

c) The main merit of a carbon-fibre tub is that it provides a very high Young's modulus for as low a weight as possible. Carbon fibre is not very workable mandating the tub design and minimising the amount of additional weight that can be saved with strategic holes. Carbon fibre is, however, corrosion resistant and chemically stable, extending the working life of the chassis. It is electrically conductive, which could be utilised to simplify power systems. It is non-flammable and has good fatigue resistance. It is brittle, which is a flaw - any impact that ~~exceeds~~^{bends} the material will easily break it - and an opportunity, allowing 'shatter zones' to be created to absorb force in a crash and protect the driver.

Steel space frames are, primarily, cheap. They are non-flammable and electrically conductive. They can be manufactured to minimise weight via strategic thinning and holing, and maximise strength where it is needed. It Steel can be alloyed to affect its strength and density and add properties such as corrosion resistance. It is ductile and will bend a lot before breaking; this increases its workability as well as allowing the creation of crumple zones.

d) When welded, a base metal is briefly liquidised and then solidified. This allows reactions with it.