Ford Finds More Interior Room in Ranger

MELBOURNE, Australia – With more and more customers using their pickup to haul not only cargo but also people, the all-new Ford Ranger is delivering more cabin room where it matters.

From boasting the biggest front head room to leading the pack for rear leg room and knee clearance in the Double Cab, the global pickup gives customers maximum interior space without compromising the substantial cargo box volume.

Engineers put in a lot of effort into keeping the vehicle short but the occupant space large by fully utilising every millimetre of Ranger's dimensions.

They also came up with innovative solutions to make sure there's no wasted space at all.

At the start of Ranger programme, the engineers were given targets for the pickup's interior, overall length and the box length.

"We weren't quite sure how to get all of them to add up. It was like making 2+2 = 3," quipped David Stanley, package supervisor, Product Development, Ford Australia.

In the end they found a way to optimise the clearance between the rear seat, the box and the body structure. They slimmed down the back of the seats and headrests, while ensuring the same level of comfort.

They also used clever shapes in the sheet metal, by utilising smaller sections instead of one large section. This meant they could make the body structure thinner without compromising on the vehicle integrity.

Likewise, to achieve the best-in-class front head room of 1022 mm, the engineers squeezed the clearance between the headliner and the sheet metal to the absolute minimum.

"It should be big enough to do its job and no more," Stanley said. "We try to account for every millimetre and during Ranger's development, we'd often find a few millimetres here and a few millimetres there which we would pare down to push out the interior as much as possible."

The all-new Ford Ranger offers more interior space than small truck customers have been used to seeing in earlier generations. The restyled Ranger was developed at Ford's facilities in Australia.

As a result, Ranger's front leg, shoulder and hip room are competitive while the overall roominess in the front is as good as, if not better than, leading competitors.

With Ranger increasingly being a work-and-family vehicle, the engineers have paid special attention to the rear seats in the pickup. While the second row in the Super Cab is more spacious than key competitors, it's the rear seats in the Double Cab that truly shines.

Shifting away from the one-door-fits-all approach, Ranger now has a two-door strategy. The Regular Cab and Super Cab share one long front door, while the Double Cab has a separate shorter front door. Moving the B-pillar forward in the Double Cab has done Ranger a whole world of good.

The Double Cab delivers best-in-class rear leg room of 902 mm and knee clearance of 39 mm. This translates into three adults fitting easily in the second row while two six-footers can comfortably sit one behind the other.

The rear ingress and egress pathways are also among the best in the segment, according to third-party experts outside of Ford.

Moreover, the rear glass is bigger which not only helps the driver's vision but also gives the second-row occupants a much more spacious feeling, due to the greater amount of light that comes in.

The perception of roominess is further enhanced by the B-pillar being further away from the eye. To open up the interior even more, engineers went down to the details and optimised the pillar size, pillar trim and the blackout on the glass, squeezing them as small as possible.

Still, it wasn't enough to whittle down every last millimetre. The engineers made sure the seat back angle was also among the leaders. Some competitors make the rear seats very vertical to improve their leg room and knee room but second-row occupants might just end up slouching into the available knee room.

"We wanted Ranger to be better than an ordinary pickup. We wanted it to have the comfort levels of an SUV," said Stanley.

"So we looked at the hip angle, back angle and torso angle to make sure we've got it right. Ranger certainly has better knee room and better hip angle than its competitors."

Ford Focus Titanium Earns 'Interiors' Award

by Christine Snyder
Staff Reporter
Tech Center News

Chrysler Group was Detroit's big winner at an awards ceremony recognizing outstanding automotive interiors.

Chrysler's Dodge Charger Ralleye Plus and its Jeep Grand Cherokee Overland Summit each won one of the 2011 "10 Best Interiors" nods at the Ward's Auto Interiors Conference at the Henry Hotel in Dearborn last week.

GM and Ford also walked away with awards for their Chevrolet Cruze 2LT and Ford Focus Titanium, respectively.

The Charger's driver-oriented cockpit, bold color use and steering wheel won the judges over. The steering wheel is not only heated, the judges considered its ergonomics one of the most sensible in the industry.

"Redesigning the Charger is like being a kid in a candy store," said Dan Zimmerman, the interior design manager for the Charger. "I loved it. This is just the beginning."

Klaus Busse, Chrysler's interior design head, was last on the same stage accepting an award for the Dodge Ram two years ago.

Busse said this year's win for the Jeep Grand Cherokee was an important for Chrysler because it was Grand Cherokee was the second vehicle after the Dodge Ram to go through redesign.

The judges thought the Jeep interior designers captured luxuriousness without forsaking the ruggedness known for in the Jeep brand.

