

TREADSTONE PERFORMANCE

Our cast turbo manifolds are cast using a high ductile silicone based iron adhering to strict ASTM casting standards. Our manifolds are very durable and can withstand all the heat and vibration you can throw at them. Our manifold casting exceeds OEM specifications and now come with a 1 year replacement warranty against cracking. All of our manifolds incorporate external 35 or 38mm wastegate, and either T3 or T4 standard turbine inlet. All internal surfaces are cast smooth for high flow and low surface friction.

Do not settle for cheap stainless steel and poor tig-welded manifolds commonly found across the net. Cast iron manifolds have a greater life expectancy because they are a one-piece design, unlike stainless steel flanges, tubes, and tig welding that has different expansion coefficients that cause the common crack.

Everyone knows that any tubular welded manifold will eventually crack and sometimes you will not even know it. These small cracks will let precious turbine spinning exhaust gasses escape, decrease manifold pressure, slow spool times, and waste energy.

Why casting?

Casting is by far the best choice when turbocharging a street, or street/strip car. It has a great life expectancy against cracking, retains more heat than tubular manifolds, and promotes better spool up. This heat and speed of the exhaust gasses is what powers the turbine, retaining more heat, keeping exhaust gasses hotter, and at a higher velocity means better spool up, and decrease turbo lag. And we all know why you want to have instant spool up, for that neck snapping torque curve!

- Thick walled
- Smooth internal casting
- Constant section runners
- Low runner volume
- Less heat transfer to ambient

Tubular manifolds: People have the misconception that tubular style manifolds are better than cast, or even log style cast manifolds. This is true in some cases and false in others. Yes, tubular will give you that higher Hp #, than a log style manifold, or tubular style casting. With tubular manifolds you have the option of making the runners equal length, and equally controlling the gasses pulses as they enter the turbine; this is how you achieve the large HP #'s.

With tubular manifolds, they will eventually crack, no doubt about it, unless your turbo system is engineered to race car standards; bracing the turbo, keeping the weight of the turbo manifold, take thermal coefficients of expansion in to case when welding tubes together, and so on.

Cast turbo manifolds: Cast turbo manifolds, as stated before will promote better spool up, and decrease turbo lag. These factors on a street car, and the street/strip car are very

important. This spool up of the turbo and boost response is what gives us torque, and the quicker you spool that turbo, the bigger the torque curve will be, and you will have the power where it counts; of the line, and throughout the low and mid range of the power band.

We have the ability to make a cast manifold from a tubular manifold, we can design tooling duplicate tubular manifolds, and even tool merge collectors into our manifolds, yes that is right, merge collectors! With our casting ability, we have designed in the past, a manifold that was equal length, and exact replica of a tubular manifold prototype. Our cast manifold actually produced more HP than the tubular one. This was mainly due to the heat retention, perfectly sized runners, and optimized cast merge collector.

What we can do for you! We can replicate your tubular manifold, or very similar style within our limits. Of course we cannot cast a long runner complex tubular manifold. Our manifolds can exhibit log style to equal length runners, and an optimized merge collector. You can even send us a header flange, with brackets supporting the turbo inlet and wastegate flange, and we can manufacture a manifold without you even having to weld a prototype up.

Material: Our manifolds come with a 1 year warranty guarantee against cracking! All of our casting adhering to a strict ASTM casting standards, we use a high silicone base ductile iron. With our casting abilities, we have manufactured 1000's of manifolds, and not one has been reported cracking!

- Good crack resistance
- High temperature shape stability for machining
- High strength