

NIA





Back in 1962 a teenage Steve Nichols was at home in Salt Lake City, pouring over the latest edition of “Road and Track”, his only connection to the European racing scene which had so captured his imagination.

One particular article caught his eye. Entitled “Chapman’s Tubeless Wonder”, it was an in-depth story on the revolutionary new Lotus 25 F1 car which featured an aluminium monocoque and fully reclined driving position. And which over-night rendered its competitors obsolete.

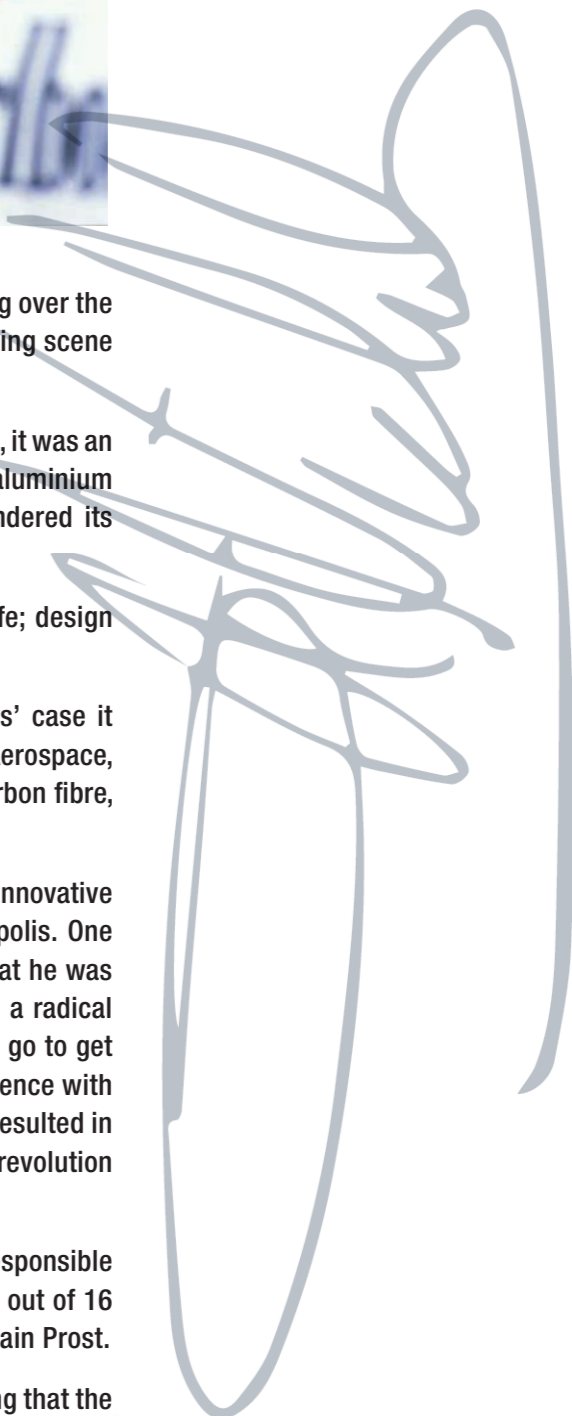
From that moment onwards Steve knew what he wanted to do with his life; design F1 cars.

Living in the USA, the career path was not especially obvious. In Nichols’ case it meant a degree in aeronautical engineering and a first job at Hercules Aerospace, designing rocket motors and familiarising himself with a new material, carbon fibre, years before its introduction in motorsport.

His first job in motor racing was with a shock absorber company, where his innovative dampers were responsible for a significant increase in speeds at Indianapolis. One of his customers was a young John Barnard. Barnard confided to Steve that he was going back to England to design a new F1 car and that he wanted to use a radical material, carbon fibre, but he had no idea how to design for it or where to go to get things made. The result was an offer to join McLaren, where Steve’s experience with carbon and the manufacturing expertise of his former employer, Hercules, resulted in the first F1 carbon fibre monocoque car, the McLaren MP4/1 and a global revolution in motor racing.

When Barnard left McLaren for Ferrari, Nichols became Chief Designer, responsible for the McLaren MP4/4, the most successful car of all time, which won 15 out of 16 races in the 1988 season in the hands of the legendry Ayrton Senna and Alain Prost.

With McLaren blood so obviously running through his veins it’s not surprising that the first car to bear the “Nichols” name is inspired by the very first McLaren, the M1A.



The new Nichols N1A is a stunning piece of sculpture which brings M1A design language thoroughly up to date. Not a single panel is the same. The N1A has a significantly more aggressive stance from its ground-stroking nose to its abrupt and purposeful tail. It is wider, longer and roomier; yet compare the elegant simplicity of the MP4/4 with the visual presence of the Nichols N1A and it's not hard to see the hand of the same designer at work.

Underneath the skin the N1A is thoroughly modern featuring a bonded extruded aluminium and carbon fibre chassis. Suspension features classic wishbones all round. Power steering and traction control are available. Wheels and tyres are 19" clad with 245 section rubber on the front and 20" 305 section on the rear.

Sat in the fully reclined driving position, you get an idea of what Senna and Prost experienced in the MP4/4; the main difference being that it is possible to experience the N1A on the open road.

And what an experience!



The product of a man with a lifelong obsession with light weight, the N1A comes in at less than a scarcely believable 900 kilos, including fluids.

Power is from a 7.0 litre (427 cu.in.) V8 engine which develops over 600 bhp and prodigious amounts of torque. Drive to the rear wheels is via a 6-speed Graziano transmission with a beautifully weighted manual shift topped by a gear knob inspired by Ayrton Senna's 1989 Monaco Grand Prix-winning car. A paddle-shift option is available. Acceleration is brutal.

Grip and handling familiar only to those who have driven racing cars of the highest calibre.

Seated at the wheel you are met with a stunning view forward across an extremely low scuttle framed by the towering profile of the sweeping front wings.

Every surface and control is there to serve a purpose; to put you at the centre of the driving experience in this most focused of cars.

For a little extra you can be fitted for your own bespoke seat, hand made by the same people who make the seats for half the current F1 grid.

The process is an experience in itself, taking several hours, working with the fitters to arrive at the perfect, most supportive solution.

