

# TORONTO

## RYERSON UNIVERSITY

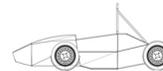
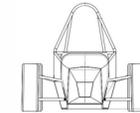
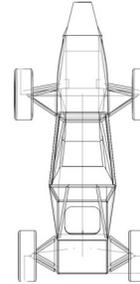


The 2012 car is an evolution over its predecessor. Redesigned from the ground up, the RF12 has been developed to find the optimal balance between performance, reliability and maintainability. Also weighing heavily throughout the design process were aspects of maximizing fuel economy while preserving power, and enhancing driver comfort and safety. Several main design concepts were kept in the forefront to advance the performance of the 2012 car such as reducing the mass and bulk of the chassis by designing an effective suspension system and increasing the specific power output of the engine while reducing fuel consumption and improving drivability. Further develop ergonomics and safety allowed for increased driver comfort and control. In addition reducing rotating mass within the driveline has allowed for variations in final drive ratios, depending on performance preferences. Website: [www.ryersonformulasae.com](http://www.ryersonformulasae.com)

CANADA



## CAR 5 PIT 13



**FRAME CONSTRUCTION:** Tubular space frame

**MATERIAL:** 4130 steel round tubing 25.4mm dia

**OVERALL L/W/H (mm) :** 2769 / 1397 / 1158

**WHEELBASE (mm) / TRACK (Fr/Rr) (mm):** 1613 / 1245 / 1168

**WEIGHT WITH 68KG DRIVER (Fr/Rr):** 140 / 140

**SUSPENSION:** Double unequal length A-Arm. Push rod actuated horizontally oriented spring and damper

**TYRES (Fr/Rr):** 20.5 x 6.0-13 R25B Hoosier / 20.5 x7.0-13 R25B Hoosier

**WHEELS (Fr/Rr):** 152 mm (6") wide, 3 pc Al Rim, 50 mm neg. offset

**ENGINE:** Yamaha / YZF-R6

**BORE/STROKE/CYLINDERS/DISPLACEMENT:**  
67 mm bore / 42.5 mm stroke / 4 cylinder / 599 cc

**COMPRESSION RATIO:** 14.3:1

**FUEL SYSTEM:** Link G4 Storm, sequential fuel injection

**FUEL:** E-85 ethanol

**MAX POWER/ TORQUE DESIGN (rpm):** 11500 / 9000

**DIFFERENTIAL:**Drexler Formula Student Special , 35 Nm preload

**COOLING:** single side-pod mounted radiator, ECU controlled fan and electric water pump

**BRAKE SYSTEM:** Outboard, Floating ductile iron, mounted to 2024-T3 brake hats, 226mm dia x 4.5mm, scalloped discs, AP Racing 15.90mm bore front / 19.05mm bore rear with driver adjustable bias bar, (Fr/Rr) 37mm/31 mm dia. 4-piston/2-piston, fixed

**ELECTRONICS:** Steering wheel mounted LED display