

Welcome to T&E Auto Haulers! We have been building trailers since 1981 and our experience shows in every trailer we build. We care about each individual customer and will guide you in your trailer buying experience every step of the way - that's what this Trailer Buyers Guide is all about.

You'll find that our trailers meet or exceed the highest standards in the trailer industry. Initially, our trailers may appear to be a bit more expensive than some of our competitors. They may cost more money than you originally planned to spend. It has been our experience that by spending a little more money up front you can actually save money in the long run. We realize we are not the cheapest, but we feel we are the BEST. At T&E, what you pay for is what you get - trailers with the highest level of quality, excellent towability and high resale value at trade in time. We still run into folks running T&E trailers built in the 1980's - that's certainly a testament to how each of our trailers is built!

Introduction

This Buyers Guide was created to supply prospective customers with information relevant to helping them choose the proper trailer for their particular situation. We'll talk about weight issues, the different types of construction, running gear selection and the various optional equipment available to suit your needs.

A race car trailer has transcended the utilitarian aspect of just hauling around a race vehicle. Your race trailer portrays your team and the reputation that you want to project. It can also serve as a rolling advertisement for your operation, as we will learn more about later in the Buyers Guide.

Professional racers generally move up to a new trailer every two or three years. Although the life span of high quality trailers can reach more than 15 years, many teams are purchasing new trailers because they have outgrown their current trailer or need to downsize due to changing circumstances. No matter the reason, now is the time to get your new trailer spec'd out and into the manufacturing pipeline if you want it delivered early on in the season. The first quarter of each year is the time period that T&E is very busy meeting the demands of the current years race season.



What Size of Trailer Do I Need - Weigh Your Options

Whether you're buying your first trailer or upgrading to a larger trailer, the first thing you should think about is what kind of interior space you'll need, the length of your trailer and the type of vehicle you'll need to tow it with. Ideally you should take stock of what your entire racing operation consists of equipment-wise. This includes your race vehicle(s), support vehicle(s), such as golf carts, support equipment such as tools, pit machinery, computers and also spare parts.



Do you need to haul multiple cars and still hold down your trailer length? If so, you might need to focus on purchasing a "stacker" type trailer. If you've got a single car operation, a Pull-a-Long or Gooseneck trailer would probably meet your requirements. These types of



trailers can be towed with "dually type" trucks when the trailer is a smaller model. The larger models, especially taller/longer "stacker" type trailers, probably will demand that you use a heavy duty truck, totorhome or motorhome to pull.

If you're operation is quite large and you are running a semi-professional or professional racing campaign, you'll most likely be interested in one of T&E's semi trailers. Semi trailers allow for multiple car hauling along with enabling you to bring along every piece of equipment you'll need to support your race vehicles. Semi trailers also feature lounge areas that hold complete living accommodations for you and some of your crew

while at the races. Semi trailers also allow you to have a separate area setup for your Crew Chief and others to process data while you're at the race site. Computer areas can be located in the work area, living quarters or both - the choice is totally yours.

Do you plan on spending a lot of time in your trailer due to a heavy racing schedule? If this is the case, you may want to consider a trailer with living quarters to allow you to spend as much time with your car while at the track and still have a place to relax when need be. An added plus with living quarter equipped trailers is that you can also save on hotel expenses by sleeping in the living quarters. Living quarter equipped trailers can be equipped with simple accommodations such as bunk beds, sink and bathroom/showers. If you really want to spend your time at the track in style and comfort, you can move up to full blown luxury



accommodations with entertainment systems, leather sofa and couches, high grade floor treatments, Corian countertops, microwaves, satellite tv's w/dvd players and so forth. The options available are only limited by your imagination and pocket book.

Another important topic that a prospective buyer should think about is the total weight of equipment and vehicles that you'll be hauling versus the size of the running gear. A good rule of thumb is to calculate your total race vehicle and equipment weight and then add 20-25% onto that number. T&E can then calculate specific axle/tire combinations that will be suitable not only for your current equipment weight, but also for any possible future additions to your operation. Just keep in mind that people have a tendency to overload their trailers so it's a good idea to add a little extra capacity to your trailer now. Tires and axles are probably one of the more important items to pay attention to here...road hazards combined with an overloaded trailer can lead to tire blow-outs that will put not only your trailer at risk, but also your race car and equipment.

What Type of Brakes and Suspension Systems Should I Consider?