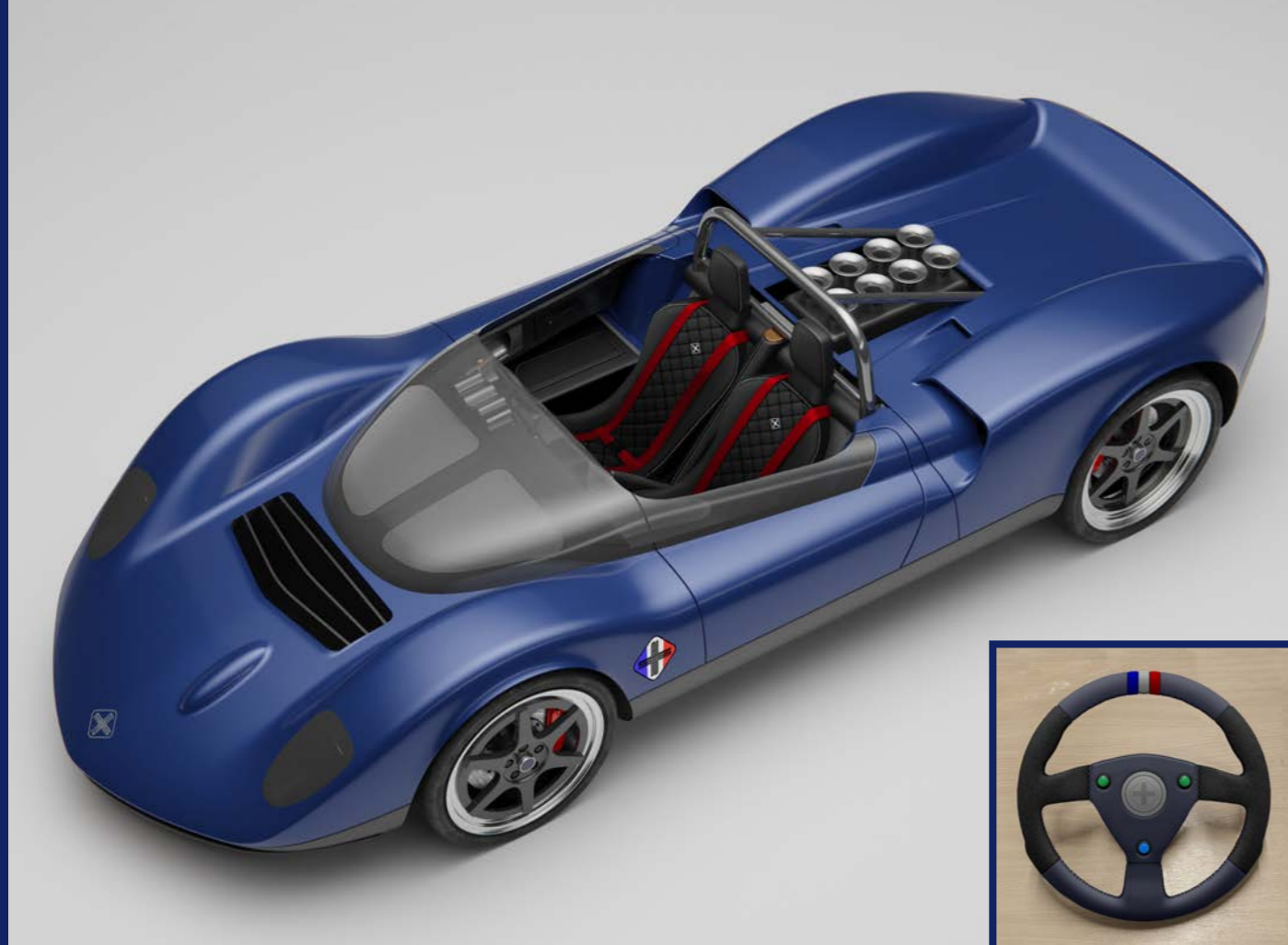
All this assembled by the same group of people who built the cars for Senna and Prost during McLaren's most successful era.



n1a







ICON '88 - A UNIQUE EDITION



The 1988 McLaren MP4/4 designed by Steve Nichols set records which have long stood the test of time, becoming a design icon along the way.

In order to celebrate the arrival of the new N1A the first 15 cars will be numbered to commemorate the record-breaking 15 race wins in the hands of Ayrton Senna and Alain Prost.

Every car will wear the hallmarks of each individual race win, with the national flag of the respective driver and a unique plaque detailing information of the event.

Customers are still free to specify the colour scheme, from a discrete basic rendering to a full reflection of the period racing livery.

Mechanically, the cars will feature a number of optional extras as standard, including full carbon fibre body, inconel exhaust, carbon composite wheels and lightweight ceramic brakes, and the magic 427 cu.in. 7 litre engine.

All of which would add substantially to the price if purchased separately.

The result is sure to be a valuable collectors' item and investment.

 
Senna
WINNER
BRITISH GRAND PRIX
8/15
SILVERSTONE

Turning the “proof of concept” N1A prototype into a production-ready reality has been undertaken using the same technology and disciplines as if it were a state-of-the-art Formula One racing machine.

Hours have been spent analysing the aerodynamic performance; remember, the Nichols has been designed as a tribute to a car from an era when aerodynamics and the trade-off between downforce and aesthetics was not appreciated, much less understood.

The aim was to obtain balanced, positive downforce both front and rear, and this has been achieved incredibly successfully.

It’s been an enormous yet satisfying undertaking.

