

DRIVING TRANSMISSION TECHNOLOGY®



**SUPERIOR FUEL EFFICIENCY.
OPTIMUM FUEL ECONOMY.**

ALLISON AUTOMATICS PROVIDE SUPERIOR FUEL EFFICIENCY AND OPTIMUM FUEL ECONOMY

For your trucking operation to be profitable, your fleet operating costs — vehicle, driver, maintenance and fuel — have to be offset by productivity. Productivity in trucks translates to maximum cargo, delivered in the least amount of time, with the fewest vehicles and maximum vehicle uptime. Productivity weighed against operating costs yields vehicle cost effectiveness.

With fuel prices rising to unprecedented heights, there's naturally a concern about what truck components can contribute to reducing fuel consumption. The transmission, as a major driveline component, rightfully should be included as an important factor in driveline efficiency. After all, the transmission is what translates hood horsepower to wheel horsepower.

However important the transmission is, it's still part of an entire vehicle propulsion system — engine, transmission, driveline, drive axle and tires. Whatever it takes to move the vehicle down the road can impact fuel consumption and vehicle performance.



Matching drivetrain components to meet the requirements of the vehicle's actual duty cycle is more important than ever for fleets seeking performance and productivity as well as fuel efficiency and fuel economy.



Know the vehicle duty cycle.

Fully automatic Allison transmissions, along with a vehicle spec that is appropriate for the particular duty cycle, can provide superior fuel efficiency and optimum fuel economy.

A truck's duty cycle can be broken into four components: acceleration, cruise, deceleration and idle. Of these, acceleration and cruise are the main factors that impact fuel consumption.

A recent data log analysis of two North American P&D fleets shows an average of over 600 upshifts during an eight-hour time frame. Any interruption in engine power during a shift creates powertrain inefficiencies, loss of vehicle energy, lower average speeds and, ultimately, less work is accomplished with the fuel consumed.

An Allison Automatic provides smooth, seamless full-power shifts to put engine power to the ground in the most fuel efficient way. Manual and automated manual transmissions interrupt engine power every time a shift is made.

More Work Per Gallon (WPG). With Allison's full-power shifts, fleet managers will recognize higher average speeds versus manual or automated manual transmissions. Higher average speeds over a day mean the Allison Automatic accomplishes more work for the fuel utilized. That's more Work Per Gallon (WPG).

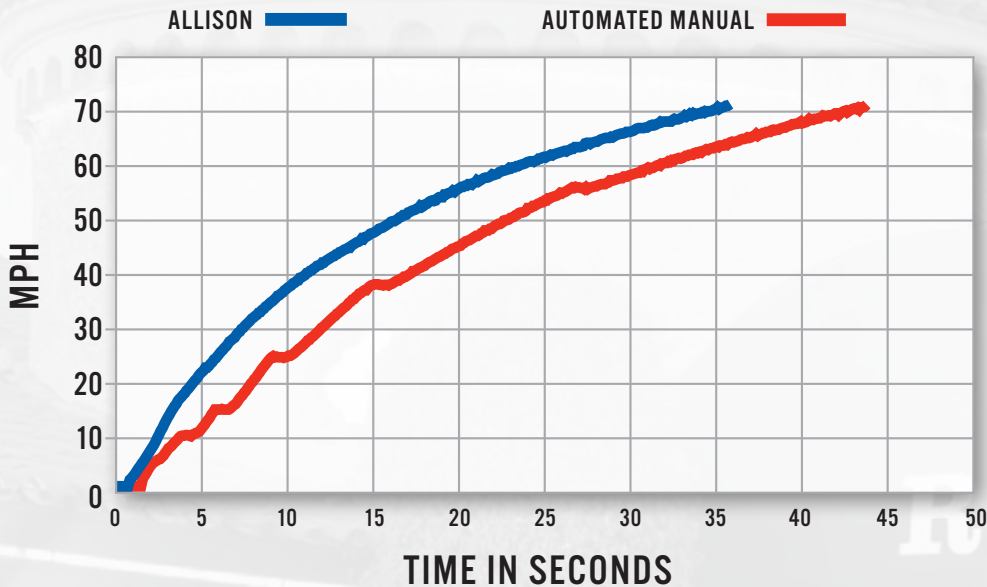
This is in line with how the U.S. Environmental Protection Agency (EPA), as part of its SmartWaySM program, is formulating a test protocol proposal to measure the fuel efficiency of medium- and heavy-duty commercial vehicles. According to industry reports, the EPA's fuel consumption metric for this test would be fuel consumed per amount of work performed, which is not the same thing as miles per gallon.



Recent fuel consumption testing.

