

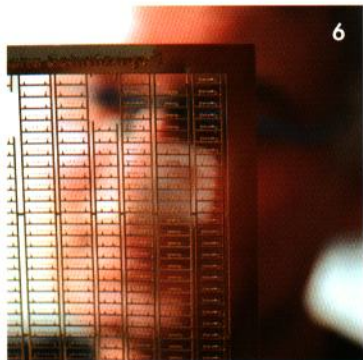
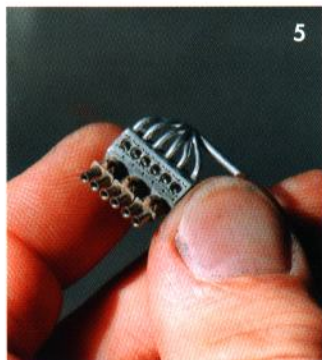
sized gas-tank lid and glove box really open. For fun, the skilled mechanic has even built interchangeable cylinder head gaskets into a six-cylinder engine.

You might have expected Göpfert to become a good clock-maker or cardiac surgeon; in fact he worked for years as a specialist dispatcher for a shipping line, responsible for enormous bulk carriers. From the age of 17 he spent his leisure time racing Fords and Formula 3 and tinkering with his car like any other amateur. As a boy he had already built model cars and was very skillful at it. Two of his motor sporting friends asked if he could make

The magic measurement is 1:43 – the golden rule of model building.

models of racing cars. He could – very good ones too – and this got about in the racing world, where everybody wants a model of their own car on their desk or in a showcase. Soon this spare-time craftsman realized that his delicate work had to be something special and worth a lot to





- 1: Set of parts for Formula 1 wheels.
 2: Screws and rivets are almost indistinguishable. 3: The Mercedes star and lettering are millimeter-fine. 4: Hairfine stencils of sunglasses and keys.
 5: A six-cylinder motor with removable cylinder head gaskets.
 6: The Porsche name in gold.

customers. He gave up his day job and in 1985 started his own one-man firm.

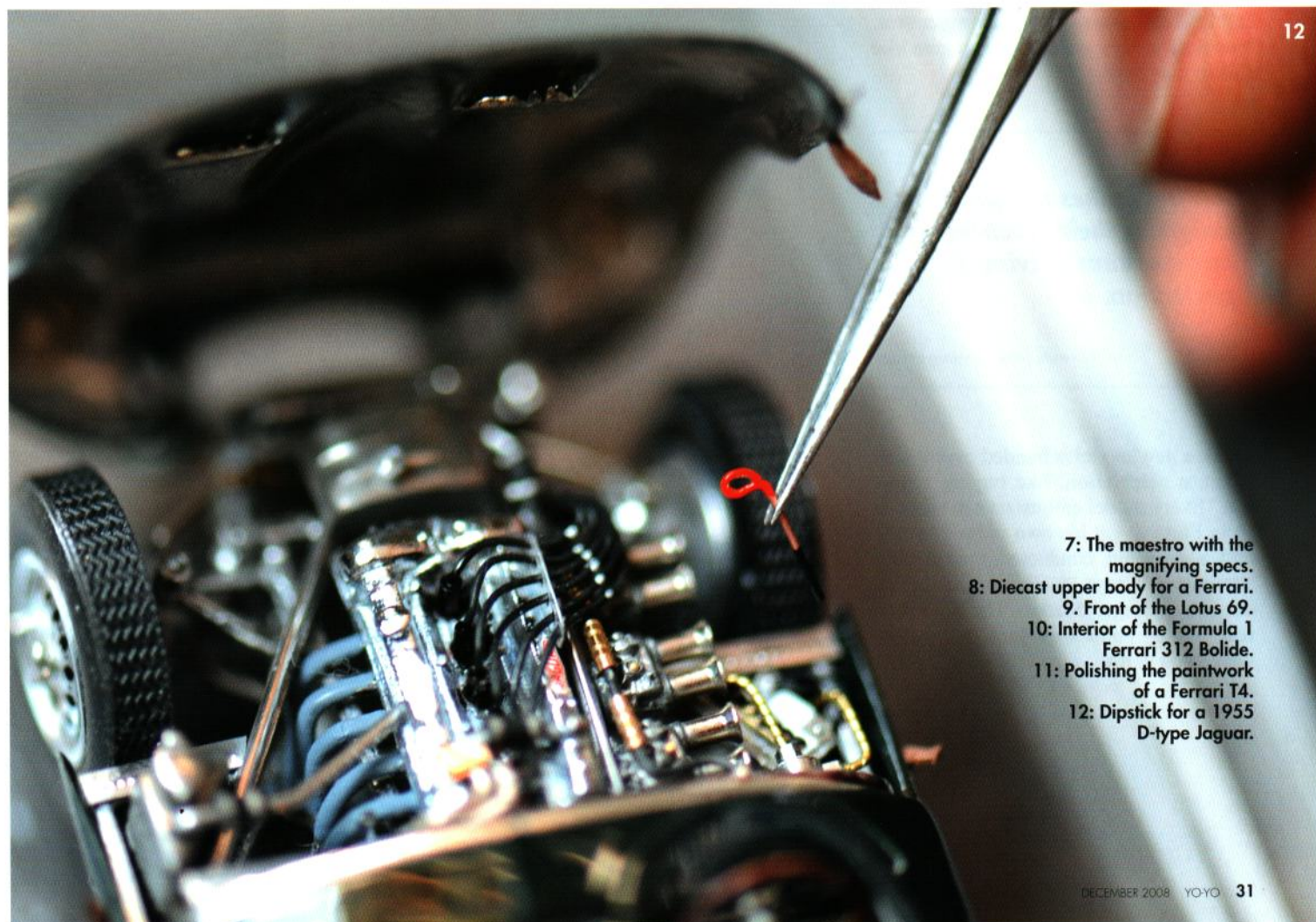
At that time miniature model-building was in its infancy. "I was the first to put in complete engines, to make seatbelts from original materials, and have radiator grilles that aren't just painted on." Those fine distinctions still apply today. Where Göpfert is concerned, anything that should open, opens – it's not just there for show. He is a precision mechanic: nothing is adapted, nothing omitted. He always prefers original materials. His Porsche logos are gold-plated, his seats are leather, the brake cables are carbon and the wheel