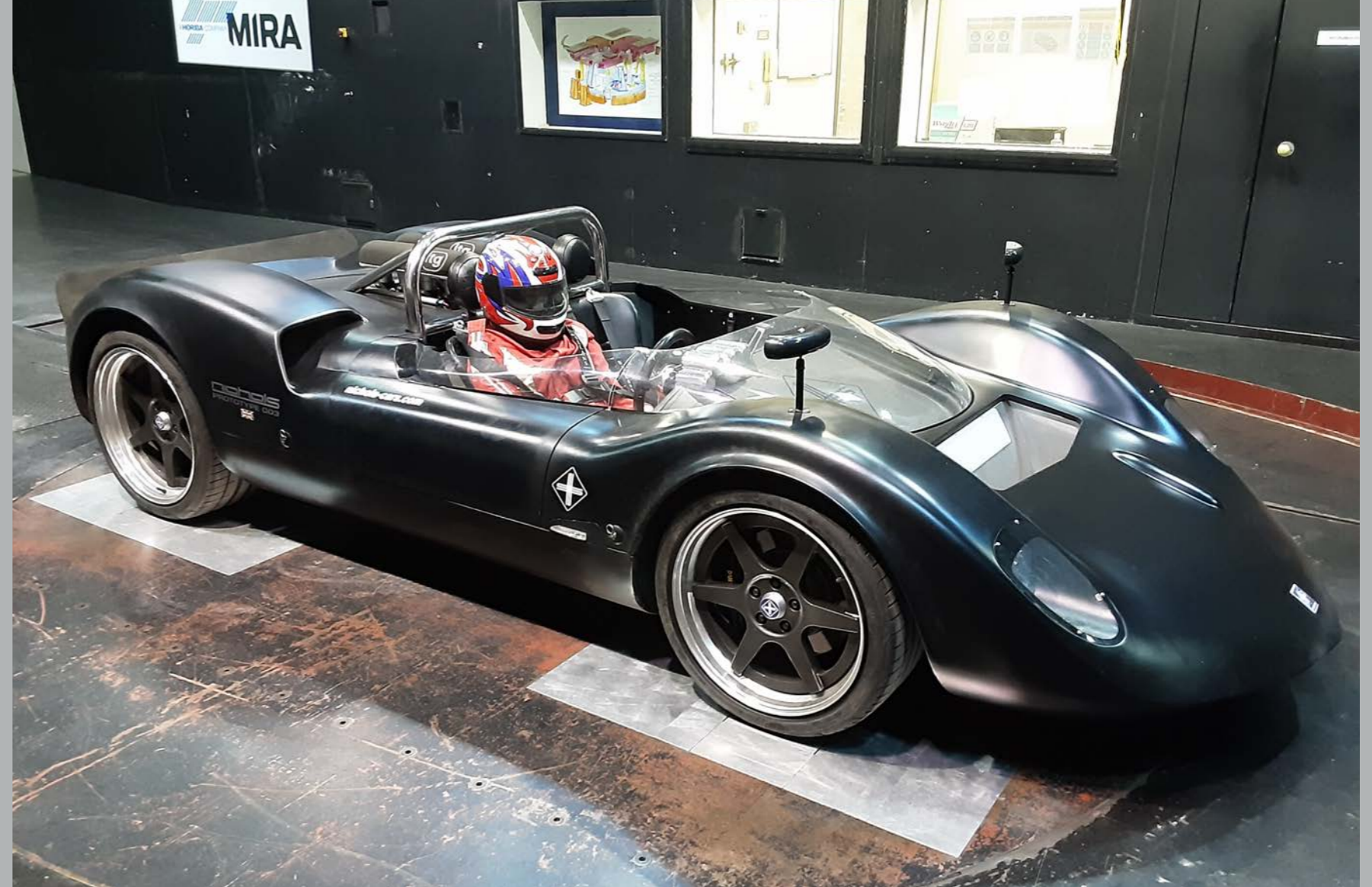
Research has included multiple runs in the full-sized wind tunnel at MIRA. Lessons learned have been subtly worked into the final shape. Part of the challenge was to leave the stunning visual presence of the prototype N1A unaffected, but with literally every surface subtly altered.

Throughout the process, the Nichols team has identified world renowned experts in each of the various disciplines.

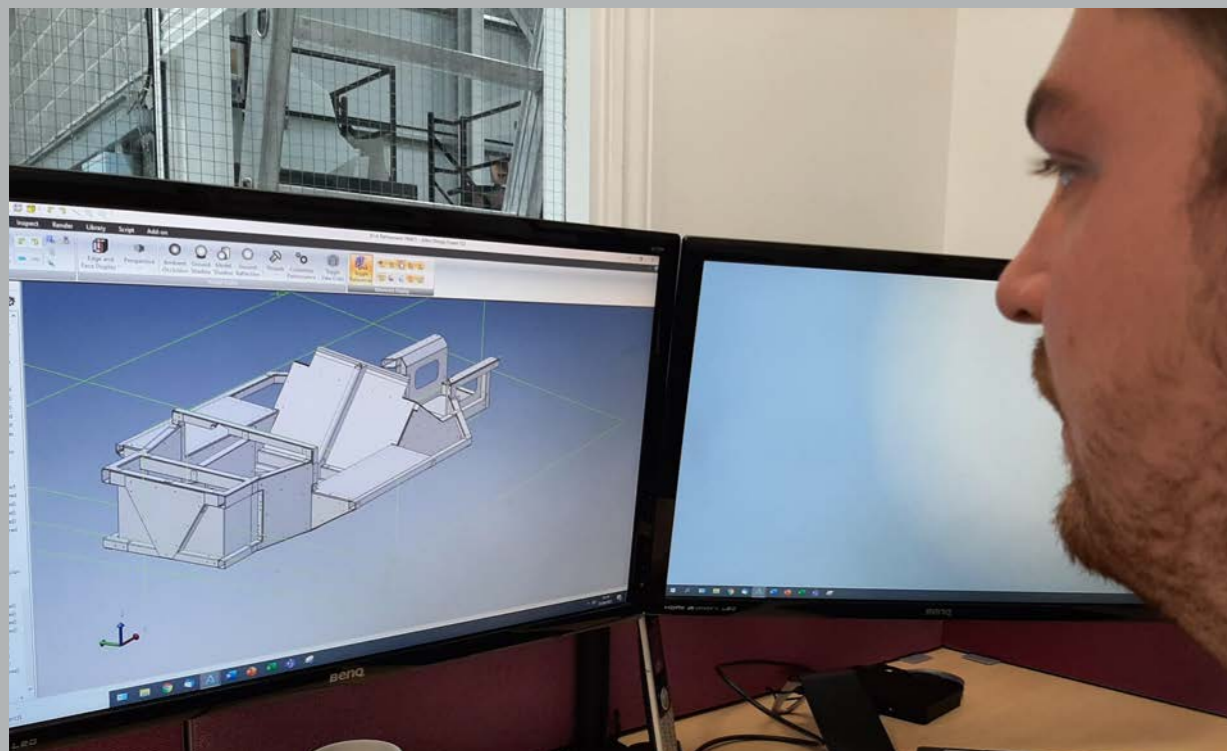
In the words of Steve Nichols:

