

Fuel Tanks

Several fuel tanks are fabricated by trained metal craftspeople, though nearly all tanks are manufactured. Restoration and custom tanks could be utilized on tractors, motorcycles, aircraft and automotive.

When constructing fuel tanks, there are a series of requirements which ought to be adopted. Primarily, the tanks craftsman would make a mockup in order to know the dimensions of the tank. This is usually performed utilizing foam board. Next, design problems are dealt with, consisting of where the outlets, seams, drain, baffles and fluid level indicator will go. The craftsman needs to determine the alloy, temper and thickness of the metal sheet he would utilize to be able to make the tank. When the metal sheet is cut into the shapes needed, many pieces are bent to be able to make the basic shell and or the ends and baffles used for the fuel tank.

In aircraft and racecars, 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 drain, the fuel pickup, the filler neck and the fluid-level sending unit. At times these holes are added once the fabrication process is finish, other times they are made on the flat shell.

The ends and the baffles are after that riveted in position. Often, the rivet heads are soldered or brazed so as to stop tank leakage. Ends could after that be hemmed in and flanged and sealed, or brazed, or soldered with an epoxy type of sealant, or the ends could even be flanged and then welded. After the brazing, welding and soldering has been completed, the fuel tank is tested for leaks.