Soft leather, adjustable cupholders and a meaty steering wheel, were some of the qualities the judges noted.

If you told David Lyon, GM's director of interior design for North America last year that Chevrolet would win an awards for its interior in a compact, he said he wouldn't have believed it.

Things change. Chevrolet Cruze 2LT wowed the judges with its fit and finish, thoughtful use of materials and ergonomics.

"People buying a compact car are spending a lot more of their discretionary income than someone buying a luxury car," said Lyon. "It's all the more reason to make it special."

The Focus Titanium got snaps for its gray and marron color scheme, attention-to-detail and its firm and supportive seats. Scott Strong, global director of interior design for Ford, accepted the award on behalf of the company.

Unlike previous years, the top 10 Interiors Awards were not divided into categories. Instead, all vehicles competed regardless of segment, with the judges keeping in mind the car's segment and class and the market it is intended for.

Also new this year was a student competition sponsored by the International Automotive Components (IAC) and Lear Corp in conjuction with Ward's.

Robert Gelardi, lead designer for Ford's Mustang program; Dan Vivien, engineering design director for Hyundai Kia and Peter Davis, chief stylist at Tata Technologies chose five finalists from the Transportation Department at the College for Creative Studies in Detroit.

The finalists were Andrew Bianchi; M. Ross Gray; Haneif Katebi; Bozenka Shepherd and Leonard Takada.

The students competed for the grand prize as well as two additional awards: the IAC EcoBlend award for the design that best utilizes renewable/recyclable materials and the Lear Design Innovation award for particularly creative or forward-thinking design.

Shepherd won the IAC Ecoblend award and Haneif Katebi won both the Lear and grand prize awards.

All student awards included scholarship money to go towards their continuing education at CCS.

Ford's European Operations Lead 'Sustainability'

COLOGNE / BERLIN, Germany – Whether it's the whoosh of blades from two recently-installed wind turbines at Ford's Genk Plant in Belgium, or the near-silent propulsion of Ford's electrified vehicles featured this week at the Michelin Challenge Bibendum in Berlin, Ford's commitment to reducing CO2 is coming through loud and clear.

Since 2000, Ford has reduced its global operational energy use by 30 per cent and CO2 emissions from its facilities by 39 per cent.

The Ford Cologne Plant in Germany and Ford Technical Centres in Dunton, UK, and Cologne-Merkenich, Germany, rely heavily on renewable power from hydro-power plants in Norway and Sweden, while Ford's Technical Centre in Merkenich is heated by steam power provided by RheinEnergie. The actions together reduce annual CO2 emissions by 190,000 tonnes.

The latest example of Ford's CO2 initiative is the Genk Plant in Belgium. Energy provider Electrabel now provides all electricity from renewable sources including two gigantic wind turbines, each with a height of 150 metres.

Each unit has an output of two megawatts of power, enough to power 2,500 private homes. The wind turbines deliver a significant part of the electrical power needed at the Genk Plant, production home of the Mondeo, S-MAX and Galaxy models, with the remaining energy required also coming from renewable energy sources. Combined, this equates to a saving of 40,000 tonnes of CO2 every year.

Ford's Dagenham Diesel Centre in the UK meanwhile became the world's first automotive plant to meet all of the electricity needs for its assembly line from two giant on-site turbines back in 2004. Following the installation of the 1.4/1.6-litre Duratorq TDCi engine production line, a new three-bladed turbine, provided by Ecotricity, will be commissioned in August 2011 to produce two megawatts of electricity.

With blades the same span as the wings of a Boeing 757, this new turbine will enable the assembly plant to remain 100 per cent powered by wind-generated electricity.

It's not just Ford plants that are benefitting from reduced CO2 emissions though, as attendees at the Michelin Challenge Bibendum this week are discovering. Ford's customer-focused electrification strategy will deliver five new electrified vehicles launched by 2013, providing low-emission solutions aimed at satisfying all needs. Those vehicles include:

An additional yet-to-be-revealed hybrid-electric vehicle is coming to market in 2013.

Meanwhile, at Challenge Bibendum, attendees were able to test the technology in the Fusion Hybrid, which is already on the market in the United States, and the Escape Plug-In Hybrid Prototype, and two Transit Connect Electric pure battery vehicles.

The award-winning Fusion Hybrid affords drivers leading efficiency figures in city driving while the plug-in hybrid version of the Escape, which is currently being utilized in Ford's demonstration fleet in the US, offers an improved range of pure electric driving.

Additionally, the plug-in hybrid's internal combustion engine is able to run on E85, a blend of up to 85 per cent bioethanol and 15 per cent petrol.

