



# VEHICLE ENGINEERING

## SPE® Honors Ford® Taurus® Sedan with 2009 *Vehicle Engineering Team Award*

Ford Motor Co. is the 2009 recipient of SPE Automotive Division's *Vehicle Engineering Team Award (VETA)* for the automaker's significant use of innovative plastics content on the 2010MY Taurus® sedan. Pete Reyes, chief program engineer-Taurus at Ford will accept the award, which recognizes the technical achievements of teams comprised of automotive designers and engineers, tier integrators, materials suppliers, toolmakers, and others whose work – in research, design, engineering, and/or manufacturing – has led to significant integration of polymeric materials on a notable vehicle. Previous winners of this award include Porsche AG in 2004 for the 2004MY Porsche® Carrera® GT supercar and Ford Motor Co. in 2008 for the 2009MY Ford® Flex cross-over utility vehicle.

When Ford introduced the original Taurus sedan in 1986, it quickly became the company's best-selling vehicle. The "new" upscale Taurus sedan, which launched this past August, sports an impressive collection of innovations and luxury features – many made possible by polymeric materials. The vehicle has already received a top safety designation by the Insurance Institute for Highway Safety (IIHS), and *Esquire* magazine named the performance-model Taurus SHO sedan as its first-ever *Car of the Year*.



The 2010MY Taurus sedan features an innovative set of standard and available technologies (many of them patented or patent-pending), including Adaptive Cruise Control with Collision Warning, Intelligent Access with Push Button Start, MyKey™ parental programmability, Blind Spot Information System (BLIS®) with Cross-Traffic Alert, Rain-Sensing Wipers, EasyFuel® capless-refueling system, and Ford SYNC® and with SIRIUS Travel Link™ voice navigation. The base-model Taurus sedan is powered by the 3.5L V6 Duratec® engine, while the Taurus SHO model features Ford's 3.5L V6 EcoBoost™ engine, which delivers 365 HP. These engines are mated to one of two available fuel-efficient six-speed automatic transmissions, including SelectShift Automatic™ transmissions with shift paddles and available all-wheel drive.

Interior innovations that relied on the benefits of polymeric materials include targeted ultra-soft foam on the instrument panel to improve craftsmanship, spray urethane skins on the instrument panel and door trim (the latter featuring molded-in faux stitching to replicate the look and feel of fine leather but with higher durability at lower cost). Other notable interior components include world-class fit and finish of the all-plastic console top finish panel with three-in-series push-push doors, and multi-contour seats with the Active Motion™ feature.

Plastics-intensive exterior innovations include the Blind-Spot Information System, a faster cycle TPO fascia material, the EasyFuel capless refueling system, below-belt plastic brackets for door outer panels and door glass (replacing steel channels), an industry-first snap-in slider on the window regulator to satisfy the aggressive window design on the Taurus, and tri-extrusion outer belt weatherstrips. The vehicle also features new active crash-avoidance technologies such as radar-enabled advanced collision warning system, blind-spot monitoring, and a cross-traffic alert that warns drivers about hard-to-see vehicles in parking lots.



# WINNING TEAM AWARD

These innovations benefit vehicle occupants through greater comfort, convenience, durability, and safety, while also helping the environment by reducing weight (thereby improving fuel efficiency), eliminating paint and other VOCs, increasing the use of recycled materials, and making greater use of carbon-sequestering bio-based resins and natural-fiber reinforcements, which helps reduce the carbon footprint of the vehicle throughout its lifecycle.

In addition to winning the 2009 VETA award, 13 components from the Taurus sedan were entered in SPE's *Automotive Innovation Awards* parts competition, with five of those nominations achieving *Finalist* status in three judging categories:

**Body Exterior:**

- Low-Profile Outer-Belt Weatherstrip Design;\*
- Glass-Run Weatherstrip Corner Mold Overlays;\*
- Blind-Spot Information System w/Cross-Traffic Alert,
- Metallic-Look Headlamp Bezel;\*

**Body Interior:**

- Non-Reinforced Console Top-Finish Panel;

**Chassis & Hardware:**

- Snap-in Slider on Side-Door Window-Regulator Hardware,
- Door-Glass Bond-on Bracket,
- Below-Belt Door-Glass Retaining Bracket;\*

**Materials:**

- Fast-Cycle Material for Fascias and Exterior Trim;

**Process, Assembly & Enabling Technologies:**

- Composite Hybrid DLFT Bolster w/ a Glass-Mat Reinforcement;\*
- Molded-in Faux Stitching with Near-Perfect Appearance,
- IP Soft-Foam Feel, and
- Ultrahigh-Durability Pneumatic Bladder.

\* = Category Finalist

