

Fuel Tanks

Various fuel tanks are fabricated by skilled metal craftspeople, even if the majority of tanks are manufactured. Custom and restoration tanks can be utilized on automotive, tractors, motorcycles and aircraft.

When constructing fuel tanks, there are a series of requirements that should be adopted. Firstly, the tanks craftsman would make a mockup in order to determine the measurements of the tank. This is usually performed using foam board. Afterward, design concerns are handled, comprising where the outlets, seams, drain, baffles and fluid level indicator will go. The craftsman has to know the alloy, thickness and temper of the metal sheet he will make use of so as to construct the tank. When the metal sheet is cut into the shapes required, numerous parts are bent so as to create the basic shell and or the ends and baffles used for the fuel tank.

Lots of baffles in racecars and aircraft contain "lightening" holes. These flanged holes have two purposes. They reduce the weight of the tank while adding weight to the baffles. Openings are added toward the ends of construction for the fluid-level sending unit, the drain, the fuel pickup and the filler neck. Sometimes these holes are added as soon as the fabrication process is complete, other times they are created on the flat shell.

Next, the ends and baffles could be riveted into position. The rivet heads are normally soldered or brazed so as to avoid tank leaks. Ends can then be hemmed in and flanged and brazed, or soldered, or sealed with an epoxy kind of sealant, or the ends can even be flanged and afterward welded. After the soldering, brazing and welding has been completed, the fuel tank is checked for leaks.