

# Motor

**Why they all  
want the man  
who styled  
this Maserati**

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**Tyrrell's  
designer  
Derek Gardner  
describes his  
ideal GP car**

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**How to protect  
your Xmas  
shopping**

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**Opel's best yet?  
We road test  
the Commodore  
Coupe GSE**

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**Stainless  
steel pipes—  
answer to  
your exhaust  
troubles?**

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**Bishop on  
the race  
against wine**

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## Insurance against breakdown?

Would the sales of new and good used cars pick up if buyers could insure against mechanical failure (as they do against accident damage) after the warranty period — no more than six months for some foreign cars — had expired. Or, in the case of a used car sold without a guarantee, from the time it was bought?

This sort of insurance against what can be crippling garage bills has been offered in the past but failed, maybe through lack of publicity, to attract enough business to make it a viable proposition for the insurance companies. Soaring inflation suggests that the time is now right to resurrect the scheme.

With repair charges rising as fast as most other motoring costs, we asked our insurance contributor (an incorporated broker) to sound out opinion among Lloyds underwriters on this type of cover. There has been an encouraging response from three Lloyds syndicates so far, although they're naturally cautious because of the poor reception the scheme got last time.

There must be a considerable volume of business if the premiums are to be set at an attractive figure. Moreover, the assured support of those who sell cars, as well as those who buy them, is necessary before the level of risk can be determined.

The initiative must come from the people in the motor trade. They know the market and (presumably) their customers. They also have the best outlets for offering such insurance to the public. There would have to be safeguards for the insurance companies, of course, to ensure that the unscrupulous dealer didn't attempt to drum up sales of duff cars which he knew would bolster his repair business later at the insurer's expense.

We believe that if such insurance could be offered at a realistic price, to cover cars up to a certain number of years or miles, it would remove the fear of costly repairs that must deter many potential customers from changing their car. Better to keep the devil they know than risk a new one.

What do you think? Suggestions and reaction from motorists, the trade and insurance experts would be welcome. We'll pass it all on and perhaps help to get what seems to us a promising scheme off the ground again.

## THIS WEEK

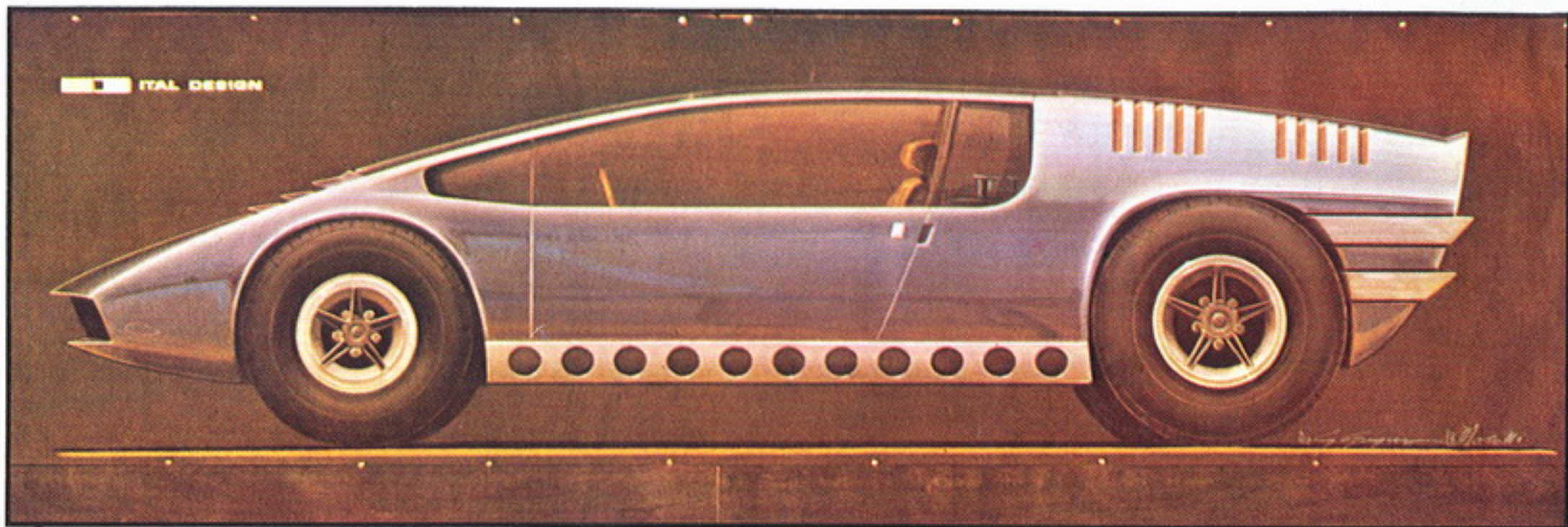
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What has the VW Golf in common with the Maserati on the front cover? The answer is that the styling of both was the responsibility of the same studio, the one bossed by Giugiaro. We profile a trend-setter on page 50. Our man in the Great Wine Race was George Bishop, who spins a merry tale of Bacchus and Beaujolais on page 44. Stainless steel exhaust systems have all sorts of advantages—just how many can you assess after reading our report, page 32. The Opel Commodore GS/E Coupe is the most expensive car in Opel's UK range. Is it worth it? See our road test page 2





