

Fuel Tanks

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

There are a series of particular requirements to be followed when making fuel tanks. Typically, the craftsman sets up a mockup in order to find out the correct shape and size of the tank. This is usually performed out of foam board. Afterward, design problems are handled, including where the drain, outlet, seams, baffles and fluid level indicator would go. The craftsman needs to determine the alloy, thickness and temper of the metallic sheet he would use to be able to make the tank. As soon as the metal sheet is cut into the shapes needed, lots of parts are bent so as to make the basic shell and or the ends and baffles for the fuel tank.

Numerous baffles in racecars and aircraft have "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 fuel pickup, the filler neck, the fluid-level sending unit and the drain. Occasionally these holes are added once the fabrication method is complete, other times they are created on the flat shell.

The ends and the baffles are then riveted in place. Normally, the rivet heads are brazed or soldered to be able to avoid tank leakage. Ends could next be hemmed in and flanged and soldered, or sealed, or brazed utilizing an epoxy kind of sealant, or the ends could likewise be flanged and afterward welded. After the soldering, brazing and welding has been finished, the fuel tank is checked for leaks.