While we're talking about weight issues, we should also discuss the different types of brake and suspension options that you have to choose from and the strengths of each. Brakes are available in standard drum, optional disc, as well as ABS types.

Standard drum brakes are quite capable under most circumstances, but they do have one weakness. Under high braking conditions, like descending a steep hill with a



heavy load or repeated high-speed slow downs, drum brakes often fade and lose effectiveness. Usually this fading is a result of too much heat build-up within the drum. For this reason, drum brakes can only operate as long as they can absorb the heat generated by slowing a trailer's wheels. Once the brake components themselves become saturated with heat, they lose the ability to efficiently halt a trailer, which can be somewhat disconcerting to the vehicle's operator. Standard drum brakes are what T&E features on their basic trailer packages and for buyers who don't plan on pulling in hilly or mountainous areas. They provide smooth and cost-effective braking power.





For trailer buyers who regularly travel over hilly our mountainous terrain, disc brakes are a very desirable option. Unlike drum brakes, which allow heat to build up inside the drum during heavy braking, the rotor used in disc brakes is fully exposed to outside air. This exposure works to constantly cool the rotor, greatly reducing its tendency to overheat or cause fading. Not surprisingly, it was under racing circumstances that the weaknesses of drum brakes and the strengths of disc brakes were first illustrated. Racers with disc brake systems could carry their speed "deeper" into a corner and apply greater braking force at the last possible second without overheating the components. For this reason, disc

brakes make an excellent choice even if your travel doesn't take you into areas with steep grades they provide an extra margin of safety for both you and your precious cargo.

Another brake option to consider is an ABS type disc brake system. In some situations, ABS can actually reduce stopping distances. This is because the system can achieve and maintain maximum braking better than many drivers can. More importantly, ABS enables you to avoid jack knifing while the brakes are firmly applied. For every split second that the brake pressure is released, the tires grip the road surface. ABS also allows you to brake firmly on surfaces with different levels of grip. Any wheel on a surface with poor grip will lock more easily than one on a good grip surface: ABS distributes brake pressures so the trailer will stop in a straight line.

Air suspensions are increasingly being specified for trailer applications. Weight-wise, air ride, as it is commonly called, falls in the middle between leaf spring and rubber suspensions. Though its off-highway mobility is not as good as the other types, air ride is at the top of the list in ride quality and transmits less harshness into your trailer and it's cargo. Air suspensions provide excellent roll stiffness for the higher gross loads on some of our larger trailers. T&E can provide you with the best in high quality air suspensions should you choose to have one installed on your new trailer.





What Type of Vehicle Loading and Unloading Options Should I Consider?



For T&E's standard type Pull-a-Long and Gooseneck trailers, we provide a heavy duty rear ramp door that can also be configured with optional beavertail extensions. For our smaller trailers this is probably quite suitable. We can provide optional electric winches to facilitate moving your vehicles into the trailer as well.

Should you desire a multiple car stacking trailer or semi, you will want to specify either a hydraulically powered lift platform or a lift gate. Our lift platforms allow trailer buyers to load two vehicles (one over the top of the other) inside

the trailer. Hand held control consoles are located inside the trailer for raising or lowering the lift platform when loading vehicles into the upper berth of our stacker trailers. Once the upper vehicle position is filled, you simply move your other vehicle into position directly underneath it in the lower berth.

For semi trailers (as well as some of our larger Pull-a-Long trailers), T&E provides a hydraulically controlled rear lift gate. The lift gate is controlled by a hand held console box hooked the outside of the trailer and allows for transporting of vehicles to and from the upper deck of our semi trailers. The lift gate is capable of moving both horizontally and vertically in its' range of motion and is rated for the specific weight of your race vehicles.



Lift Gate Operation





What Type of Interior Options Should I Consider?

T&E has a wide array of trailer interior options to choose from and we have options to fit anyone from budget to full time professional operation. Again, what you initially should consider is the number of race vehicles you plan to carry and then tally up all the support material and equipment that you need to bring along to races. T&E offers work benches, overhead aluminum cabinetry with latched doors, Drings, Logistic Track, slick mounts, tire racks, header racks, shock racks and a wide range of other storage solutions.





For a first time trailer buyer who has a limited budget, a simple front mounted work bench with overhead storage cabinet would be desirable and very cost effective. There would be storage area underneath the workbench for larger items as well as space for a small electric winch should you choose that option.