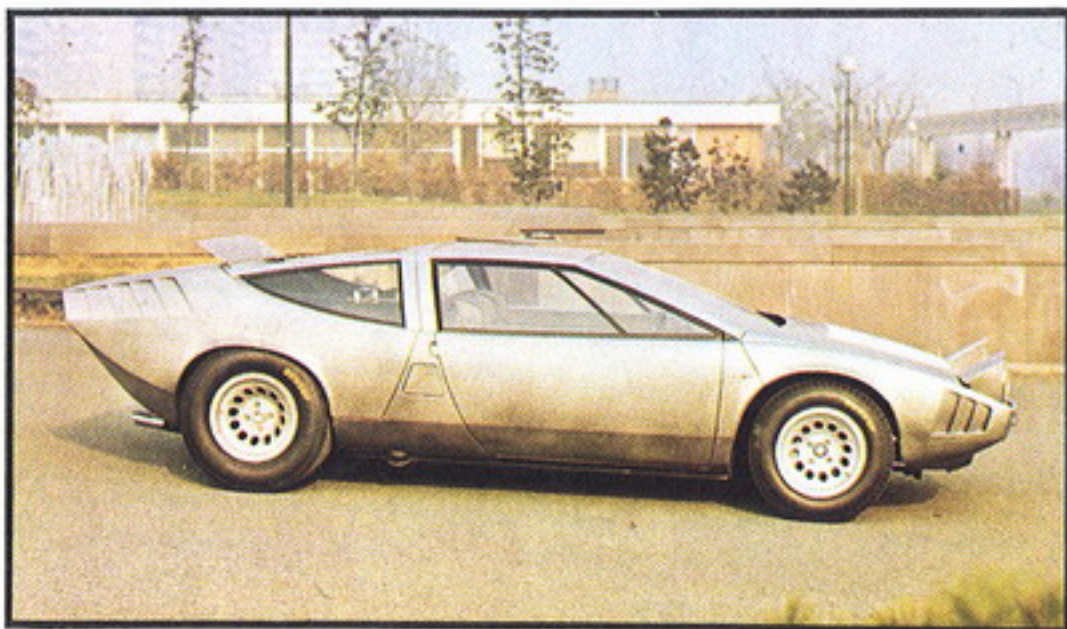


# GIUGIARO~ MAESTRO OF FORM

Few men of such youth can boast the achievements in form that the young Italian stylist Giorgetto Giugiaro can. He's been responsible for around 70 per cent of all the Turin Show stoppers these past 15 years, as Brian Hatton relates, overleaf



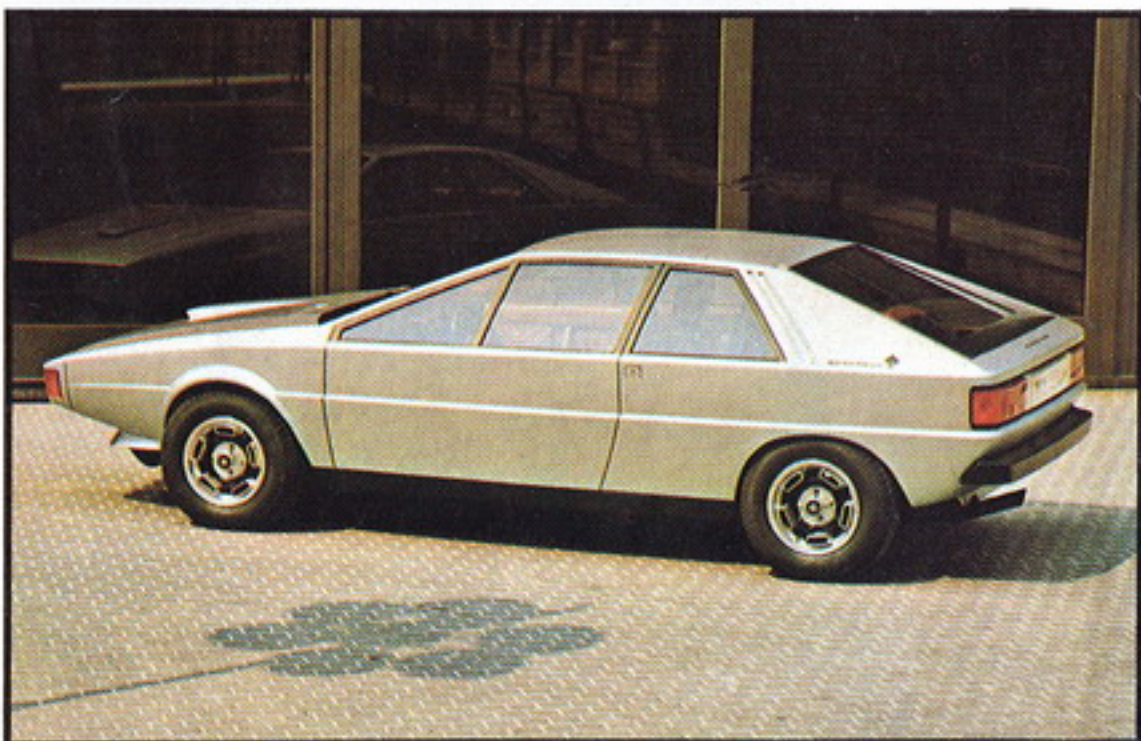
Giugiaro's rendering (top) of the Itai Design Bizzarini Manta shown by the then newly formed company at the 1968 Turin Show



Alfa Romeo's sporting Type 33 formed the basis for the Iguana (above) exhibited in 1970 while as a token of their appreciation for designing the Alfasud, Alfa Romeo passed over a chassis of the newly announced car for Giugiaro to build the Caimano (below)