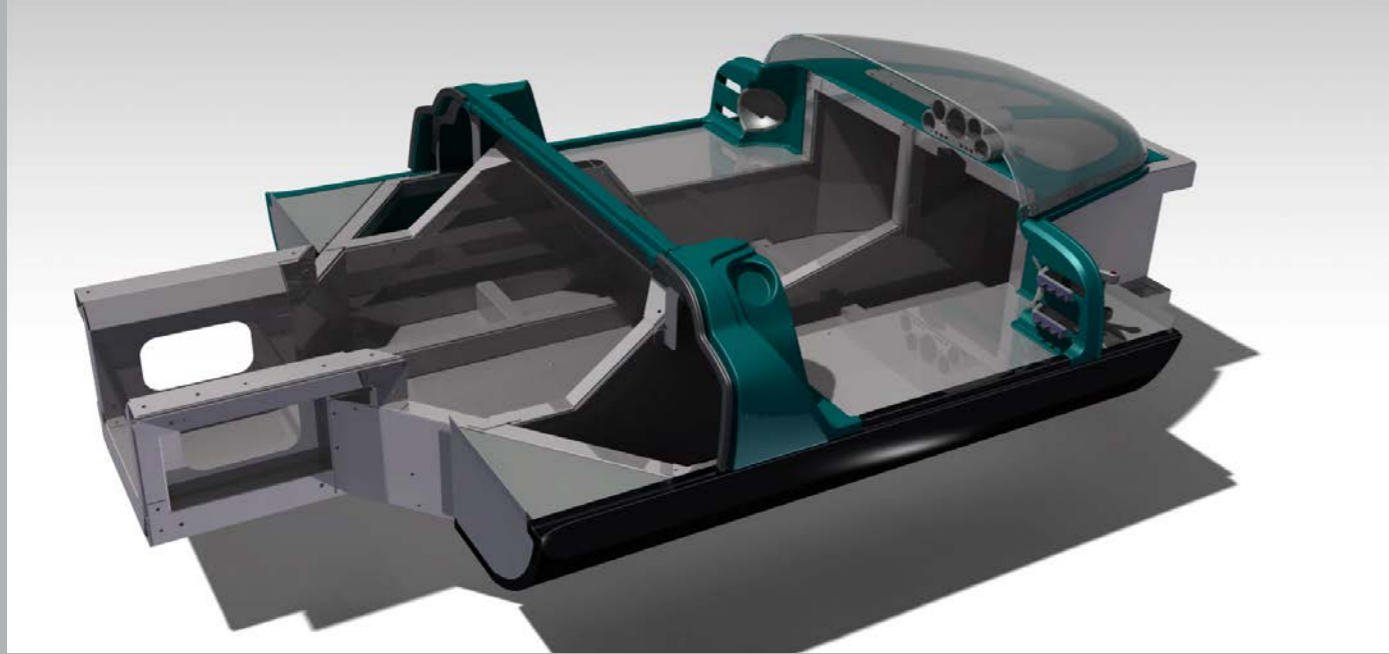
“I always felt, for example, that if I knew more about aero than my aero guy, he was not up to standard. My mantra was always to get the best people available and create an environment for them to give of their best.”

The Nichols N1A is surely a testament to that philosophy.



DESIGN AND DEVELOPMENT





CHASSIS

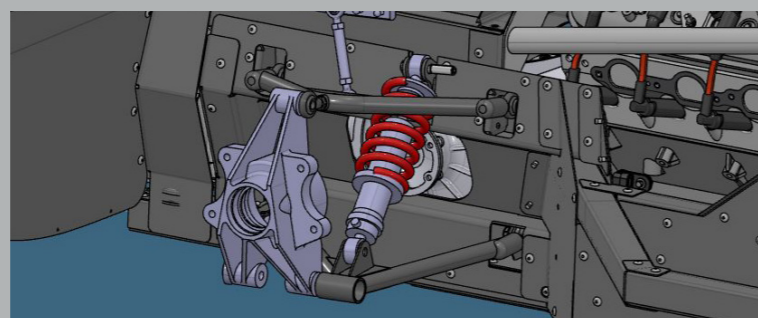
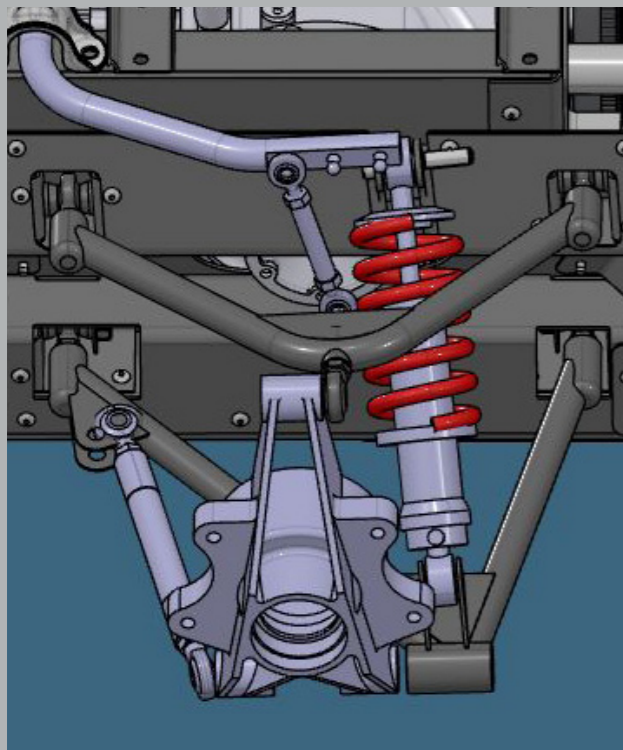
The chassis has been developed in conjunction with Stalcom Limited, whose founder, Bob Mustard can lay claim to being one of the world's leading exponents of lightweight aluminium design and production, having been a major instigator in the development of the Lotus Elise, and Aston Martin's adoption of the technique, amongst others.

The interaction with the Nichols team pushed this technology to new levels, maximising the potential of the construction method, to obtain the lightest, stiffest structure possible.

It is a work of art: a study in rigid light weight.

Designed on the latest CAD/CAM systems, the chassis features load-bearing aluminium beams, to which are bonded aluminium sheeting and moulded carbon fibre panels. The complete assembly comes in at under 100 kilos, including subframes.





