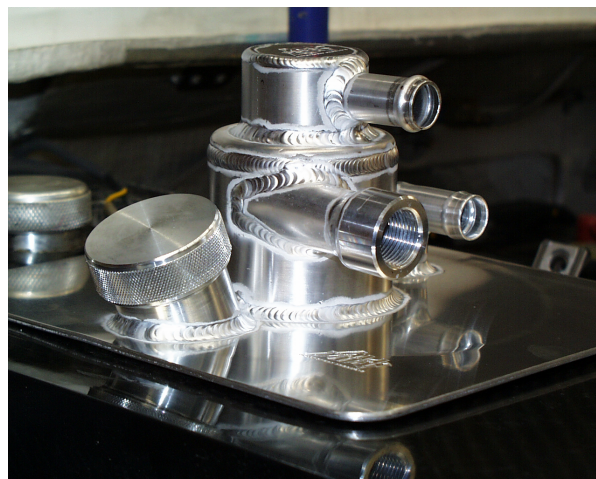




Data Sheet AHFspec Custom Millington Approved Dry Sump Tanks



Features

High strength, low weight, dry sump oil tanks for competition and fast road use.

Applications

Bespoke oil tanks that are designed to be fitted to competition engines of all sizes, where our off the shelf sizes are not perfect for your application.

General Description

A good dry sump tank will perform two functions. The first is to store oil for the short period until it is needed by the engine, the second is to separate it from any gases that have been returned by the scavenge pump. When the oil is returned to the oil tank, it is very often a foam that is made up of the engine oil and air that occupies the crank case. The oil tank needs to be able to quickly separate the oil from the air so the lubricant is ready to be delivered to the engine again. This effective separation is something that our tanks are renowned for, the design often copied. However the design, position and dimensions of the various components are very important in producing a reliably performing product.

Available in various off the shelf sizes, but because we produce all of our products in our Hereford workshop we are able to easily accommodate custom and bespoke designs. Our tanks are used with both petrol and diesel engines of various capacities, and are suitable for all common engine lubricants including synthetic ester based oils commonly used in motorsport. Various capacities are achievable even with limited space, the most popular target capacity for circuit and rally is 1.5 gallons. Smaller tanks holding around 1 gallon are popular for shorter distance events, or when the oil can be changed more often. Certainly larger tanks of ~2 gallons are popular with long distance events and 24 hour endurance races, where longevity of the lubricant is more important.

No oil should be rejected from the breather, although a catch tank is required by most Motorsport governing bodies. This is purely to mitigate the loss of oil in the event of an engine failure.

Various body diameters and shapes can be accommodated, some can be equipped with a proprietary 'split-ring', allowing the unit to be completely disassembled for cleaning and inspection. Service kits are available with replacement o-rings and fasteners. The special deaeration tower projects only 100mm from the top of the main body, so adds very little to the size of the tank, but improves performance hugely.



Oil tank design.

When designing a tank, you need to consider only a handful of things. You need to think about its overall shape, where each of the unions or its 'furniture' will be located, and how it will be mounted to the vehicle.

- You will need a filler, a breather and a scavenge near the top of the tank, and a feed at the bottom of the tank.
- A tall, round tank with the deaeration unit in the centre will always work much better than a short, square tank with the deaeration unit off to one side.
- Most oil tanks are either mounted to the vehicle with a mounting base, or in a saddle/cradle & strap that matches the shape of the tank body.

Body Diameters Available

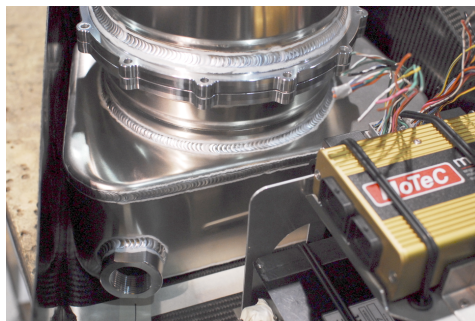
110mm	120mm	128mm	135mm	140mm Split available	145mm	155mm Split available	195mm Split available	300mm
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Oval body dimensions

150x110mm	232x120mm	200x150mm	250x150mm Split available
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Additional Options

FEP sight tube	Sight tube fitted to the side of the tank to allow instant visual check of oil level
Dipstick	Dipstick attached to the filler cap to allow simple oil level checks
Drain	Threaded plug in the base to allow quick and thorough oil changes
Temperature Sender Boss	All Metric and Imperial sizes catered for
CT catch tank	Popular addition fitted to the side of the oil tank
Tapered bottom	Popular in F1, the oil is channelled into the centre of the base, at the expense of oil capacity



Our dry sump oil tanks are trusted by engine builders and the finest vehicle preparation specialists, and are used across the globe. The only dry sump tank approved by Millington Racing Engines.