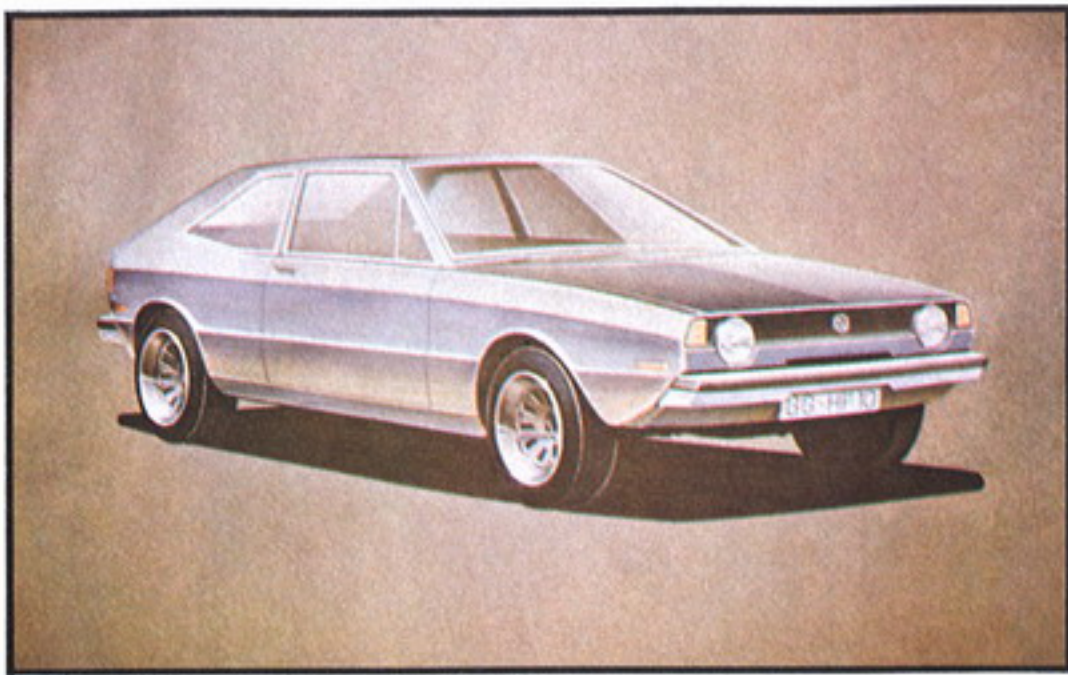


Early stages in the sketch-book life of the VW Porsche Tapino and also the wooden buck from which the skin was formed

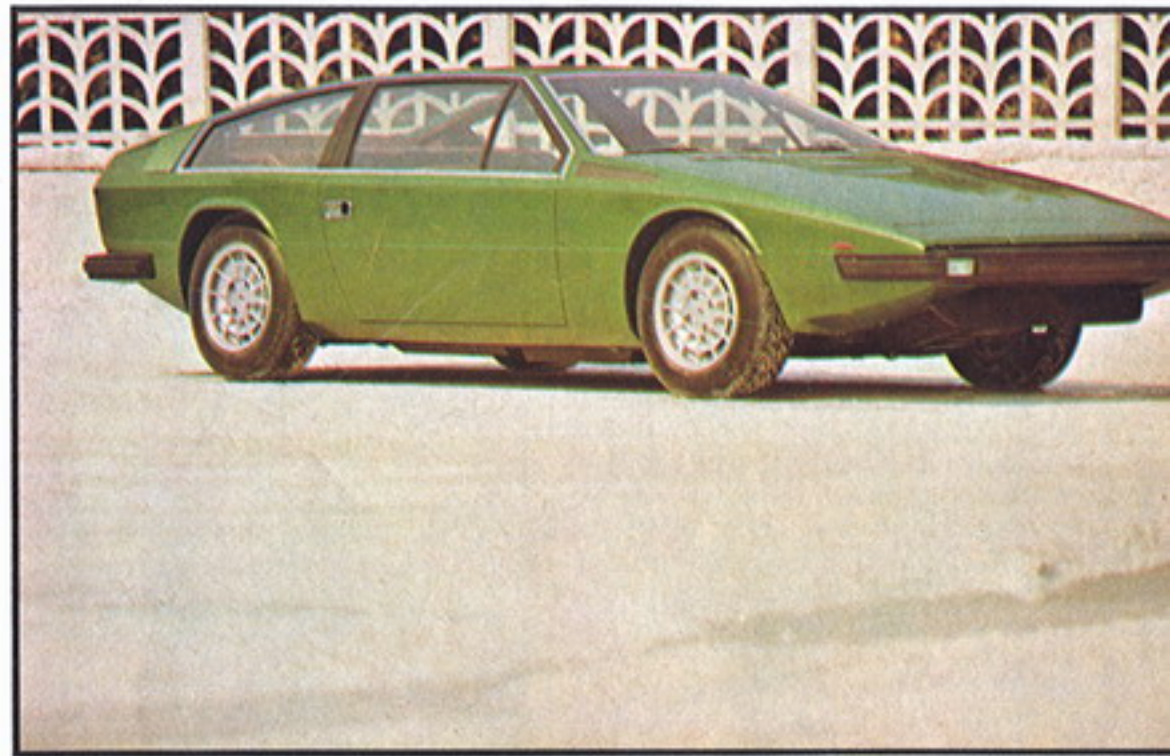


The Audi Ace of Spades displayed the first signs of Giugiaro's change toward angular contours, a trend shown again on his latest work, the coupe version of the Hyundai Pony (right)