SUSPENSION



Top consultant on the suspension was Richard Hurdwell.

Formerly one of the senior ride and handling gurus at Lotus, Richard spends his retirement working on a few projects every year which spark his interest.

These range from those which can't be talked about to those which can, such as the Ariel Atom 4, which was voted Autocar's best handling sports car two years in succession.

Richard brings a highly theoretical and analytical approach to the discipline using the latest computer technology.

The result is put into the metal by Austin Metcalfe, one of many ex-McLaren personnel on the Nichols Team.

Austin hand-fabricated the suspension for McLaren F1 cars when that was the method of construction. His beautifully made components are truly works of art.

The engine is a 7 litre V8, producing well in excess of 600 bhp whilst meeting local emission requirements. It starts as a GM aluminium block which is bored out to accept bespoke cylinder liners, pistons and conrods.

The unit is assembled by renowned experts Langford Performance Engineering, whose pedigree is second to none. At LPE, Nichols engines will share space and dyno time with classic F1 engines of all eras, built in spotless conditions for ultimate performance and reliability.

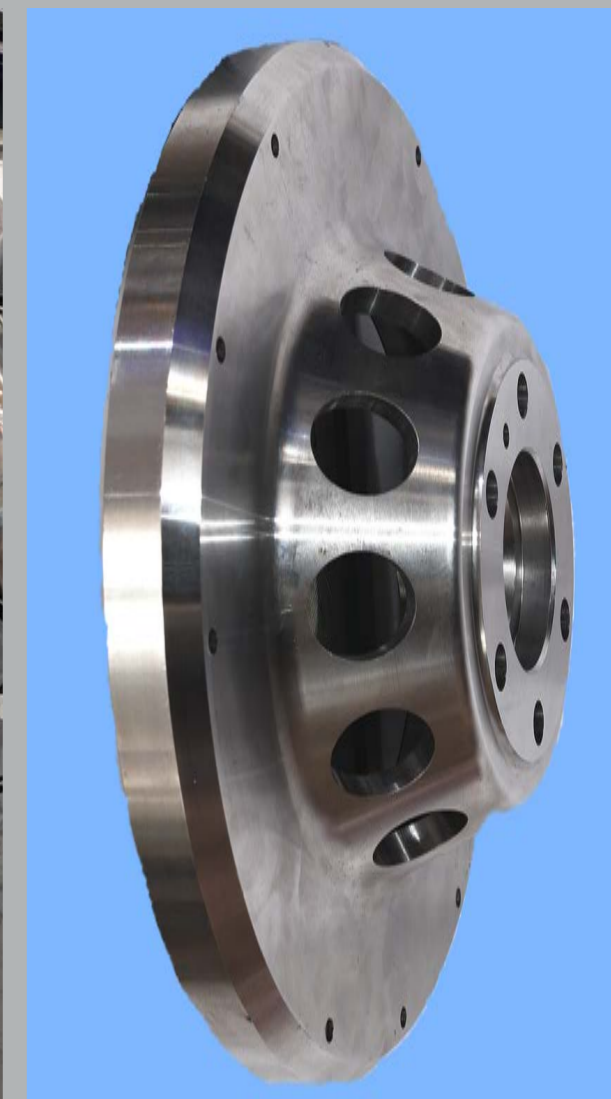
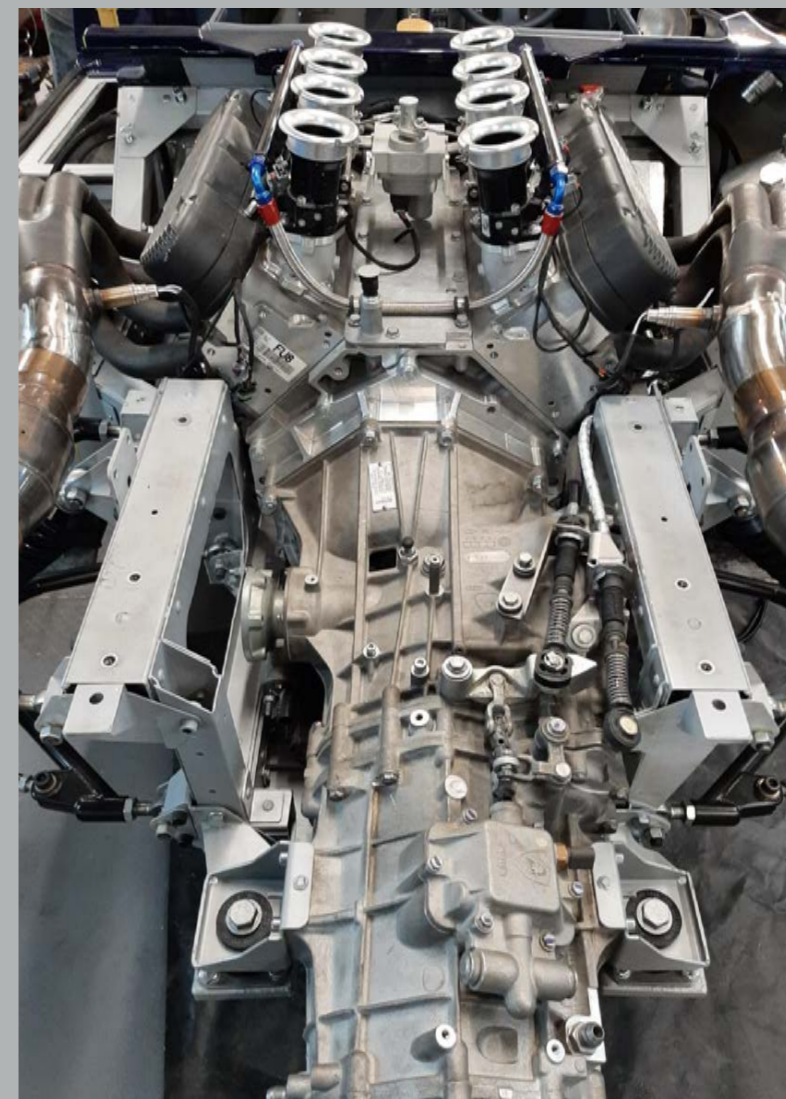
The transmission is a development of a Graziano unit, adapted to meet the power, torque and rev-range of the engine.