Norwegian Post has already ordered 20 Transit Connect Electric vehicles, noting the use of these zero-emission commercial vehicles is an important step in its goal of reducing 150,000 tonnes of CO2 annually.

Those at Challenge Bibendum found that zero emissions does not mean compromised performance, though, with Transit Connect Electric capable of a 120km/h (75mph) top speed, a range of 130km/ 80 miles, a cargo volume of 3.8 m3 and a payload of 500 kg.

Ford vehicles already are among the most environmentally efficient on the road.

The latest generation of Duratorq TDCi diesel engines offers impressive performance while maintaining excellent economy.

Using a 1.6-litre TDCi engine, the Fiesta ECOnetic offers a combined fuel economy of just 3.6l/100km (78.5mpg) with exceptionally low CO2 emissions of 95g/km.

SAE Detroit Section Dinner Peeks Under the Hood of 2012 Ford Focus

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have benefited not only Ford, but our industry in general – all around the world.

"Many of those innovations came from within walking distance of here at our Research & Innovation Center. That's 60 years of great innovations that have brought us not only great products and a strong business, but also helped us make our contribution to a better world.

"The ongoing development of technology is core to our global strategy. It's what drives us to deliver the best possible products at affordable pricing.

"It also defines Ford as not only a leading auto company, but as a leading technology company. At Ford, we've made steady progress by remaining committed to our One Ford Vision – that is One Team and one set of goals.

"By working together as a global team, by concentrating on the same plan, and by working toward those same goals, we've really been able to achieve results that are clearly greater than the sum of the individual parts."

He then praised the Focus as being an excellent fit of Ford's primary market business drivers, which include the four brand pillars of Quality, Green, Safe and Smart.

"Together, they help steer us in the right direction so that we can continuously improve our vehicles, advancing both the technical and the functional content – but at the same time retaining consistent process disciplines, and an ongoing passion for excellence in everything we do, and a focus on delivering a superior experience for our customers," Mascarenas said.

(Next week, we'll look at the remarks about what's different on the Focus from under the hood, a micro view of the hot car, from Jim Hughes, Chief Nameplate Engineer, who followed Mascarenas at the podium in describing the achievements made in developing the 2012 Focus.)

PHOTO: GERALD SCOTT

The 2012 Ford Focus was the center of attention at the SAE Detroit Section meeting at the Ford Conference & Events Center in Dearborn last week. Engineers described the latest innovations.

Paint Supplier Magni Toasts 10M Gallons

May 6 was a big day in the history of Magni, a Detroit-based industrial paint supplier. The firm delivered its 10 millionth gallon of paint from throughout its corporate history dating back several decades.

"It took Magni 37 years to reach this milestone," said The Magni Group, Inc. founder-chairman Dave Berry. "Now, with Magni's rapid growth, the company is on course to produce 1 million gallons every year."

The celebratory event at the Magni factory included a visit from the Eastern Michigan University cheerleaders, who burst through Magni Industries' closed side doors to get the party started.

For more information, visit themagnigroup.com.

Ford Eyes Using SYNC For Wireless Health Care

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services, asthma management tools and more.

Ford further said its research had identified that health of mind, body and spirit is a significant piece of the larger global health and wellness trend that is transcending multiple generations, spectrums and industries.

So-called healthy homes, allergen-free cleaners and products, and the cosmetic and bariatric surgery boom, for example, are all converging to create an eclectic mix of needs and services that is redefining health and wellness for today's consumer.

An underlying consumer demand for "in the know" about one's health while on the go also continues to rise, fueling the growing number and breadth of mobile healthcare devices and health- and fitness-related software and smartphone applications hitting the market today.

According to a recent survey conducted by CTIA-The Wireless Association and Harris Interactive, for example, some 78 percent o U.S. consumers expressed interest in mobile health solutions.

"Wireless health provides an unprecedented ability for monitoring and promotion of health and wellness for all individuals," said UCLA Electrical Engineering Professor Willaim Kaiser, who has worked with NASA and Homeland Security's Science and Technology Directorate to study how wireless health technologies can be used to track an individual's fitness and health status and help identify potential riks and challenges.

PHOTO: GERALD SCOTT

Ford Chief Technical Officer Paul Mascarenas hosted the Health and Wellness Connectivity Forum at the Ford Research & Innovation Center in Dearborn last week.

"Studies show wireless health empowers people with information and guidance that can directly address the most important health concerns.

He added, "The new Ford health and wellness connectivity solutions represent a fundamental advancement for these individuals, providing them additional support and functionality during time spent in the vehicle."

It was a well-attended event by local auto writers and health care reporters alike.