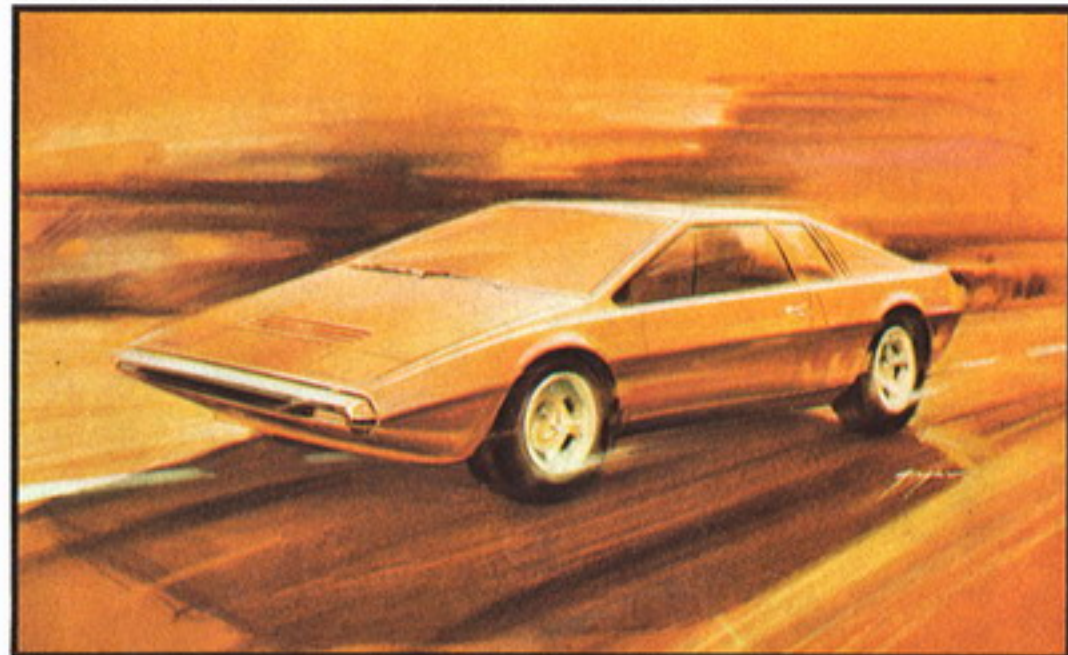
Successful co-operation with Kharman led to work with VW and the building of the Scirocco



The latest product of Ital Designs work for VW is the Golf



A Maserati that might have been, had not the financial climate changed, was shown by Ital Design at this year's Turin Show. The sumptuous interior (left) in leather follows the same fashion as the Ace of Spades



Giugiaro's idea of how a Lotus should look; this was shown as the Esperit at Turin in 1972



An appearance which is both robust and sophisticated has been chosen by Giugiaro for Hyundai's Pony Saloon, the interior of which is well up to the current European requirement for good trim and clear instrumentation



If you traced the antecedents of 70 per cent of the Show stoppers of the past 15 years, they'd probably have originated from Giorgetto Giugiaro. He is now *the* stylist of the moment, the man with the best track record for elegance in the business, and one of the most sought after by the big manufacturers.

Born 36 years ago into a family whose artistic background was the decoration of frescoes for churches and palaces of northern Italy, it was natural that he should be sent to study the subject as a boy. So at the age of 12 he already was following a course of painting and illustration under Eugenio Colmo in Turin's Accademia di Belle Arti. Later, to learn more about illustration, he took another three-year course in technical design, which was to prove the springboard for his career.

At that time he had no particular interest in cars, but some of his humorous charcoal sketches involving them came to the notice of one of his tutors, who was related to Fiat's Ing. Dante Giacosa, then



The man with some of his machines. Reading clockwise: Maserati Boomerang, Alfesud, Alfesud Caimano, Alfa 33 Iguana and the Maserati Bora

**Volkswagen Scirocco**  
Wolfsburg, marzo

**Alfa Romeo Alfetta GT**  
Milano, maggio

**Volkswagen Golf**  
Monaco, maggio

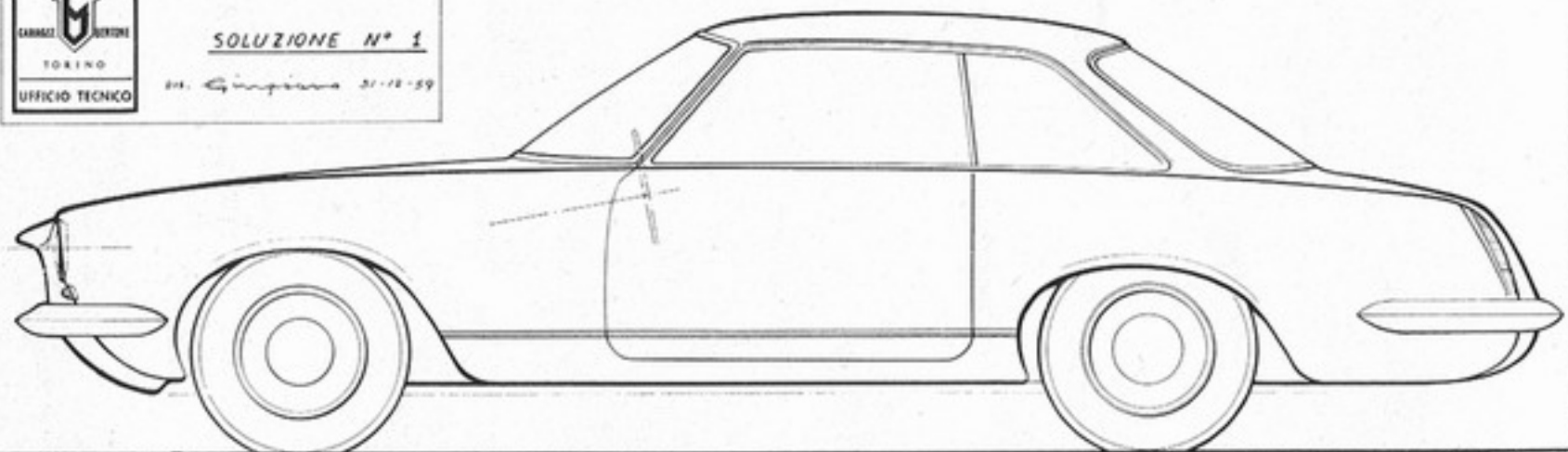
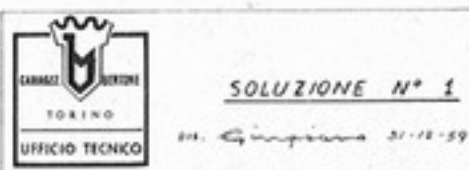
**Hyundai Pony**  
Torino, ottobre

**Hyundai Asso di Fiori**  
Torino, ottobre

**Maserati Coupé**  
Torino, ottobre

**Medici**  
Torino, ottobre

One year's output of designs from Ital Design



head of their central styling department. He invited Giugiaro to join his team, and what was meant as a job to finance further studies became his profession.