The integration of the engine and gearbox was overseen by another industry legend, David Wood. In order to get the engine in the optimum position in the chassis, and the gear box in the best position relative to it, a heavily dished flywheel was required.

It's a shame that such a beautiful piece of engineering is hidden beneath the bell-housing, and something owners are unlikely to see.



POWERTRAIN





One of the project's most important associations is with Lights, Cars, Action, where the prototype work was based.

As comfortable preparing vehicles for Paddock Hill Bend as the Pebble Beach Concours, LCA contributed massively to the realisation of the concept.

It is no good having a brilliant design with wonderful components if the finished item does not reflect it. The bodywork for the Nichols was prepared and painted in the same facility which has seen many of the cars from McLaren's heritage collection, as well as F1 road cars, and grand prix cars from the 1930's driven by some of the sports' all-time greats. So every Nichols will be sharing space with motoring legends.

The surfacing and detailing of the shell was undertaken in conjunction with Sterling Automotive Design. The original prototype was scanned, the design optimised and the information used to machine the moulds direct from the CAD/CAM data.

The result is perfectly accurate, beautiful panelling, produced by APH3G who also contributed to the body engineering and interior detailing.

FINISHING

Trim is also designed and executed by Sterling Automotive Design, providing real vision and craftsmanship.

Through Sterling, we are able to offer a full customisation service. If an owner wants a bespoke livery, the design team is on hand to make it happen.

Any colour is possible.

A Nichols N1A looks good whatever the finish. Similarly, trim is entirely down to the owner's choice.

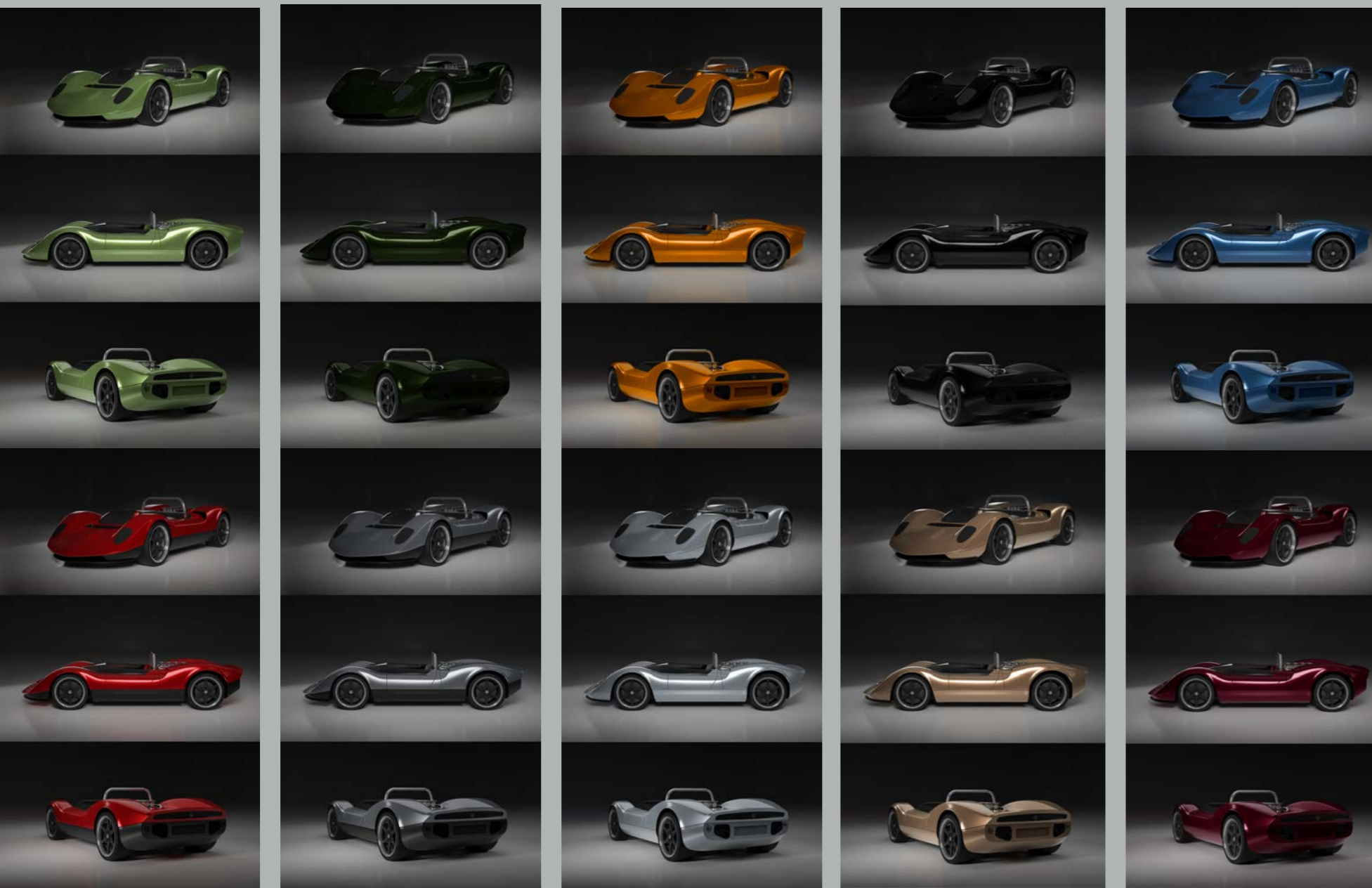
Other areas of personalisation include all aluminium components, from the grills to the interior items which can be specified in a number of different anodized colours.

