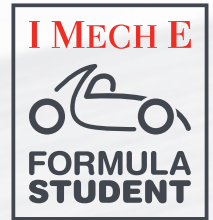


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to the Universität Karlsruhe

FOR PARTICIPATING IN FORMULA STUDENT 2008

7th
Overall in
Class 1

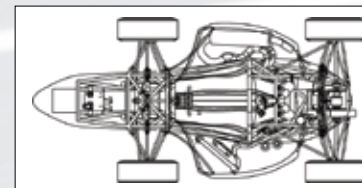
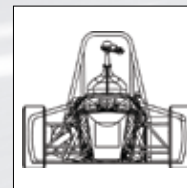
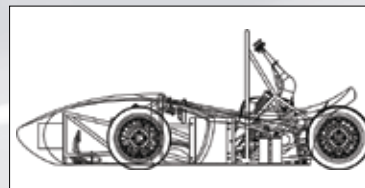
KA-Racelng, the formula student team from the Universität Karlsruhe(TH) was founded in 2005, competing for the first time ever in 2007 and for the first time in the UK in 2008. Development of the KIT08 began in September 2007 following a successful season, winning the “Best Newcomer Award” in Germany and taking sixth place in Italy

The team consists of 53 students from different fields of study, mainly mechanical, electrical and industrial engineering. Organised into eight sub-teams every team member has a technical component or organisational job to complete, where they are fully responsible.

The main design goal was to design and build a significantly lighter car compared to the previous season without reducing reliability. Other important aspects were to achieve high serviceability and good ergonomics for the driver.

In order to achieve these goals, every part in the car was revised and optimised by reducing parts and saving weight. Eventually we were successful and a car with ready to race weight of ~220kg was produced.

Overall we would like to thank all our supporters that made it possible to build this race car. We are looking forward to an exciting and interesting competition in Silverstone!



Length/width/height/wheelbase	2785mm/1400mm/1114mm/1600mm
Track (front/rear)	1200mm/1200mm
Weight including 68kg driver (front/rear)	135kg/155kg
Suspension (front/rear)	Pushrod-actuated unequal length A-Arms with adjustable horizontally-oriented springs and dampers with semi active torsion-type anti-roll bar/z-anti-roll bar
Tyres (front/rear)	Goodyear D2692 20.0x7.0 – 13 R075
Wheels (front/rear)	7x13, 22mm offset, 1 pc Al Rim
Brakes (front/rear)	Floating, lasercut steel, hub mounted, 220mm outer diam., 170mm inner diam.
Frame type	Tubular space frame, 15CDV6, Clubman 500 and T45 steel round tubing 20x1mm – 30x2mm, CFRP tube 30x2mm
Engine	2003 Honda CBR600F PC35
Bore/stroke/cylinders/cc	67.0 x 43.0mm/4 cylinders/599cc
Fuel	98 octane
Fuel system	Student des/built, fuel injection, sequential
Max power/max torque	11,500rpm/8,500rpm
Transmission/differential/final drive	520 chain, 5/8" (15.875mm) pitch, 1/4" (6.35mm) width, max load 35 kN/Drexler clutch pack limited slip differential, adjustable bias ratios (30%, 50%, 85%)