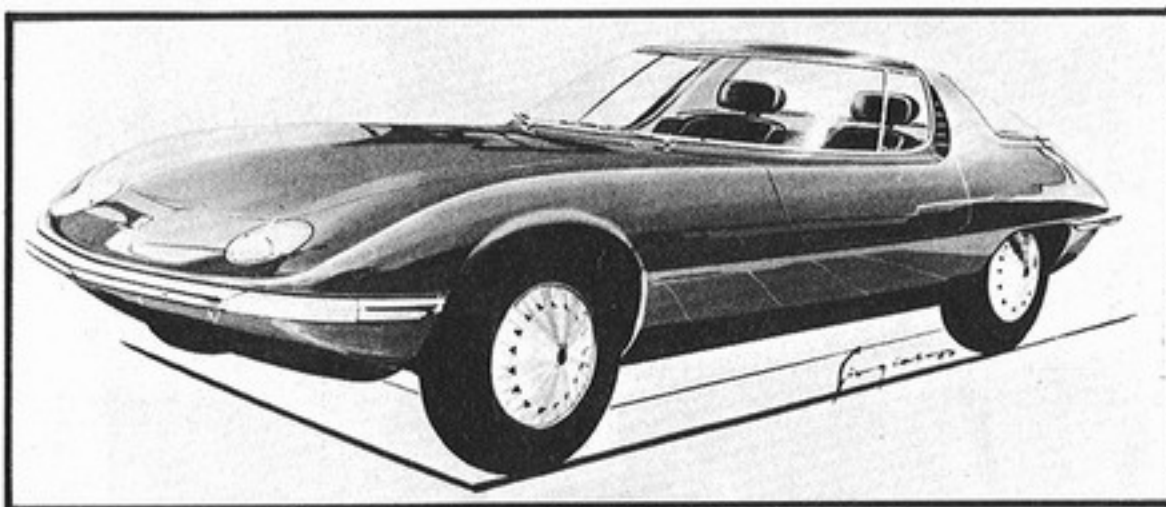
Giugiaro stayed with Fiat for four years, learning by doing, so that he became completely involved with car design, and gave up the idea of painting and fine art as a means of earning his daily bread. Using his innate skills though, he still paints for pleasure.

Chance again moved him onto Bertone's Carrozzeria because a mutual friend introduced him to Nuccio Bertone on his stand at the 1958 Turin show. Bertone was so intrigued with Giugiaro's design that he was asked to become chief (and at that time only) designer for Bertone.

From his work with Bertone came some 20 of the most polished cars of the Sixties. Starting with a design for J. S. Gordon of Peerless, later to become the Gordon Keeble, it included the Iso Rivolta and Grifo, Fiat 850 Spider (commercially one of their best designs which stayed in production until last year) Chevrolet Corvair Testudo, Alfa Giulia Spring and the delightful Alfa Canguro, the Mazda 1000 saloon and 1500 Luce, and finally, in 1966, the Fiat Dino Coupe for which he had laid out the general line some years before.

Having reached the great age of 27, now married with a young

Giugiaro's solution No. 1. His design for Bertone's submission to the Peerless Car Co, Slough, the car which became the Gordon Keeble



A highly finished rendering for his presentation of the GM Corvair Testudo, Geneva 1963

Below: the remarkable Alfa Giulia Canguro, Paris 1964





family, Giugiaro decided he would move to another Carrozzeria. Although his name was appearing on the drawings all the work was presented under the Bertone house name. So he moved to Ghia, a house which was not at the peak of its achievements but which was to blossom with the advent of Alessandro de Tomaso and the American Rowan Corp. This combination of talents led to the exhibition in 1966 of four new designs, the de Tomaso Mangusta and Pampero, Maserati Ghibli and the Fiat Vanessa. The Mangusta, intended as a showpiece, aroused such interest that it was put into production, and the Ghibli put Maserati back on the road to compete again with Ferrari. Giugiaro stayed with Ghia as an employee until April '67 and then got the idea of forming his own group. During this period he acted as adviser to Ghia to see his work carried through to public presentation. The five designs involved ranged from the Thor, a mighty machine based on the FWD Oldsmobile Toronado, down to a diminutive electric town car for the parent Rowan Corporation.

Giugiaro's ambition to create his own design organisation came to fruition at the beginning of 1968, formed with three friends, Aldo Mantovani and Luciano Bosi, the former an expert in body structures and the latter in production methods, and the third, Gino Boaretti, a specialist in tool design. He hoped they would be able to move beyond the constraints of the usual hand-built bodies of the Turin Carrozzeria into the wider world of mass production.

Thus Ital Design was born, growing over the past six years into a most efficient and prolific unit. To date there have been 23 different designs shown to the



Ghia/Rowan electric car, Turin 1967

public. The first was the three-seater Bizzarrini Manta shown at Turin in 1968, then came the first big operation, the work with Alfa Romeo leading to the complete production and tooling design for the Alfasud, the Maserati Merak, Boomerang and Bord, work with Karmann on the VW Cheetah (which led to contacts with VW and the design of the Passat, Scirocco and Golf) and now this year the production and design work for the Hyundai Pony for the South Korean Group. The success of this work led to the opening in April this year of the new Design Unit at Moncalieri just outside Turin which houses all Ital's design facilities under one roof and covers an area of 12,000 sq metres.

