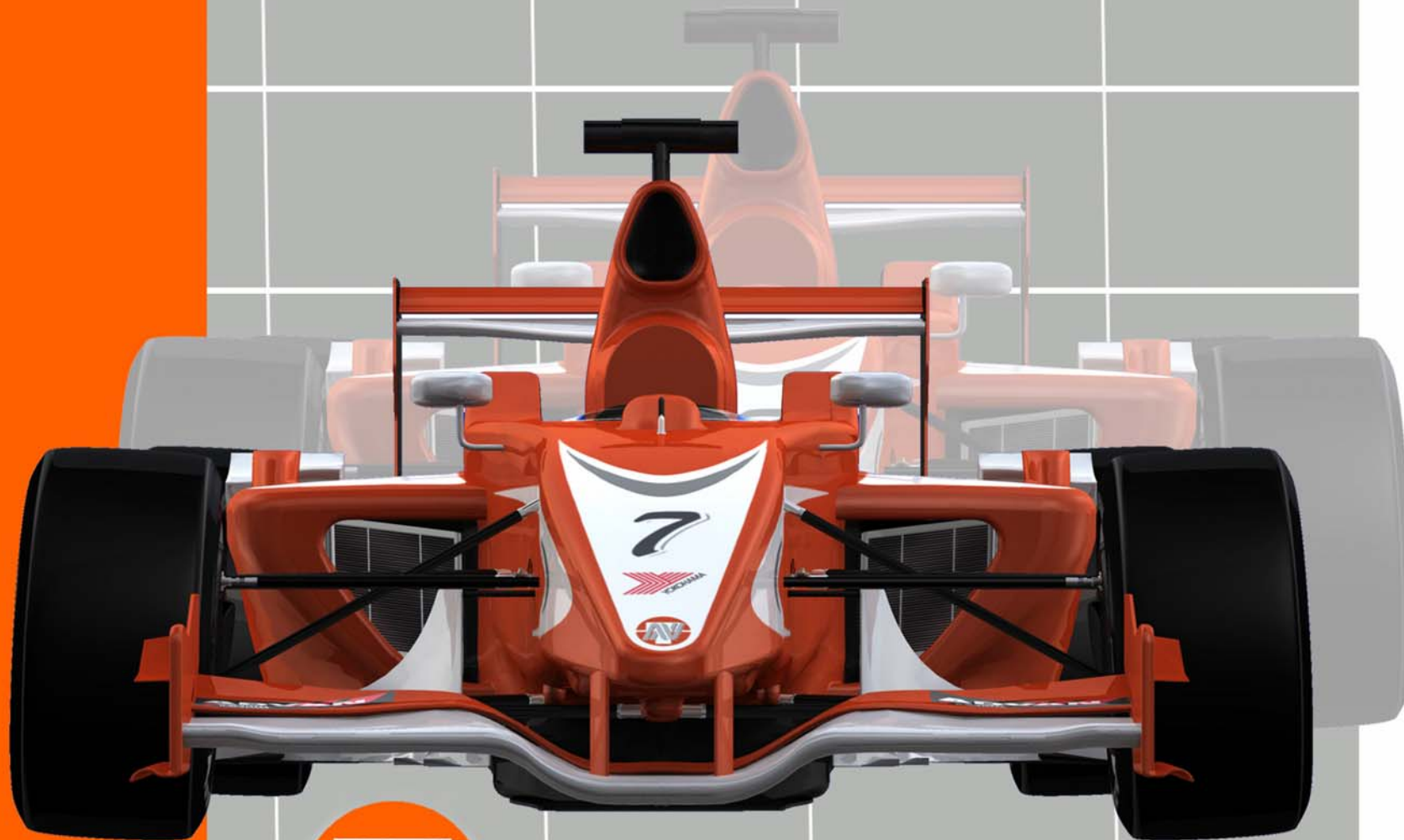


**F**ORMULA  
52000



**PRESENTATION**

## THE N.T FORMULA S2000 CONCEPT

N.Technology S.p.A. and Tatuus s.r.l. have agreed to produce the new single-seater N.T FORMULA S2000 car. This car has been designed for international and national series, and will first race in 2007 in a one-make series supporting all eight European rounds of the FIA World Touring Car Championship.

