

# ALUMINUM TANK DESIGNER'S GUIDE

YOUR GUIDE TO CHOOSING THE RIGHT TANK FEATURES

## SHAPE & DIMS

**01.** **Square and Rectangle** designs are often the most effective tank shapes. They are strong, easy to mount and cost effective to manufacture. When considering these tanks, start by determining your desired height, length, width, and target capacity.

Tanks with more **Complex Geometry** are sometimes needed to accommodate **Unique** Applications. For these situations look at our application specific tanks. Need something custom? Start your design process by looking for basic shapes within your complex one. Breaking that awkward shape down to rectangles, wedges, and cylinders, makes it easier to handle dimensioning the design and will give you a leg up when the tank is sent to fabrication.

## PORTS & FITTINGS

**02.** Determine how your tank will **plumb into your system** and other components. Consider AN style connections for high pressure applications or barb fittings for a quick easy connection in a lower pressure situation. If you want flexibility in your connections consider using female threaded bungs, pipe thread or AN, and use adapter fittings to convert to what ever is needed.



## NECKS & CAPS

**03.** When choosing what cap your tank needs consider whether your application will be **under pressure** or **vented**.

If your tank will be part of a pressurized system, you will need to have a neck and cap designed to hold that pressure. In these applications you can use caps with built in pressure reliefs or separate pressure relief valves to protect against undesirable pressure levels in your system. If your tank will be un-pressurized a neck and cap design that allows for ventilation may be needed. In certain applications this ventilation is critical to allow for the free flow of fluid in and out of the tank.

## MOUNTING BRACKETS

**04.** Consider how your tank will be mounted in its application. If your situation allows, look for a tank with tabs integrated into the body. This design is simple and effective. For more unique applications the use of customized brackets will be required.



## BAFFLING

**05.** Depending on the intended application, baffling may be required to control or direct fluid within the tank. In addition to baffling, scavenging tubes can be used to pull fluid from specific locations within the tank.



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