Thanks to the goodwill and hard work of Dr Molineri, the Press and PRO of Ital Design (and Giorgetto Giugiaro's cousin), we managed to slot in a brief interview with Giugiaro at Ital's new



centre on the opening day of the Turin Show. We were expecting only a very brief meeting but his reputation for unflinching courtesy was amply justified as we found this easy, assured, approachable man happy to talk about design without any of the egotism justified by his record.

We were intrigued to find out how he could produce so many fresh ideas in so short a time. He reckoned that he carried his ideas around with him, mentally interplaying shapes and proportions to form fresh ideas. In the time that he has been designing cars he says it is not possible to separate out the individual

Above left: the great little money spinner, Bertone's Fiat 850 Spider, Geneva 1965. Left: De Tomaso's Mangusta which aroused such interest when exhibited in Turin in 1966 that it was put into production

aspects of his working methods. Proportion, he says, is like musical harmony; the public's tastes are always changing and, he hopes, advancing. He cites the golden rule of acceptable proportion as being the ratio of one third to two thirds which, he says, was usually applied to the canopy of the cars—glass to metal respectively. This, he thinks, has now been outdated by his introduction of the dropped waistlines bringing larger glass areas, which public now find acceptable. Was he, we asked, the Schoenberg of the styling world? He thought not, but designers are like athletes in top class competition, the gap between the performance of the top few becoming narrower with each decade.

His training as an illustrator obviously influences him in his initial approach. He never starts

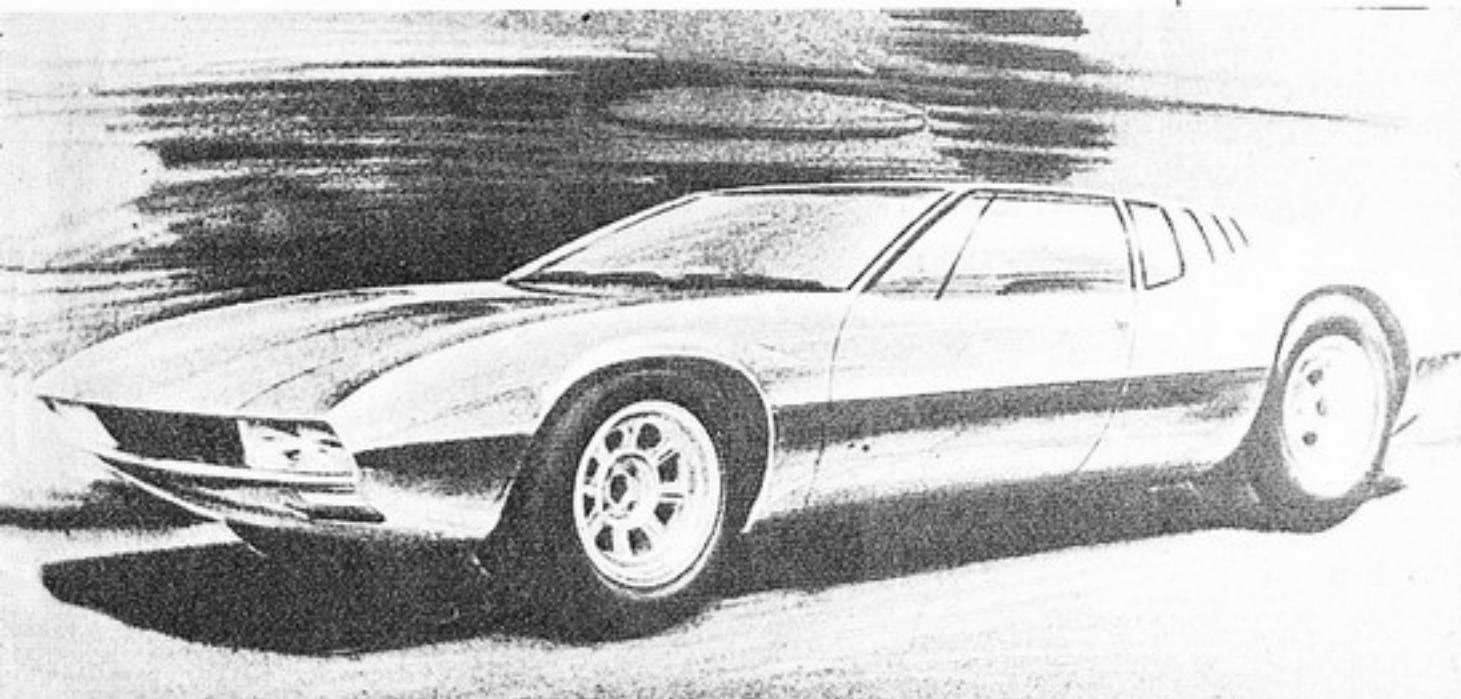


The Ghibli, Maserati's sales booster, Turin 1966

with a model, preferring to get his first thoughts down at home with 1/10th scale on orthographic drawings (side, plan and front and rear views). While he is talking his hands are expressing his ideas in small, precise sketches. When these have jelled he brings them to the office to work out the feasibility with his staff. If these work then everything goes on to the full-size draughting boards. He then puts his ideas into perspective renderings.

We asked about aerodynamic considerations. He said that he could tell pretty well from experience what would be acceptable in broad outline, and that later tunnel testing would bear him out, usually with quarter scale model in Turin's polytechnic tunnel. But sometimes the customers' changes would cause headaches—not the single customer but usually the clients' committee, where it is always difficult for the designer to defend his efforts, since each committee member feels expected to have some say in the appearance without contributing anything positive.