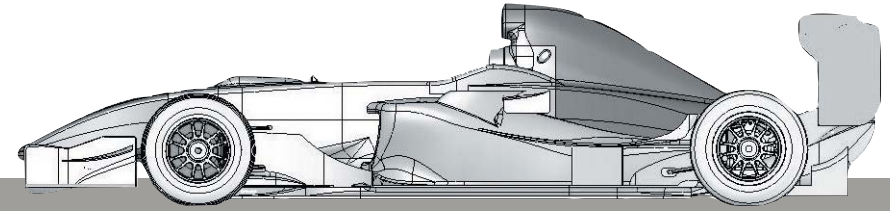
The N.T Formula S2000 car is designed to provide a good balance between quality, price and performance, assuring high technology and modest running costs. This is a high-performance formula designed to allow driving talent to shine.

### CONCEPT :

- Single-make chassis formula
- High safety standards, meeting 2008 FIA Formula 3 rules
- Designed at the outset to later accept an energy-efficient hybrid system
- Run and promoted by a high-quality sporting and technical organisation
- A successful marriage of innovative design and optimised aerodynamics
  - Attractively low purchase price and operating costs



# TECHNICAL OUTLINE



## TECHNICAL OUTLINE

<b>Type</b>	.Formula single-seater
<b>Chassis</b>	.Carbon fibre monocoque by Tatuus, meets 2008 FIA F3 safety regulations .front and rear crash structures, wheel tethers, removable head protection, roll hoop
<b>Bodywork</b>	.Carbon fibre
<b>TV cameras</b>	.Designed to accept four TV cameras within aerodynamic body shape
<b>Wings</b>	.Carbon fibre front and rear
<b>Engine</b>	.2.0-litres, four cylinders, fully aluminium, 250 HP, prepared by Heini Mader Racing Components .86mm bore x 86mm stroke, dry sump, solid aluminium machined cam cover and oil pump, .carbon fibre airbox, designed to accept hybrid system, rebuild period 5.000 km
<b>Electronics</b>	.ECU includes data-acquisition system (military connectors), pits speed limiter
<b>Exhaust system</b>	.Inconel alloy, includes catalyst and silencer
<b>Radio</b>	.Designed to accept radio system
<b>Gearbox</b>	.Six-speed, limited slip differential, gearshift and clutch paddles
<b>Safety harness</b>	.Six-point, three-inch shoulder and lap straps, HANS system
<b>Seat</b>	.Carbon fibre, extractable, meeting FIA rules
<b>Instrumentation</b>	.LCD dash integrated in steering wheel
<b>Front suspension</b>	.Pushrod, height register with shim, single damper, aerodynamically-shaped wishbones
<b>Rear suspension</b>	.Pushrod, two dampers, aerodynamically-shaped wishbones
<b>Steering rack</b>	.Machined aluminium
<b>Upright</b>	.Steel welded front and rear
<b>Shock absorbers</b>	.Monotype, bump and rebound adjustment
<b>Springs</b>	.36 mm x 140 mm
<b>Calipers</b>	.Four pistons, machined aluminium, Brembo
<b>Brake</b>	.Ventilated discs, 278mm x 16mm, Brembo
<b>Wheel</b>	.Aluminium, centre-bolt for rapid pit stops
<b>Tyres</b>	.Front 23/56-13, Rear 28/58-13, Yokohama

<b>Wheel base</b>	.2700 mm (provisional)
<b>Front track</b>	.1450 mm (provisional)
<b>Rear track</b>	.1320 mm (provisional)
<b>Weight</b>	.550 kg including driver
<b>Fuel tank</b>	.40 litres, FIA FT3-specification .with rapid refuelling valve
<b>Extinguisher</b>	.5 kg, electrically-operated
<b>Rear light</b>	.Led, FIA-approved



**F**or crash protection and high performance, the chassis will be rigid in construction and will meet 2008 FIA F3 safety rules.

Chassis:

- Carbon fibre monocoque
- Deformable crash boxes constructed of sandwich material: aluminium honeycomb construction, with carbon fibre outer skins baked in a vacuum
- Three carbon and aluminium bulkheads to absorb energy generated by suspension and engine mounting points
- Crushable structures engineered beyond minimum requirements and located to protect the bodywork and minimise repair costs in minor accidents

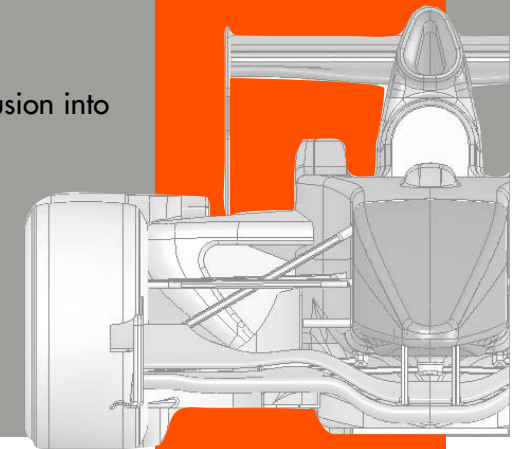
**T**he new car will be submitted to stringent crash tests according to the 2008 FIA F3 rules.

