

Laser Cutting

2007 has seen the continued association between Team Swinburne and New Touch Laser Cutting. New Touch has the ability to process non ferrous materials such as Aluminium and have the ability to process traditionally difficult materials such as Stainless Steel. This has given Team Swinburne the ability to manufacture and implement design solutions with a greatly reduced lead time.

This year New Touch have assisted the team in the manufacture of all bearing retainers found on the ts_07, all the aluminium lightweight brackets found in the cooling system, exhaust brackets and flanges and also the floor.

There are many benefits in having these pieces laser cut compared to traditional manufacturing methods. The technology New Touch offers produces tolerances of plus or minus 0.1 mm, making it ideal in the manufacture of all flat plate components in the ts_07. Also due to the quality of the cuts there is no secondary machining required therefore reducing the load on the dedicated Swinburne technical staff.

Due to the laser process not requiring any hard tooling and therefore requiring minimal setup, the process is extremely fast and efficient. This has meant that components made by New Touch have been manufactured quickly and have been amongst the first components made for the ts_07 FSAE car.

Team Swinburne would like to thank New Touch laser cutting for their continued support of the Formula Sae race team.

Steven Meikle
Drivetrain Team





Above: Laser cut parts of the bellcrank plates (TOP) and bearing carriers (BOTTOM) for the ts 07 car.