We asked about the Italian Manikin used in the design of interiors—the one who always seems to have short legs and long arms. He ruefully admits that these dimensions have been applied by some companies in the past, but as he and Dr







Molineri are pretty tall he doesn't think it will apply to his designs. Fixing these critical dimensions, which every buyer will notice, is the most time-consuming part of the whole project, especially when working on a small car. This was particularly true of Ital Design's first joint production design, the Alfasud, where the man in charge was Rodolfo Hruska who is not only well over 6ft tall but knows to within a millimetre the size of things which fit him. "A pleasure to work with," says Giugiaro, "but he even gives his tailor dimensions for how far his shirt cuffs will project beyond the sleeve of his jacket." It was his demand that the boot of the Alfasud should hold four cases which he had specially made for his own clothes, that caused the hinges of the lid to be placed on the outside. Hruska was equally adamant about the exterior dimensions; one of Giugiaro's first designs had a front overhang 10mm greater than specified. This was rejected by Hruska who said 10mm on the nose, 10mm on the engine bay, 10mm on the passenger compartment and the car has moved out of its intended place in the market.

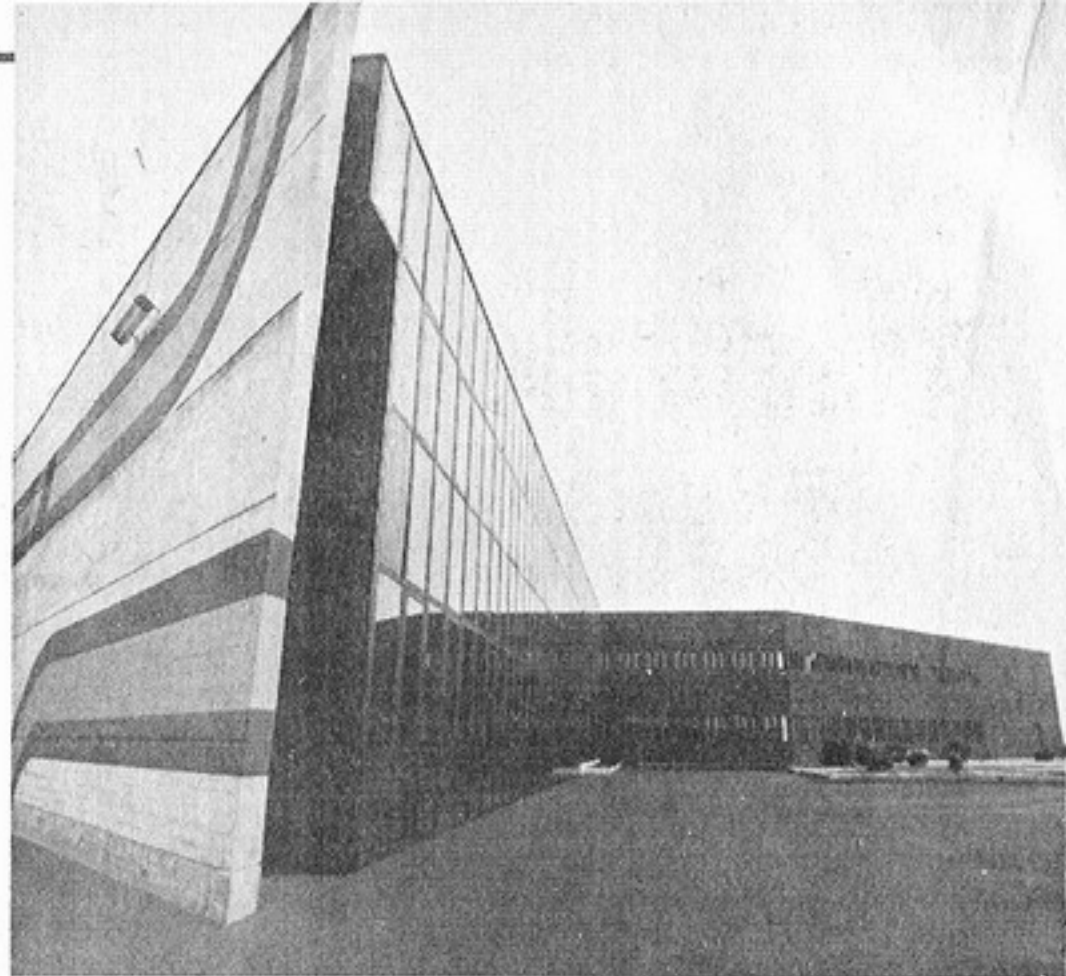
The opposite end of this size spectrum must have been the initial brief received from the Hyundai Co in September '73 with the request for a design of what was to become the Pony. They just enclosed a photograph of the engine. Fortunately Mitsubishi, the engine and transmission suppliers, came up with the rest of the information so that it was possible for Giugiaro to carry on and complete his feasibility drawings. These were started in January and by July they had built four prototypes, and by October a show car. This gives some idea of the rapidity with which they work.

We got around to his impression of British cars, but in his tactful way he would neither praise nor condemn. What would he do with, for instance, the E-Type Jaguar? He said that it would be difficult to do small changes on a car with such character but he would like the opportunity to do a complete body design. And what had happened to his Lotus Esprit? It was still a production possibility, he thought, although getting the drag factor down to the Lotus specification of 0.036 had been difficult (the first quarters scale model was 0.042) but they had then managed on another model, with the aid of a big spoiler, to get it into the region of 0.028 which had encouraged them to

build a full-size body. This had not progressed beyond the show prototype stage. What about the latest Citroen, we asked? They have a very good formulae to which they stick, but the GS was a more successful design than the GX because it had grown beyond its proper size for the formulae, particularly noticeable around the "pavilion" area.

We expressed admiration for his interiors, particularly the graphics and digital presentation. He says that the interior design offered scope for greater imaginative treatment than anywhere else on the car. His ideas of grouping minor controls near the wheel, cantilever consoles, seat designs, and sensible arrangements over heater control layout shows an appreciation of ergonomics which is as least as active as his aerodynamic knowledge. The use in his prototypes of a variety of upholstery materials—hide, suede, cord and nylon—displays another facet of his taste. His concern does not end at appearance alone, he uses tactile values of the upholstery, carefully relating them to the use of plastic and glass to create reassuring, though distinctly automotive, interiors. This interest in interior layouts had led him to complete the seat design and interior safety work on the Agusta 109 eight-seat helicopter which appeared at the Farnborough Show this year.

