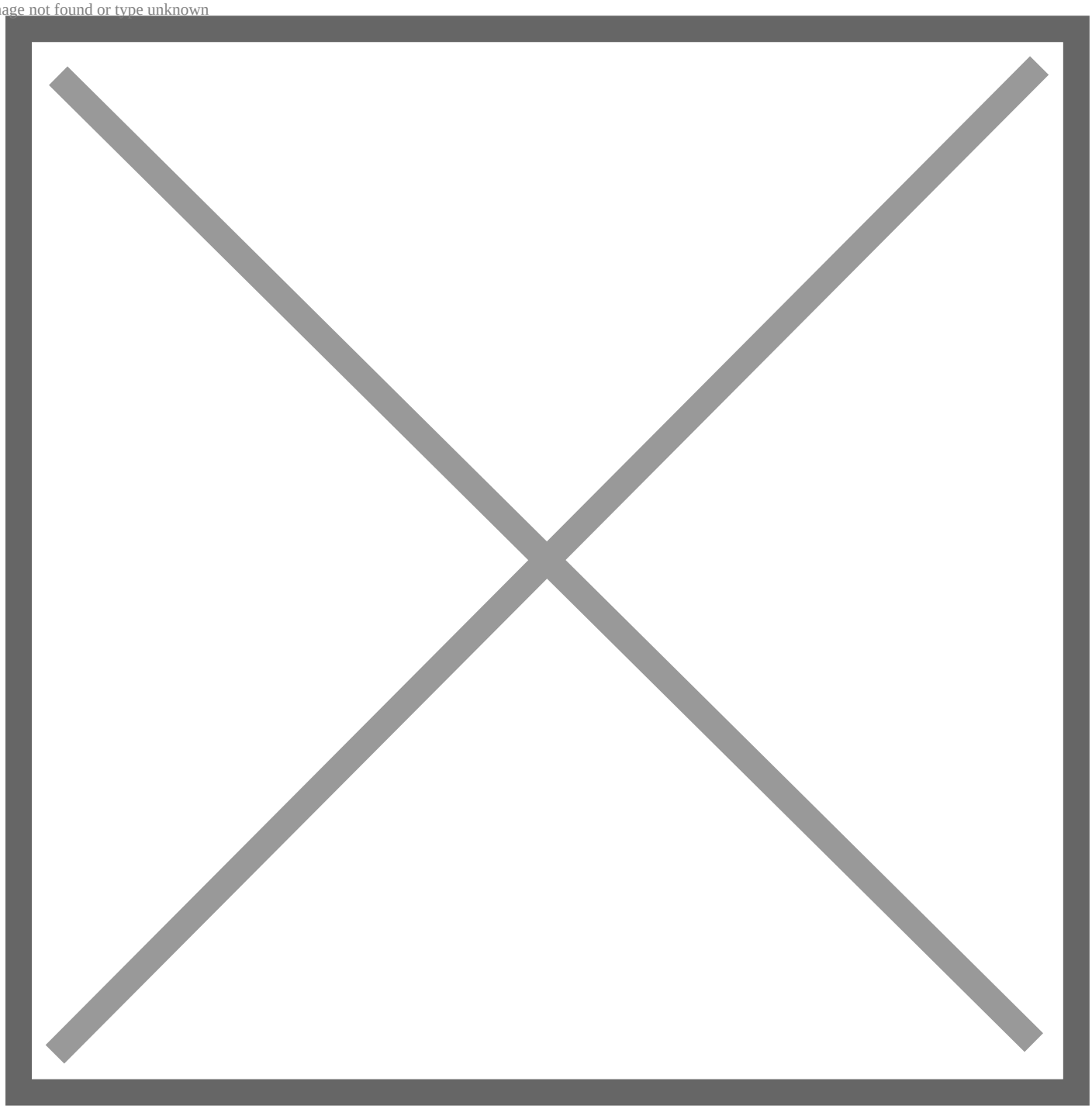
Toyota Tundra Pie Pro Makes its Own Pizza at SEMA 2018

October 30, 2018

Image not found or type unknown



Tundra PIE Pro Fact Sheet

PLANO, Texas, Oct. 30, 2018 — Appearing at Toyota's **2018 Specialty Equipment Market Association (SEMA) Show** display, the one-of-a-kind, Zero-emission Tundra PIE Pro is a mobile pizza factory that takes the party wherever it goes.

"As the flagship Toyota truck, the Tundra is a workhorse in the truest sense," said Ed Laukes, Group Vice President – Toyota Division Marketing. "Its great strengths are its extreme capability and eminent versatility, and what better way to illustrate that than by turning it into something completely unique—a hydrogen fuel cell electric-powered, pizza-making robotic vehicle!"

The Tundra PIE Pro was built by Toyota's Motorsports Technical Center (MTCI). The overall project included cooperation from its Plano, Texas, neighbor Pizza Hut, along with engineering from Nachi Robotic Systems.

The starting point was a Tundra SR5 that was torn down to a bare rolling chassis and then reassembled from the ground up. The conventional gasoline-powered drivetrain was removed and replaced with a hydrogen fuel-cell electric power unit adapted from the Toyota Mirai.

This use of hydrogen is one more example of Toyota's ongoing, cutting-edge hydrogen fuel-cell technical development. Sales of its hydrogen-powered Mirai surpassed 4,000 units this past September, and the company is continuing development on a hydrogen fuel cell Class 8 commercial truck fleet.

The Tundra's bed has been converted into a virtual pizza factory on wheels—what MCTI calls The Kitchen. Totally self-contained, The Kitchen comprises a refrigerator, a pair of computer-guided articulating robotic arms, and a portable, high-efficiency conveyor oven. Like the truck itself, all Kitchen components can be powered by hydrogen fuel cell electric powertrain.

From start to finish, the pizza-making process takes between six and seven minutes. When the process begins, the first robotic arm opens the refrigerator and removes the selected pizza, places it on the oven conveyor, and returns to close the refrigerator door.

The pizza is then conveyed through a high-speed ventless oven. On the far side, a second robotic arm removes the finished pie, places it on the cutting board, divides it into six identical slices, boxes it up, and delivers it to the customer awaiting on the side of the Tundra.

The Tundra PIE Pro's environmental impact is virtually nil—the only by-products being water vapor emissions and delicious Pizza Hut pizza.

"We've had a hand in putting together all sorts of custom Toyota vehicles over the years, from high-performance racecars to one-of-a-kind show vehicles," said MTCI's Marty Schwerter, "but the concept and technology used in this Tundra presented a unique challenge."

The Tundra PIE Pro, along with other Toyota specialty vehicles—can be found in the Toyota display booth (#24800) in Central Hall and on the Patio Annex of the as Vegas Convention Center, Oct. 30 – Nov. 2, 2018.