rims aluminum. Göpfert designs the tiny parts and they are then stamped by a specialist firm on to a photo-etching stencil. Individual parts have to be cut out using a scalpel. They are fixed not with glue but with acid. You can etch down to 0.2 millimeters, but no further.

SPECIAL ORDERS FROM SCHUCO

Needless to say, this model car maestro could not go unnoticed by Schuco, the cult brand founded in 1912, a member of the Simba Dickie Group since 1999. The Bavarian with the magic hands takes exclusive orders for smaller quantities than Schuco normally handles. He often goes

to measure the original he intends to imitate on the spot – in a private garage, barn, or museum. Down to the nearest millimeter. And he'll take photos, lots of photos. By the end he'll know every screw, every rubber ring. In fact he probably knew them pretty well already, because he's been studying all the automobile manuals for years. There are piles of them on the floor and on shelves in his workroom. The miniature maestro radiates profound tranquility. He has to: trembling hands would be fatal. Sometimes he works deep into the night without ever leaving his workshop. A 15-hour day is nothing unusual. "Once I've started I simply can't stop." ►



- 7: The maestro with the magnifying specs.
 8: Diecast upper body for a Ferrari.
 9: Front of the Lotus 69.
 10: Interior of the Formula 1 Ferrari 312 Bolide.
 11: Polishing the paintwork of a Ferrari T4.
 12: Dipstick for a 1955 D-type Jaguar.



He just needs to stand up from time to time to ease the strain on his shoulders and the back of his neck.

A SCHUCO MODEL IS AN EVENT

His latest job for Schuco consisted of 30 1954 Mercedes-Benz 300 SLs. Each model represents 70 hours' work – by hand – and contains 320 separate parts.

Wheel rims, ignition coils, handbrake, interior and exterior mirrors are brass; hinges are steel, leather, and rubber, just as in the original. The tiny cabins even contain minute carpets bearing the appropriate emblem. And look! The driver's left his sunglasses on the passenger seat. Needless to say, you can't buy a gem like this in the shops.

» What makes our products unique is their precision and our constant striving for perfection. «

Markus Hirsch, Schuco marketing manager

When a new model is handed over it's an event, a celebration, like buying a new car. "Every model enthusiast can come to us in Fürth to get his own unique model, and a personal conducted tour of our showroom," says marketing and key account manager Markus Hirsch. For a real model enthusiast that has to be heaven on earth. ■



1-3: Lovingly detailed: it may be 43 times smaller than the great 1954 original, but it is alike in every respect.



- 1: Precision perfection: the silhouette of the Lotus 69.
- 2: Red 1960s Porsche 356.
- 3: Ferrari 312 with two-part chassis.
- 4: The legendary D-type Jaguar.
- 5: A Ferrari racing sports car.



This Mercedes-Benz 300 SL contains 320 separate parts.