Crash tests will assess:

- Chassis
- Nose crash box and rear crash structures
- Rollover bar
- Steering column

**O**ther safety features:

- Crash structures meeting 2008 FIA F3 rules
- FIA-approved wheel-retainer cables
- Removable lateral head protection for the driver
- Six-point safety harness, HANS system
- Electrically-operated 5 kg fire extinguisher
- FIA-approved FT3 fuel cell
- Cockpit safety cell and cockpit opening meeting 2008 FIA F3 rules
- Removable steering wheel
- Twin-jointed steering column; non-intrusion into driver's leg area
- FIA rear led light



# AERODYNAMICS

## AERODYNAMICS



**T**atus will combine excellent aerodynamic performance, achieved from the wind tunnel development programme, with an attractive modern body shape.

The rear wing's upper main wing and flaps are adjustable in steps of one degree.  
The front wing is also adjustable in steps of one degree.

The shape of the floorpan and sidepods have been studied to optimise aerodynamics. The radiator air ducts, modelled around the sidepods, are designed to optimise cooling efficiency for a variety of different engines.



DESIGN

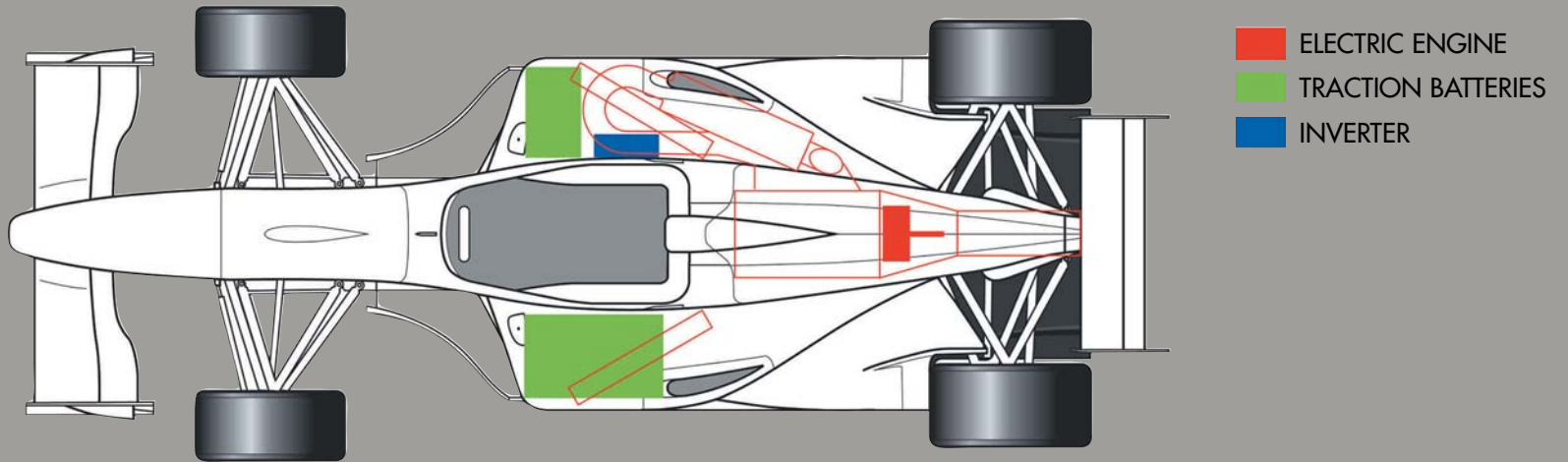
DESIGN



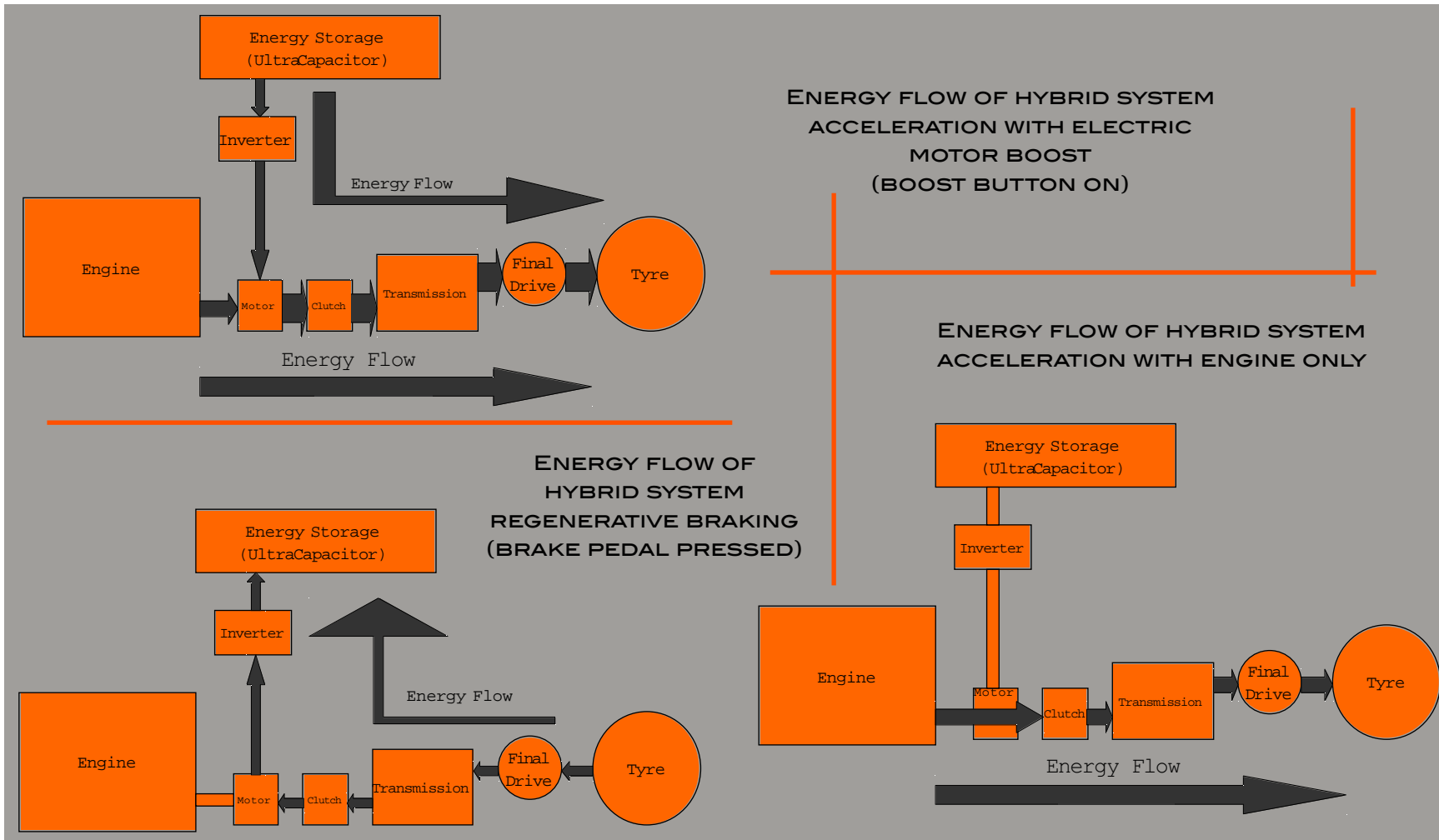
## READINESS FOR HYBRID SYSTEM

### READINESS FOR HYBRID SYSTEM

The N.T Formula S2000 car has been designed from the outset to accommodate, at a later date, an energy-efficient hybrid system. This system recovers kinetic energy during braking (known as regenerative braking) and uses the stored energy for a 10 percent gain in engine performance and improved fuel consumption.



