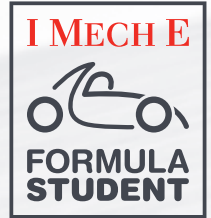


FORMULA STUDENT

Institution of Mechanical Engineers



Congratulations to ETH Zurich

FOR PARTICIPATING IN FORMULA STUDENT 2008

In its second season the Academic Motorsportclub Zurich (AMZ) of the Swiss Federal Institute of Technology (ETH Zurich) has followed the tradition of naming its car after a famous Swiss alpine pass. The new car 'maloja' takes its name from the mountain pass between the town of St. Moritz and the Italian city of Chiavenna.

During the relatively successful debut-season in 2007 the team gained practical experience with their racecar 'albula'. This acquired know-how enabled the only Swiss team to realise some major improvements in lightweight construction, ergonomics, material technology and electronics.

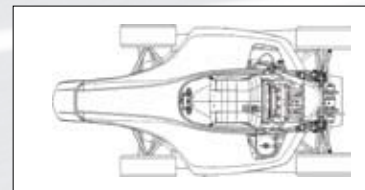
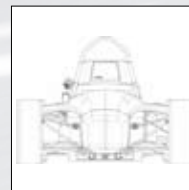
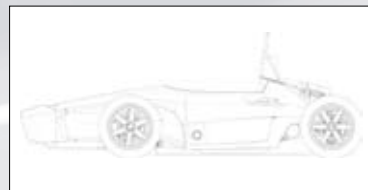
Both, the focus on lightweight construction and the use of modern composite materials allowed a weight-reduction of about 20% compared to the first built car. Careful attention was paid to keep inertias low around all three main axis of the car, lowering the centre of gravity and giving the suspension enough room to be efficient.

The focus in the electronics department was set in reliability during all conditions, simple error debugging and integration of all computational processes in a self-designed on-board computer. Both, the hardware and the software were fully developed by the student team.

The suspension was designed to be predictable, give enough feedback and not exhaust the driver during endurance race.



8th
Overall in
Class 1



Length/width/height/wheelbase	2764mm/1403mm/1005mm/1625mm
Track (front/rear)	1200mm/1160mm
Weight including 68kg driver (front/rear)	133.95kg/151.05kg
Suspension (front/rear)	Double unequal length A-Arm. Pull rod/Push rod actuated, horizontally oriented spring and damper
Tyres (front/rear)	20 x 7 - 13 R075 Goodyear Eagle
Wheels (front/rear)	7 inch wide, 3 piece Al rims, 22.6 mm positiv Offset
Brakes (front/rear)	Floating, Cast Iron, hub mounted, 220 mm dia/212mm dia Drilled
Frame type	Full length monocoque with aluminium/steel differential holder
Engine	Suzuki 2005 GSX-R 600 4 cylinder
Bore/stroke/cylinders/cc	67 mm bore/42.5 mm stroke/ 4 cylinder/599 cc
Fuel	gasoline 100 octane
Fuel system	Original fuel injection, sequential
Max power/max torque	12,000rpm/8,750rpm
Transmission/differential/final drive	Chain 520 norm/limited slip differential with friction plates, adjustable/3.69:1