For interior work area wall treatments the first time buyer has some options, depending on their finances. While you could specify standard bare walls and aluminum floor to save money initially, walls sheeted in optional white aluminum would provide for maximum light reflection when working inside your trailer. This could also be enhanced by choosing our optional flourescent lighting packages.



Some other options that the first time buyer should consider would be a basic 110 volt electrical package, either run by exterior supplied power or an optional generator package. With the optional generator package you would have a self-sufficient power supply wherever you might be working. Wall outlets for the 110 volt system can also be conveniently located throughout the trailer to provide access from the front of the trailer to the rear. Exterior electrical outlets would certainly be a plus should you go with a generator



package. Also, it might be wise to consider an air compressor setup somewhere inside your trailer. It could be run off either an exterior power supply or off your generator package. For the first time trailer buyer, these items should be high on the list.



T&E can provide you with a custom computer station mounted either on top of a work bench or in its' own unique free standing cabinet. The computer station could be built with either a slide-out keyboard/mouse platform or it could utilize the work bench top to hold the keyboard and mouse. The CPU would fit right next to your monitor on the monitor base of the cabinet or it could be installed in the upper compartment of the cabinet of free standing computer stations. A high quality European roll up door assembly is provided with custom facia for our optional computer cabinets.

Additional storage cabinets can be place along the side walls on either side of the trailer or migrate from the front work bench in an L-shaped configuration. Wheel well storage cabinets are also available to make room in the rear of the trailer for smaller items that are not too wide. Additional overhead cabinets can span back on either or both sidewalls to

enhance storage without tying up floor space. On stacker trailers or semi trailers, cabinets can be installed in the upper deck area which is accessed by a ladder which passes through the upper floor through an access way. Some customers have even chosen to equip this upper area with sleeping accommodations and entertainment systems. Your imagination is the limit here.





exterior work area, we can provide special trolley beams. These trolley beams are located directly across from the trailers' side entry door to allow you to transfer these heavy items safely to the exterior work area. They are powder coated in standard white to match our white interior color.



What Kinds of Exterior Trailer Options Should I Consider?



The exterior of your trailer is an area where you can focus attention on a variety of options that will project your teams professionalism and also enhance your productivity. T&E can also provide custom lighting, manual or electric awning packages, exterior air and electric reels plus a host of paint options to highlight your operations professional attitude.

An exterior awning to provide shelter from the sun and other elements while you work between rounds is one very important element to focus on with the trailer exterior. T&E offers both manual and electric awning packages in a variety of colors as well as custom print colors to match your race teams color scheme. We can even provide custom team logo's and lettering at additional cost. Pole mount awning systems mount physically on attachment points on the exterior walls of your trailer. Electric awning systems either roll up into a self-enclosed storage box permanently installed on the trailers side or into a recessed portion of the upper side of your trailer with a hydraulically actuated door for a sleeker appearance when stored for transit.

Exterior lighting is a popular option to consider if you plan on working in the pits at night. We offer either individual quartz lights mounted on portable stands or quartz light packages mounted physically in the side fo your trailers' side or rear that are controlled by an interior

light switch. Quartz lights installed in the side of T&E trailers can even be ordered with electric solenoids to open and position them by a remote electric switch control.

T&E can also provide all aluminum fold up work tables for holding your parts tear down assemblies, portable surface mount tables that mount on the trailer sides and a host of other optional exterior items to make your work easier.







Now, let's focus on your trailers' exterior appearance. In 2007, T&E introduced a rivetless, rounded top extrusion which is styled with the new European look for the top of the trailer. These extrusions can either be polished, painted or left in their natural form.



We offer custom painting of all the exterior aluminum extrusions in either white to match our standard white or black or red to match our optional sheeting colors. You

may also choose to have your entire trailer custom painted in either solid colors of you choosing or with a custom designed paint scheme.





T&E offers three exterior sheeting options - all-aluminum riveted, all-aluminum rivetless and aluminum plate-side construction. We'll discuss the details and the differences of each and how they might fit in with your trailer plans below.

The standard all-aluminum rivited construction style is the most popular style of trailer in our product line and what cost conscious trailer buyers will probably choose. This method of construction begins with our standard interlocking floor/frame. We then construct the walls on this frame to create a unibody type of construction which provides the utmost in strength with least amount of weight possible. Next, we apply the exterior sheeting by riveting each seam and apply adhesive tape and epoxy to all the wall studs, which are located on 16" centers. This results in an unusually strong unit which also features a very clean appearance. After sheeting the side walls, we then install a .040 thick 1 piece seamless roof. We also offer a rivetless version of the sheeting process above for teams that want a cleaner look and to allow the easier use of graphics on the trailer sides. These trailers can be custom painted for the European look that is so popular.