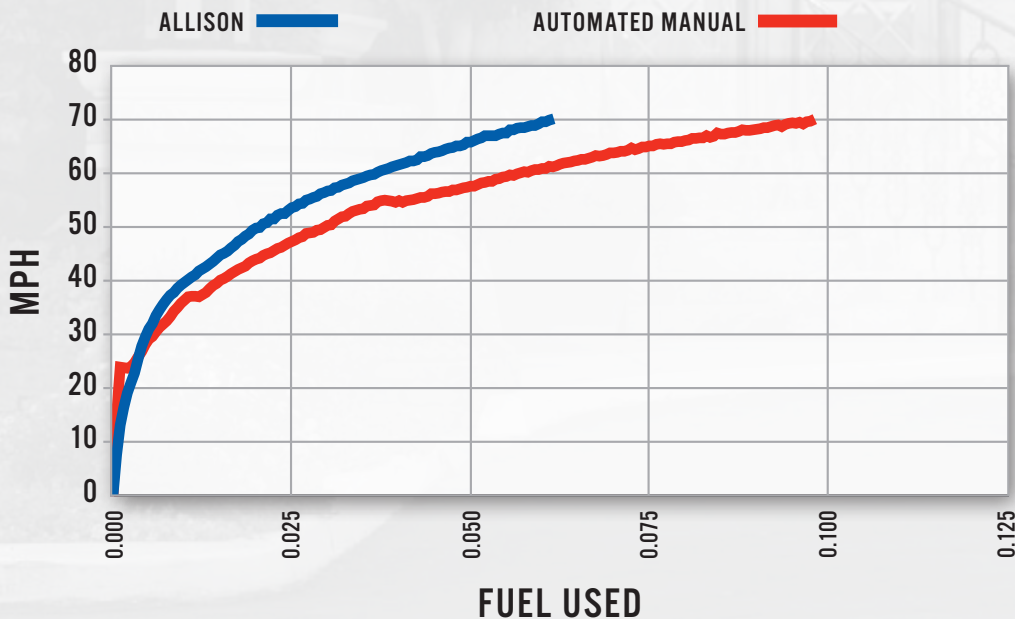
The Transportation Research Center (TRC), an independent, third-party test facility located in East Liberty, Ohio, recently completed Fuel Consumption Testing commissioned by Allison. For the test, TRC was provided two equally spec'd medium-duty trucks; one equipped with an Allison 2200 HS and the other with a comparable automated manual. Both trucks were tested in a variety of real-world conditions.

PERFORMANCE



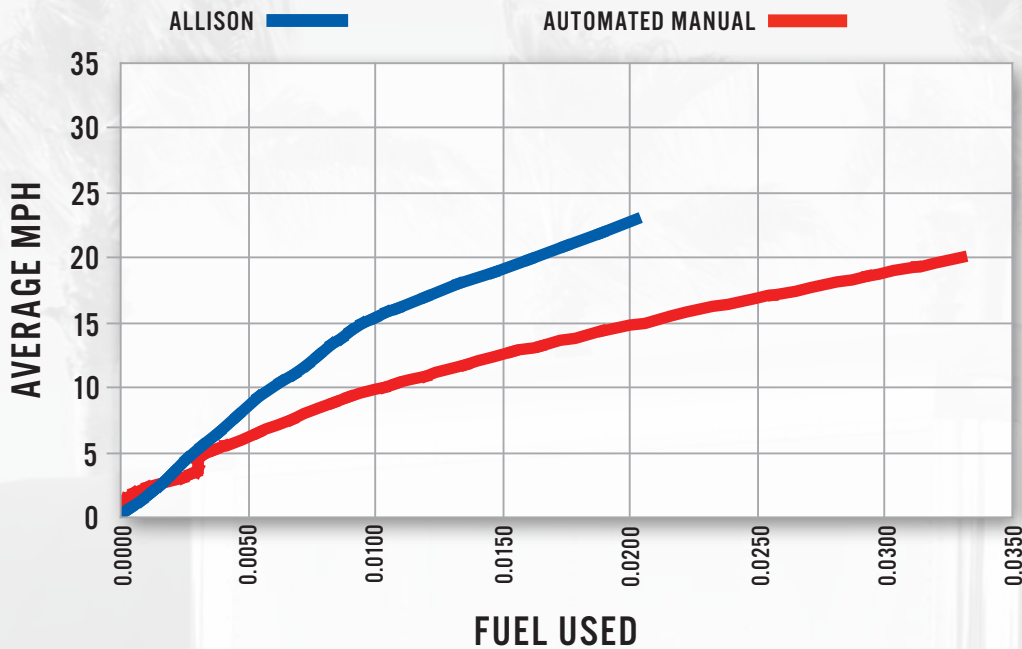
Testing shows Allison Automatics accelerate faster and more efficiently than comparable automated manual transmissions.