Moving Ital Design out of the purely automotive field has been made possible by the opening of



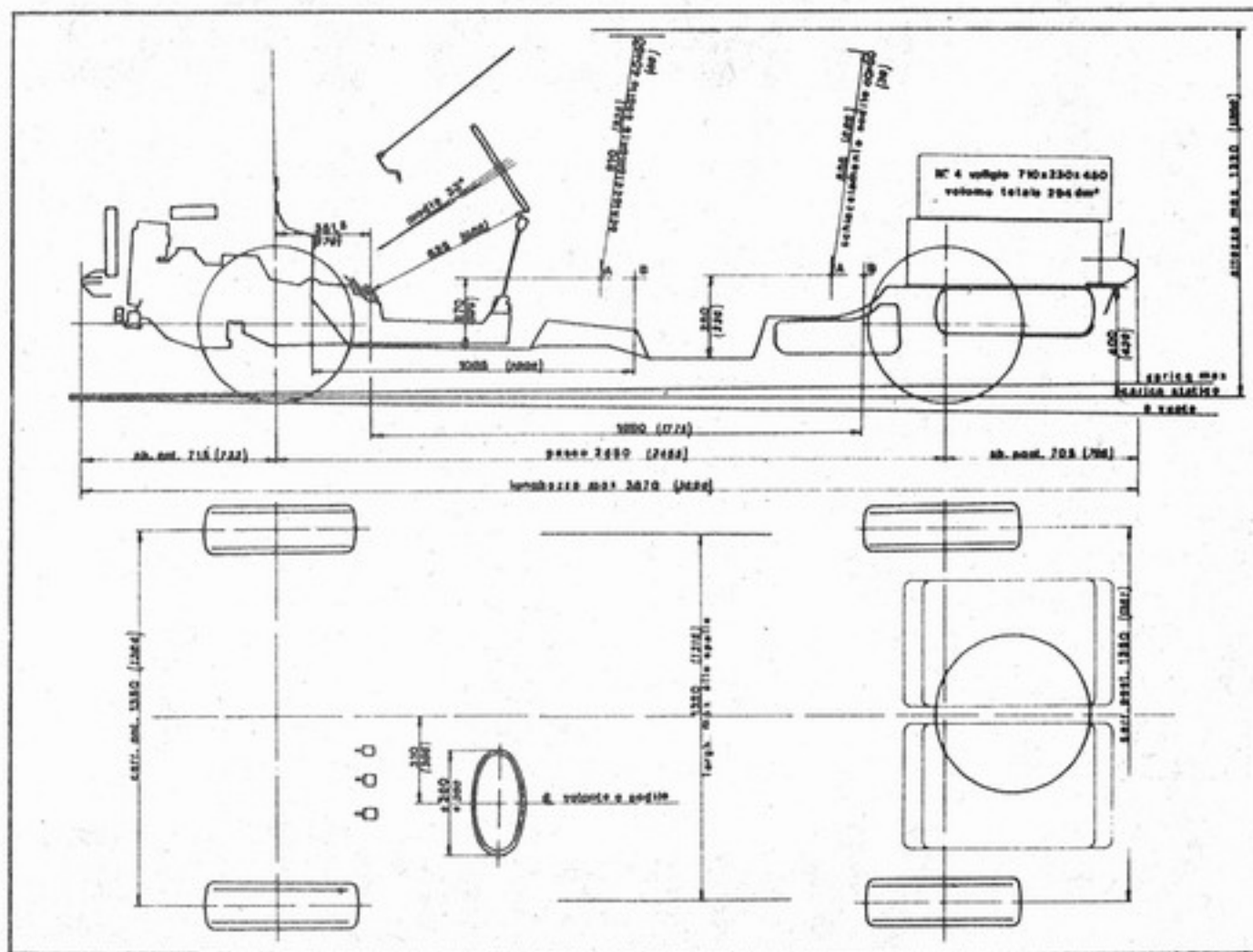
Above left: Giugiaro's early association with Karmann led to the Cheetah Ital Design Moncalieri factory, showing the tinted glass facade and decorative bands of colour

the Moncalieri factory. Although this unit employs about 150 people, Giugiaro still works in the main studio alongside his eight designers who help develop his basic themes. His ideas on graphics can be seen throughout the factory, a fairly simple concrete structure, but one carefully decorated with abstract paintings and coloured bands (which are continued on the outside) to reduce the stark effect. Perhaps a form of industrial fresco? Facilities usually found in styling areas are all here—inside and daylight viewing areas, large modelling studio, glass fibre shop and photographic studio, plus the production design unit which decides on methods, equipment and automation. All are kept under one roof to create the sense of working in a tight knit community.

To get the flavour of one of his products we had a chance to drive the Audi Ace of Spades around the landscaped area fronting the factory. This told us little

of its handling but did give us a chance to try a very sensible design with good visibility, adequate head and leg room and with a lavish interior that proved how well Giugiaro's ideas are accomplished.

Other aspects of industrial design, now being covered by Ital Design's Industrial Division, which will probably be seen in this country, range from fridges, irons and hairdryers for Indesit; motorcycles ranging in size from 350 cc to 1000 cc for Ducati; packaging for L'Oreal cosmetics, and tyres for the German Continental company. For the domestic home market they are working on projects ranging from low cost pen sets for schools, through furniture, bathroom fittings, and photographic equipment, to 34ft motor launches. If diversity is the key to Ital Design's success, then one day we may all own something which originated from the brilliant pen of Giorgetto Giugiaro.



How it all starts. Alfa's basic dimensional parameters supplied to Giugiaro for designing the Alfasud