



International's new ProStar was designed with strong aerodynamic features.

Pushing Air

AS DIESEL PRICES STAY HIGH, SPEC'ING AERO FEATURES IS A MAJOR CONSIDERATION FOR HIGHWAY TRUCKS.

Dima Rips is a classic truck fan, and his favorite model is a Kenworth W900. "I love the style and the look," says the Russian-born owner-operator, who has driven in the United States for more than 14 years. "I love everything about classic trucks. Everything but their efficiency."

That's why Rips bought an aerodynamic Kenworth T600 to replace his previous rig. "There was no doubt in my mind that my next truck was going to be aero," he says. "I strongly believe that trucking is a business, and the bottom line dictates the rules. Why would I want to pay extra to push the air?"

With their external air cleaners, Texas bumpers, chromed tanks and big, long hoods, classic trucks like the W900, Peterbilt 379 and Freightliner Classic remain popular despite major gains in aerodynamic design and even more notable increases in fuel prices.

Today's classic truck models cut through the wind better than

their predecessors, thanks to incremental improvements in design, say truck engineers. Most of these trucks have roof and skirt fairing options, angled windshields and other modern wind-friendly touches, such as integrated sleepers.

Should you specify classic plus aerodynamic devices, or buy a

more aerodynamic body style – such as a Freightliner Century Class, Peterbilt 387 or 386, or Kenworth T2000? Or buy one of the newest models that emphasize a traditional look but have some aero features, such as the Peterbilt 389 or the Volvo VT 880? As with so many other aspects of spec'ing, it depends on how you will use the truck.

Aero trucks can improve fuel economy from 5 percent to 10 percent over traditional designs, a savings of thousands of dollars in fuel every year. But all those extra aerodynamics may not help much if your truck sits in city traffic or climbs hills all day. And you may pay for that at resale because conventional designs tend to retain their value better.

Aero vs. traditional is only one of the considerations in spec'ing your power unit. You'll also need to pick the right specifications for the sleeper size and wheelbase, choose the right combination of power and fuel efficiency and match the drivetrain components to your truck's application.

Much of what you will select is just as dependent on geography as freight. Trucks running in the city may need a shorter wheelbase and a smaller sleeper, while highway trucks may require higher horsepower to maintain speed and the right gearing and aerodynamics to minimize your fuel bill.

Design a truck with your salesperson so the parts work together and meet the bridge formula and other legal requirements. You need to be able to turn corners without having the cab side extenders hit the trailer and yet be able to close the cab-to-trailer gap for efficient highway cruising. You need to ensure you can cruise at the right rpm and start on the steepest hill you'll encounter with a full load.

The final piece of the spec'ing puzzle is the resale factor. The real price of a truck is what it costs new, minus what you sell it for. Paying a little more initially often means a good deal more money at resale, giving you a free ride in extra luxury or performance in the meantime.

Here are a few of the components to keep in mind when spec'ing your dream truck.

CABS AND SLEEPERS. Since most highway trucks are an owner-operators' home and office, taking special time with these components is vital. Still, that doesn't mean you should over-spec here.

An oversized sleeper may limit your truck's maneuverability. Regional operators might run a 230- to 240-inch wheelbase, but if you're running over the road, consider a wheelbase 265 to 280 inches long, which means a set-forward axle. Maneuverability is a function of wheelbase, so if you'll be making city deliveries, take that into consideration. While having a longer wheelbase and bigger sleeper provides a smoother ride and more comfort, it may not make business sense.

It usually pays to spec the premium-level interior for an on-highway truck. For example, you might save \$500 to \$600 by choosing a standard interior instead of the premium. But the lost value at the time of resale could be \$1,500 or more.

VEHICLE HEIGHT. Make sure to specify low-profile rubber if you must clear low bridges. And don't get the idea you can adjust ride height with your air suspension: If your suspension is out of spec', you can ruin the driveline basics. The angles at which the U-joints work are critical. Too great an angle, caused by riding lower than the design height,

creates a form of torsional vibration that can damage transmission synchronizers.

FRAME RAILS. It doesn't pay to skimp. Follow your manufacturer's guideline. A truck, for example, might have a 0.3175-inch frame, but move up to a 0.375-inch after the wheelbase reaches a certain length.

Still, there may be choices available, depending on the customization choices offered by the truck's manufacturer. Strong rails offer safe handling and a better ride and cushion the whip effect that lighter frames experience over bumps and in corners.

WHEELS. Another wise spec'ing choice is polished aluminum wheels for the entire tractor. Some buyers choose steel wheels for the inside wheels, or non-polished aluminum wheels for the rear wheels. Either choice may come back to haunt the buyer when it's time to sell.

Other low-maintenance items, such as unitized wheel hubs that are permanently sealed with synthetic grease, help lower costs and downtime. The up-front expense is often more than offset by reduced service time.

In the final analysis, determine the best balance of comfort, fuel economy, resale value and performance based on your specific needs and operating environment before you buy.

HIGHWAY SPECS. The highway trucks included in the spec listings represent the products from each manufacturer that are most popular with owner-operators for over-the-road use. Weights are approximate and can vary substantially depending on specs and options. Contact your dealer for more information; contact information is available on page 6. ■