



FREQUENTLY ASKED QUESTIONS REGARDING RECENT FUEL ECONOMY AND AERODYNAMIC TESTING

Our recent testing and advertising regarding ProStar fuel economy savings have generated excitement as well as some questions. Here are some frequently asked questions to help you and your customers understand the facts.

SUMMARY AND BACKGROUND

International recently completed competitive analysis in both wind tunnel and on-highway testing versus our top competitors. The results proved ProStar to be the most fuel efficient Class 8 truck on the road. Wind tunnel tests were performed at the National Research Council (NRC) of Canada using SAE procedures. TMC (Technology and Maintenance Council of American Trucking Association) Type IV fuel economy testing was conducted against ProStar's closest competitor, Cascadia, by TRC in Ohio.

Q. IS A TMC TYPE IV TEST A VALID WAY TO DETERMINE FUEL ECONOMY BETWEEN VEHICLES?

A. Yes, TMC recommended practices are recognized and respected within the entire trucking industry. The TMC Type IV test provides a consistent and scientifically valid test method for fuel economy evaluation between vehicles. This test provides the closest link to real-world fuel economy because it takes everything that affects fuel economy into consideration. Aerodynamics, powertrain and tires are all part of the equation. Every one of our competitors would agree that extended real-world on-highway testing is the best way to determine vehicle performance. TMC's goal is the improvement of equipment (and truck technology), its maintenance, and maintenance management.

Q. HOW IS THE TYPE IV TEST CONDUCTED?

A. The Type IV test provides valid and scientifically supported comparisons of fuel consumption between vehicles. The test is conducted on public highways over hundreds of miles. Below is a summary of test requirements.

	TYPE IV REQUIREMENTS
LOCATION	On-highway
MILEAGE	200-500
NUMBER OF VALID RUNS FOR A COMPLETE TEST	3
CRITERIA	Driver and trailer are switched halfway through each run
VALID RUN DEFINITION	Results duplicated within 2% to be considered a valid run
TEST VALIDITY	1%





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Q. WAS INTERNATIONAL'S TYPE IV TEST VALIDATED BY A THIRD PARTY?

A. Yes, the Transportation Research Center (TRC) in Ohio conducted and endorsed the testing. The final data used in the comparison was collected and provided by TRC. While International employees were present to observe the results, they did not conduct the testing.

Q. WHAT ABOUT REGENERATION? WOULDN'T THIS AFFECT THE RESULTS?

A. Yes, each engine manufacturer has different triggers that it sets for regeneration. For instance, one engine may go through regeneration more frequently than another, but might use less fuel during the more frequent regen. The TMC Type IV test is long enough that differences in regeneration cycles are minimized, therefore providing an accurate representation of real-world performance. Removing regeneration would be an unrealistic way to measure fuel economy.

Q. YOUR WIND TUNNEL TEST RESULTS WOULD ESTIMATE ONLY A 3.7% INCREASE IN FUEL ECONOMY OVER THE CASCADIA. WHY THE DIFFERENCE WITH THE TYPE IV TESTING WHICH CLAIMS 7% IMPROVEMENT?

A. Although drag reduction is a great indicator of overall fuel economy, it cannot take the effects of powertrain into consideration. In this instance, we would expect that the aerodynamic superiority of ProStar would support a 3.7% improvement; the remaining 3.3% must be attributed to powertrain and regeneration efficiencies.

Q. WHAT ARE YOUR NEXT STEPS?

A. International remains committed to robust test methods that include both wind tunnel and on-road testing to validate our designs. We will continue to test our products against both competitors and our own current designs as we continue to push the envelope in aerodynamics and fuel efficiency.

Q. WHAT IF MY CUSTOMER IS STILL CONFUSED ABOUT ALL OF THIS INFORMATION?

A. Have them test ProStar themselves. We are confident that ProStar will prove to be the most fuel-efficient truck for them.

Q. HOW DOES THE TEST MINIMIZE THE VARIATION OF THINGS LIKE TRUCK SPECS, TRAILERS, DRIVERS, AND TIRES?

A. Every effort was made to ensure that the vehicles were as equal as possible. The trucks were spec'd as similarly as possible. Trailer gap and test weight were equalized. Tire types were identical with the same level of wear. Tire pressure was measured before each run. The TMC procedure requires that drivers and trailers are switched at the midpoint of each run in order to minimize these variables as well.

A summary of the truck specs is on the next page.

For more information visit InternationalTrucks.com/ProStar



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	PROSTAR	CASCADIA
MODEL	PROSTAR PREMIUM 6X4	CAI25SLP
CAB	73" HI-RISE SLEEPER	72" RAISED ROOF SLEEPER
AERO	AIR FAIRING	N/A - RAISED ROOF SLEEPER
	3/4 SIDE SKIRTS	3/4 SIDE SKIRTS
	CAB SIDE EXTENDERS	CAB SIDE EXTENDERS
	EXTERIOR SUNSHADE	NONE
TRAILER GAP (FROM BACK OF CAB)	47"	46.5"
(LADEN)	45.75"	45.5"
FIFTH WHEEL HEIGHT FROM FRAME	7.75"	7.75"
TRAILER HEIGHT FROM GROUND	160.75"	159.75"
FRAME HEIGHT (LADEN)	38"	37.75"
TIRE PRESSURE	105 PSI	105 PSI
STEER TIRES	GOODYEAR 395 LHS 295/75/22.5	GOODYEAR 395 LHS 295/75/22.5
DRIVE TIRES	GOODYEAR 372 LHS 295/75/22.5	GOODYEAR 372 LHS 295/75/22.5
DRIVER TIRES REV/MILE	507	507
TRAILER	48 FT. VAN	48 FT. VAN
ENGINE	CUMMINS ISX	DDC SERIES 60-14L
	450 HP @ 1800 RPM	455 HP @ 1800 RPM
	1550/1750 LB-FT	1550 LB-FT
TRANSMISSION	FRO-16210C 10 SPEED	FRO-15210C 10 SPEED
FRONT AXLE	MFS 12-143A 12K	AF-12.0-3 12K FFI
FRONT BRAKES	15 X 4 CAM BRAKES	15 X 4 CAM BRAKES
REAR AXLE	RT-40-145	RT-40-145
REAR AXLE RATIO	3.58	3.55
REAR BRAKES	16.5 X 7 S-CAM	16.5 X 7 S-CAM
REAR SUSPENSION	INT'L. 40K AIR W/52" SPREAD	AIRLINER 40K AIR W/51" SPREAD
FUEL CAPACITY	275 GALLONS	280 GALLONS
TRAILER WEIGHTS	44,760 LBS	44,760 LBS



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