

Congratulations to the Technical University of Braunschweig

FOR PARTICIPATING IN FORMULA STUDENT 2008

Winner of
2 FS Prizes

The Lions Racing Team was the second German team to enter Formula Student and the first team worldwide, with a working Race-ABS. Ever since our first entry in 2002 we have been constantly developing the technical and economic knowledge of team members. Results of these developments are increasingly innovative and fast cars with a high quality finish, one of which was rewarded with the 'Sir Henry Royce Award for Excellence in Craftmanship.'

Our new car, the LR08, is once again equipped with an ABS system. The aggressive suspension concept, a very compact and highly sophisticated package and supporting Continental AG for tyre development, make the LR08 the fastest car built by our team to date. A complete triangulated space frame made of 25CrMo4 high strength steel; the use of HANS and the well chosen package add up to a very safe car exceeding the safety rules of FS.

To increase the reliability of our car we developed a dry sump oiling system, enhanced the cooling performance and built custom-made, induction-hardened drive shafts.

Because of the above mentioned reasons we hope to reach a Top 5 position in Formula Student UK 2008.



Length/width/height/wheelbase
2620mm/1500mm/1150mm/1525mm

Track (front/rear)
1310mm/1190mm

Weight including 68kg driver (front/rear)
130.2kg/165.8kg (full wet car weight of 228kg)

Suspension (front/rear)
Double unequal length A-Arm. Push rod actuated spring and damper (orientated in 7 deg inclined plane), no Anti-roll Bar/Direct acting spring and damper (orientated in 20 deg inclined plane), Anti-roll Bar

Tyres (front/rear)
195/500 R13/245/500 R13, Continental

Wheels (front/rear)
7x13; 0mm offset/9x13; -25.4mm offset, 3 pc Al/Mg Rim

Brakes (front/rear)
Floating, 4mm mild steel, hub mounted, 250mm outer diam., 202mm inner diam./ 3mm mild steel, hub mounted, 230mm outer diam., 170mm inner diam.

Frame type
Tubular space frame with supporting frames and hollow nodes/25CrMo4 steel round tubing 10mm to 25mm dia

Engine
Suzuki GSXR-600 K4

Bore/stroke/cylinders/cc
67.0 x 42.5 mm/4 cylinder/599 cc

Fuel
100 octane petrol

Fuel system
MoTeC M4, fuel injection student manufactured, sequential

Max power/max torque
11,500rpm/9,500rpm

Transmission/differential/final drive
Chain #520/GKN fabricate progressive locking speed sensing ViscoLok LSD, 0Nm preload/Adjustable between 3.18-4.09 by sprocket changes, final ratio to be tested