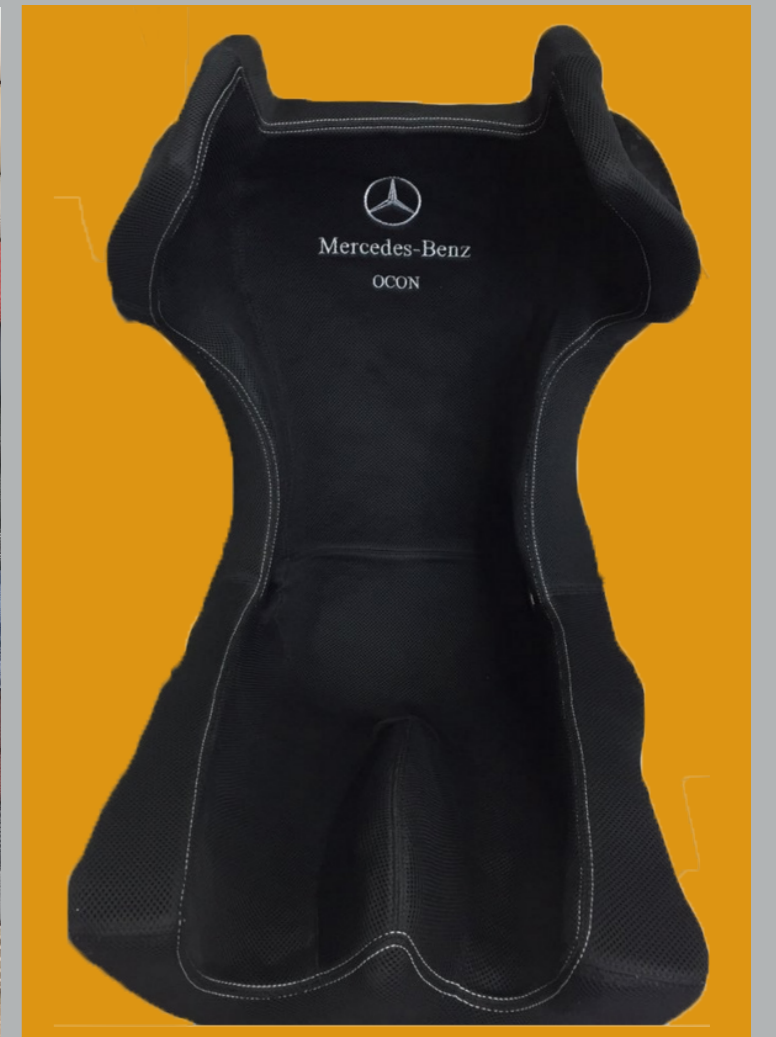
Screens and side glass are also available in a selection of different tints.

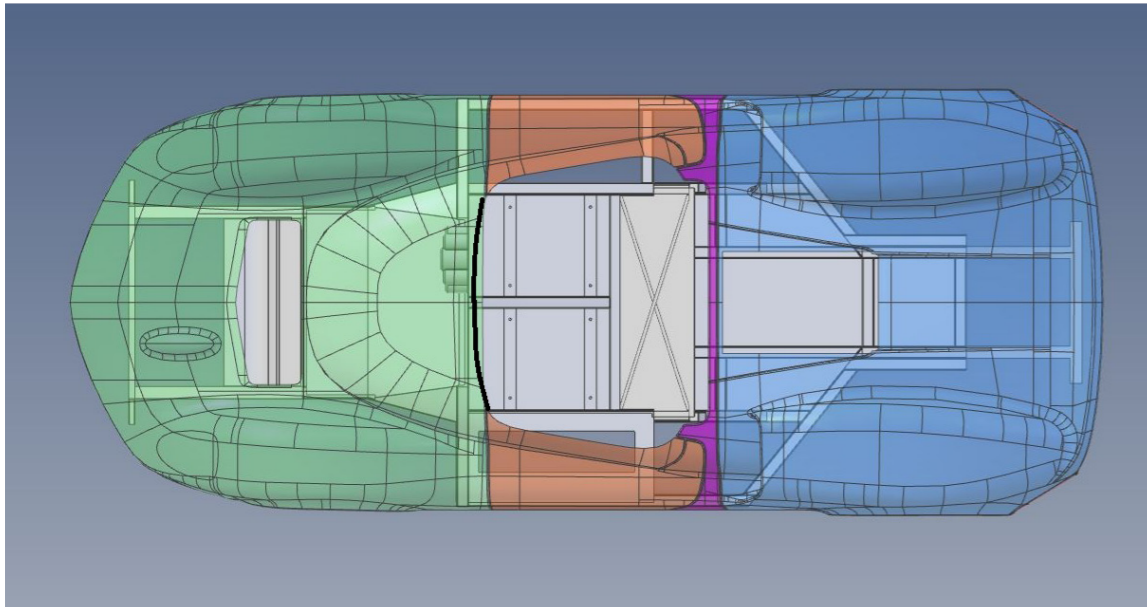
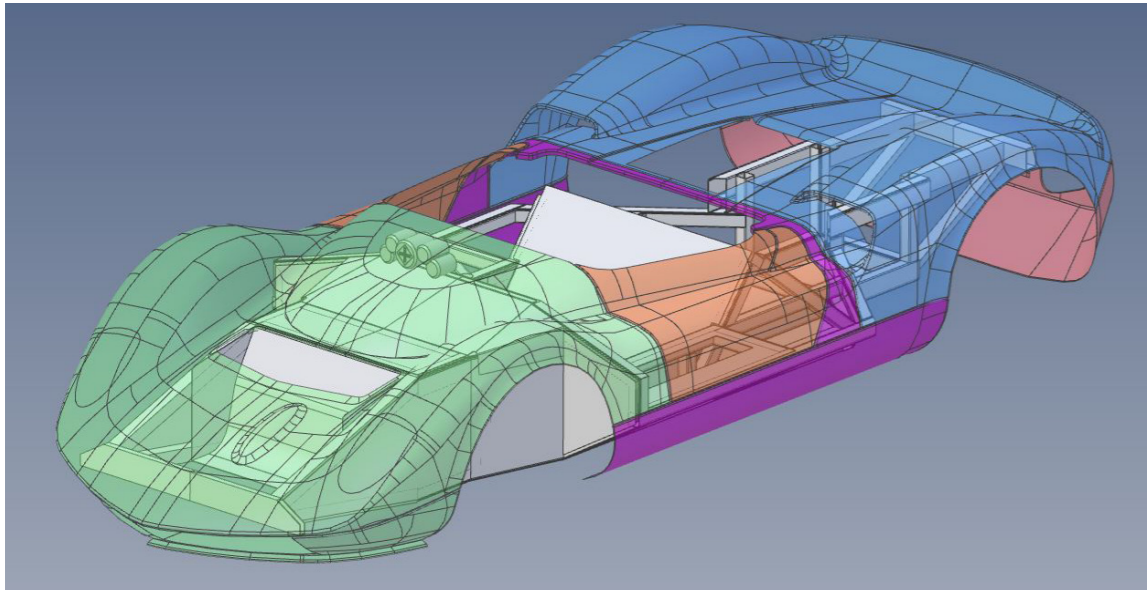
Perhaps the ultimate expression of the tailoring service is the ability for every owner to have a seat moulded, machined and covered to their individual form. It will be undertaken by the leading exponents in the field and is a facility used by many of the top teams in racing including F1 and the WEC.