# HYBRID SYSTEM CONCEPT



HYBRID SYSTEM CONCEPT



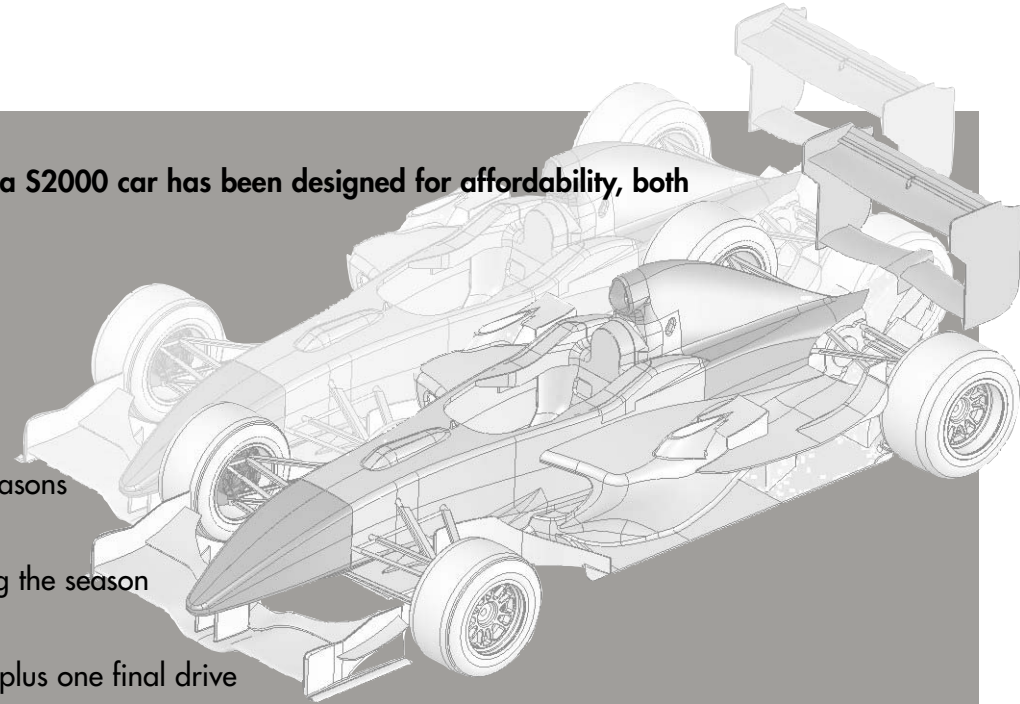
## CONTROLLING COSTS

### CONTROLLING COSTS

**D**espite high levels of performance, the N.T Formula S2000 car has been designed for affordability, both with purchase price and running costs.

Measures taken to control costs:

- Single chassis formula
- Single engine
- Vehicle's purchasing costs amortised over several seasons
- Spare parts costs controlled by series organisers
- Only one engine change or rebuild permitted during the season
- Trackside spare parts service at each race
- Only three sets of gear ratios (not interchangeable) plus one final drive
- Limited number of set-up parameters for suspension and aerodynamics
- Minimum of three types of anti-roll bar
- Monotype differential (with two acceleration/deceleration ramps)
- Only eight spring types and one type of damper (with double adjustment)
- No more than five sets of new dry-weather tyres for the first event; no more than three new sets plus two previously marked dry-weather sets for other events
- Limited number of engine hours or kilometres, monitored by engine ECU system, for private testing sessions



## SPORTING & TECHNICAL ORGANIZATION

**C**ontrolled costs and serious training ground for young drivers.

**Each event will comprise of:**

- Two Free practice sessions
- One Qualifying practice session
- One Warm-up
- One race on Saturday, another race on Sunday
- Races of 75km to 100km distance

**C**ustomer support will be provided at all the 2007 series events :

- Chassis technical assistance
- Engine/ECU technical assistance
- Tyres service
- Spare parts service

**T**o contain running costs and encourage equity between teams, only five official testing sessions will be scheduled during the season.



SPORTING & TECHNICAL ORGANIZATION

2007 PROVISIONAL CALENDAR\*

-  May 20<sup>th</sup> Valencia - - - - - Spain
-  June 3<sup>rd</sup> Pau - - - - - France
-  June 17<sup>th</sup> Brno - - - - - Czech Rep.
-  July 8<sup>th</sup> Porto - - - - - Portugal
-  July 29<sup>th</sup> Istanbul - - - - - Turkey
-  September 2<sup>nd</sup> Oschersleben - - - - - Germany
-  September 23<sup>rd</sup> Brands Hatch - - - - - Great Britain
-  October 7<sup>th</sup> Monza - - - - - Italy

\* To be approved by FIA

- All events of the new International Series will be part of the FIA WTCC racing weekends.



- TV production and broadcasting will be by Eurosport. In 2007 all the races will be broadcasted live at the same time each race week end.



- Tyres will be supplied by Yokohama.



## CONTACT US

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