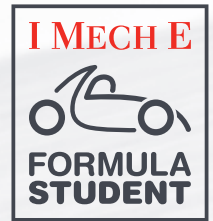


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to Newcastle University

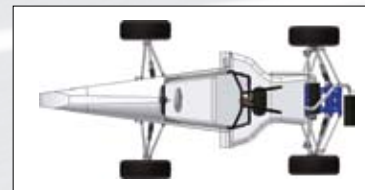
FOR PARTICIPATING IN FORMULA STUDENT 2008

Newcastle Racing 5 is a small team (10 in total) with big aspirations from Newcastle University. NR5, the class 1 entry from the team is the fifth entry from the university and builds on the foundations laid by previous teams.

The car has been designed with ease of manufacture and maintenance off the track in mind, with high performance and reliability on it.

One particularly innovative element of the car is a carbon-fibre plenum chamber and air induction system, which has yielded great improvements in car performance, thanks to several visits to a rolling road. Thanks to the hard work from the team at the end of 2007, the engine has also been run under load in a test cell for the first time. A pneumatic gear change, floor mounted steering assembly, modular wheel package design and composite ducts to cool the engine are all innovative student-designed features present on the NR5 car.

The project is entirely self-financed by the team, with students tasked with raising the required funds to complete the project. The team has secured partnerships with BP, iMass, Studsvik and many other local and international companies. With a fully tested car ready for competition, this looks to be the best year yet for Newcastle Racing.



Length/width/height/wheelbase
2600mm/1400mm/1100mm/1610mm

Track (front/rear)
1310mm/1260mm

Weight including 68kg driver (front/rear)
110kg/120kg

Suspension (front/rear)
Unequal length A-Arms, pushrod
activated Fox Vanilla spring/damper units

Tyres (front/rear)
Avon Tyres 6.2/20.0 R13

Wheels (front/rear)
Keiser 13" Aluminium, Magnesium Centre

Brakes (front/rear)
4mm stainless steel solid discs
mounted on EN24T steel hubs

Frame type
Aluminium monocoque front with steel
plate mid and rear chassis, 5251 and
7075 Aluminium, Docal 700M steel

Engine
Ducati Monster 600M

Bore/stroke/cylinders/cc
80mm/58mm/2/583cc

Fuel
98 octane unleaded

Fuel system
Student designed using Jenvey parts

Max power/max torque
7,500rpm/5,000rpm

Transmission/differential/final drive
Chain and sprocket, Quaife ATB, 3