The object is to create a unique, superb looking, spectacularly fast vehicle matched completely to a customer's requirements.

We are confident of our ability to deliver!

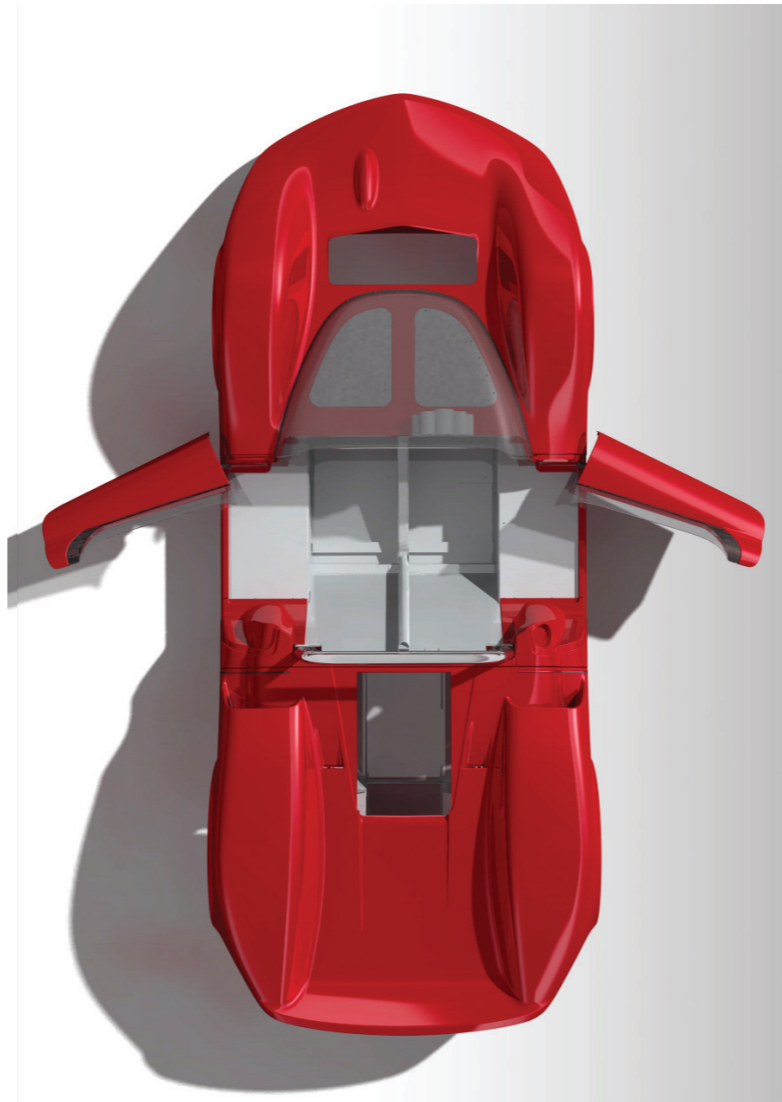






N12

SPECIFICATIONS



DIMENSIONS:

LENGTH	4.3m
WIDTH	1.76m
HEIGHT	0.99m
FRONT TRACK	1.44m
REAR TRACK	1.46m
WHEELBASE	2.45m

WHEELS AND TYRES:

FRONT:	19" x 245 x 40
REAR:	20" x 305 x 30

CHASSIS:

BONDED ALUMINIUM SHEET AND EXTRUSIONS AND CARBON FIBRE SHEET

BODY:

STANDARD: Light weight composite panels

OPTION ONE: Carbon fibre with paint finish

OPTION TWO: Exposed carbon fibre with lacquered finish

NB. All carbon fibre components are infused with high end graphene

STEERING:

STANDARD: Unassisted rack and pinion

OPTION: Speed sensitive power assisted

SUSPENSION:

INDEPENDENT FRONT AND REAR WITH DOUBLE WISHBONES AND ANTI ROLL BARS

BRAKES:

LARGE RACING MULTI PISTON FRONT AND REAR

OPTION: Racing-certified Bosch ABS

ENGINE:

7 litre 600+bhp unit with throttle bodies and trumpets

EXHAUST:

OPTION ONE: Standard system produced in stainless steel

OPTION TWO: Lightweight system produced in inconel

GEARBOX:

NICHOLS-DEVELOPED 6 SPEED UNIT WITH MANUAL SHIFT AND SENNA-INSPIRED GEAR SELECTOR

INTERIOR:

ALL FITTINGS MACHINED FROM SOLID ALUMINIUM BILLETS

TRIM IS IN THE MATERIALS OF THE OWNERS' CHOICE

OPTION: Air conditioning (in development)

THE CAR THAT STARTED IT...



When Bruce McLaren set about the construction of the first car to bear his name, he could have had little idea of the legend the marque would become.

At the time he was still driving for the Cooper F1 team. The McLaren M1A was a private project to give him something with which to compete in the fast developing and financially rewarding world of sportscar racing.

The initial success of the car resulted in potential orders for three replicas, and McLaren felt that it might be possible to commit to a run of six, although he was worried about being saddled with the responsibilities of a racing car manufacturer.

An arrangement with Trojan under which they would build production versions was a mutually satisfactory solution, with a batch of twenty-five cars the result. Since Trojan felt that another brand which they owned - "Elva" - was more established than "McLaren," the cars were marketed as "McLaren-Elvas."

The M1A was designed at a time when relatively little was known about the need for downforce, the main criteria being that the cars were aesthetically pleasing. It has been suggested that renowned motor sport artist Michael Turner was involved in the styling of the M1A, which might help to explain the car's stunning looks.

Drivers who raced the M1A in period include some of the greatest names of the day both in and outside motor racing: Elvis Presley was also an M1A driver, appearing behind the wheel of the prototype in the film "Spin-Out."

Nearly 60 years since it first appeared, the M1A has inspired the birth of another automotive company, Nichols Cars Limited. We think we've done it justice.....

nichols



Nichols Cars Limited



Approved by:



nichols-cars.com