

Fuel Tanks

Various fuel tanks are made by trained metal craftspeople, although most tanks are fabricated. Custom and restoration tanks could be utilized on motorcycles, aircraft, automotive and tractors.

There are a series of specific requirements to be followed when constructing fuel tanks. Typically, the craftsman sets up a mockup in order to find out the accurate shape and size of the tank. This is normally done from foam board. Afterward, design problems are handled, including where the drain, outlet, seams, baffles and fluid level indicator will go. The craftsman must know the alloy, temper and thickness of the metal sheet he will make use of to construct the tank. Once the metal sheet is cut into the shapes required, lots of pieces are bent to be able to create the basic shell and or the ends and baffles for the fuel tank.

In racecars and aircraft, the baffles hold "lightening" holes, which are flanged holes that provide strength to the baffles, while likewise reducing the tank's weight. Openings are added toward the ends of construction for the filler neck, the fluid-level sending unit, the drain and the fuel pickup. Every so often these holes are added as soon as the fabrication method is finish, other times they are made on the flat shell.

The ends and the baffles are then riveted in position. Frequently, the rivet heads are soldered or brazed to be able to stop tank leakage. Ends can next be hemmed in and flanged and brazed, or soldered, or sealed utilizing an epoxy type of sealant, or the ends could even be flanged and then welded. After the soldering, brazing and welding has been done, the fuel tank is checked for leaks.