ACCELERATION, WIDE OPEN THROTTLE



Allison Automatics not only get up to speed quicker, they use less fuel getting there.

ACCELERATION, WIDE OPEN THROTTLE



While achieving a higher average speed, Allison Automatics use proportionally less fuel.



Patented Allison torque converter technology during acceleration allows Allison Automatics to provide smooth, full-power shifts that produce superior acceleration and greater fuel efficiency.

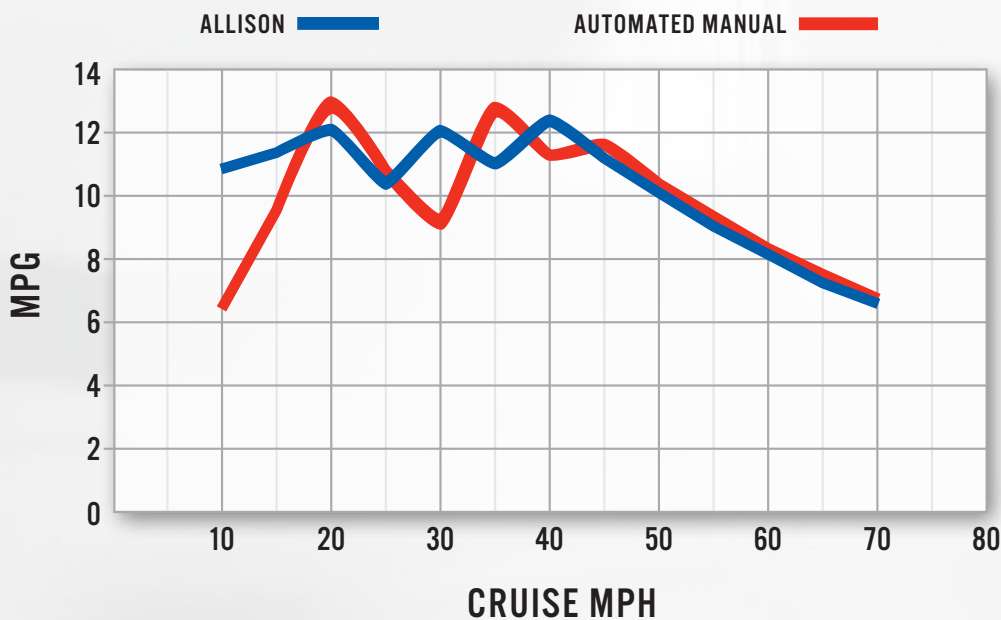
Fuel economy at cruise.

When cruising, the most critical component to achieving maximum fuel economy is engine rpm. Operating in the engine's recommended rpm range is the best way to reduce fuel consumption and increase mpg.

If a truck is used in town and spends 60% of its time at or under 40 mph, it doesn't make sense to spec the truck to cruise at 65 mph at the engine manufacturer's recommended rpm rating. Savvy fleet managers know how their trucks are used and write their specs according to that duty cycle.

The TRC test results show that the Allison-equipped truck produced significantly lower engine rpms versus the automated manual-equipped truck at many cruise speeds below 40 mph, which resulted in less fuel used. With most medium-duty truck applications, this is where much of the operational time is spent. In higher cruise speed ranges, the two transmissions produced comparable engine rpms and fuel usage.

FUEL ECONOMY AT STEADY CRUISE



At many cruise speeds below 40 mph, Allison Automatics produce significantly lower engine rpm and use less fuel than comparable automated manual transmissions.

Specifying to achieve the best results.

Matching drivetrain components to meet the requirements of the vehicle's actual duty cycle is more important than ever for fleets seeking performance and productivity as well as fuel efficiency and fuel economy.

Once actual duty cycle requirements are known, appropriate selection of engine size, axle ratio, transmission and other driveline components can be made. Specifying an Allison Automatic can allow you to spec a smaller engine and still get the performance required in your operating range. And, following axle selection, the shift schedules available with Allison Automatics can help refine engine rpm for the vehicle's primary operating parameter.



Allison Automatics make your miles more profitable. While gains made in fuel economy and fuel efficiency are an important factor, they are still just one part of the overall value of any Allison Transmission product. Increased durability, reliability, shift quality, maneuverability and productivity are other benefits found with Allison Automatics. Not to mention reduced maintenance, driver fatigue and driveline stress. All these factors add up to provide superior life-cycle value.

If you want the best combination of fuel efficiency, fuel economy and superior life-cycle value, specify Allison Automatics and put your fleet on the road to being more productive and profitable.



FUEL ECONOMY = MILES PER GALLON
FUEL EFFICIENCY = MILES PER HOUR PER GALLON





Ask for the Allison

DRIVING TRANSMISSION TECHNOLOGY®

For more information about Allison Automatics,
visit www.allisontransmission.com.