Our optional all aluminum plate sided trailers offer the ultimate in T&E quality and durability. This method of construction is the most time intensive and involves an extra measure of hand craftsmanship. We start the construction process by drafting the design of each trailer within a computer program. Using these plans we carefully handcraft each trailer using no rivets in the sides of the trailer other than in the aluminum extrusions. We use aluminum sheeting of either .090 or .083 thickness with a standard white finish or your choice of



custom finishes. The plate sides are built with two 90° bends on the edge of the piece and are then bolted together every 3" to the inside of the trailer. We then tape and glue the uprights to these panels to assure a strong, monocoque type of construction. All of this is topped off with a .040" seamless aluminum roof. This trailer style is optimal for painting with your choice of custom finishes or your custom decal or graphics package.

Now that we've discussed the trailers exterior and appearance option choices, we'd like to focus on an area that is really catching on like wildfire - Rolling Billboards.

T&E all aluminum plate side trailers offer an excellent "canvas" for placing your teams custom race graphics. The completely smooth exterior finish provides the perfect surface for easy application of corporate/team graphics, as evidenced by some of the customers we've built trailers for over the past several years.

Lets face it, a trailer with a custom graphics package can project a sense of professionalism for your team wherever you travel. Just think of the thousands of opportunities to provide your sponsors exposure as you travel down the freeway systems of this country. Your trailer is in effect a two-sided rolling billboard! There's no better way to advertise than to take advantage of your trailers sheer size. This is an option that professional teams will consider a "must have".

ROLLING BILLBOARDS....





Specialty Trailers - Vending and Coach Trailers

T&E has also built vending and coach type trailers over the past 2 years. Vending and coach trailers have different requirements than trailers built for race teams, but these trailers' specifications are also important. For example, since business is conducted in vending trailers all day, air conditioning, microwaves and refrigerators are highly requested options so vendors don't have to leave their trailers.

Vending Trailers

Vending trailers play another vital role in many racing businesses, and we'd like to offer some helpful hints on buying this type of trailer.

Vendors need to protect their valuable cargo and that's why T&E vending trailers are sealed tightly to keep dust, dirt and fumes away from the customers' valuable merchandise.

If you plan on selling goods straight from the trailer, you should consider lightweight aluminum flip-up doors with awnings to allow shade from the sun and elements while you work. You'll also have some exterior removable shelving under each vending





window. Your trailer can also act as a billboard by ordering it with flip-up signage. They will provide you with convenient instant signage to advertise your business and products.



Some of our customer teams sell parts out of their trailers. Generally, we build those trailers to be self-contained. They have their own power, their own generator and these trailers are built so they can be pulled very easily behind a motor home. These trailers are very self-sufficient, are heavy duty and pull nicely. A typical vending trailer

customer will want air conditioning, at least in part of the trailer. For the most part, they'll probably have some special storage requirements. And some of them will have a microwave and refrigerator so they don't have to leave the vending trailer.



In vending trailers, the trend is toward heavier suspensions with air ride, nice heavy tires and other beefy components as these trailers sometimes have to deal with locations off the beaten path.

Coach Trailers

Coach trailers are design for motor coach owners who desire a way to bring their toys along with them in their travels. These trailers feature room for up to two vehicles, golf cart or whatever else you may want to take with you on your excursions. Side door ramps allow for easy loading/unloading of golf carts and work areas with benches and overhead cabinets are available. Platform lifts are available to allow transportation of up to two vehicles.

Whether you are in the market for a vending trailer, coach trailer or race trailer, the time to place your order is now.

Why Not Choose T&E For Your Next Trailer...

Thanks for reviewing our Trailer Buyers Guide - we hope we've highlighted some important information that you'll use when choosing your next trailer. Please feel free to give us a call anytime with questions on why a T&E Quality Built All-Aluminum trailer is your best value. We can even arrange for a tour of our plant, if you'd like to visit us. Give us a call at 815-426-2761 - we'd love to talk trailers with you!

Visit Us on the Web @www.tande-racetrailers.com

PHONE: 815.426.2761





National Association of Trailer Manufacturers Member



Pro Quality All-Aluminum Trailers Built by Racers for Racers