



Laser vision on display at the Ford Chicago plant.

Ford Invests in Robotic Lasers

\$100M Inspection Technology Verifies Dimensions to 1/10mm

DEARBORN – Ford Motor Company is investing \$100 million globally to install robotic plant laser inspection technology to improve quality through reduced wind noise and more refined fit and finish.

This new technology is being used during assembly of the popular new 2012 Ford Focus at Michigan Assembly Plant and the Saarlouis, Germany, plant, and the hot-selling Ford Explorer at Chicago Assembly Plant.

The technology then will be rolled out globally as part of Ford's next phase of its quality initiative to lead the industry in customer satisfaction.

"Ford's robotic laser technology gives us a degree of precision like never before," said Ron Ketelhut, chief engineer, Body Construction Engi-

neering. "The vision technologies verify the dimensions of interfaces on the vehicle's body in a highly accurate way, to a tenth of a millimeter."

The technology helps ensure car door panels fit more accurately and reduce wind noise, a key quality factor for consumers and a major industry challenge.

The laser and camera systems that are major upgrades to plant robots were developed in collaboration with minority business partner Gonzalez Production Systems, and significantly improve the robustness of the overall manufacturing process.

The technology builds on

laser-guided, end-of-line robotic technology pioneered by Ford's European team to measure points on each vehicle as it moves past the line to verify build quality.

The robots are programmed to recognize any minute deviations from the correct specification and, if any errors are found, instruct the operator on the correct course of action. Ford first used the system in Germany and, after seeing quality gains, quickly rolled it out to plants around the world.

The precision technology helps advanced robots more accurately install the doors to reduce the potential for wind noise.

The laser vision technology also is being upgraded on the robots to help confirm the door quality margins once installed. The robots are even empowered to shut down the assembly line if the cameras detect a door does not fit Ford's exacting quality measurements.

Human error is also reduced, as the machines are tuned to measure point specifications on the vehicle, whereas previously it was determined by an operator making a subjective judgment on whether it was accurate.

Wind noise is a primary consumer consideration when judging the quality of a vehicle. Ford has gone to great lengths to minimize noise by pinpointing its source through a number

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Autopalooza Kicks Off With Hot Rod Tour June 10

by Christine Snyder
Staff Reporter
Tech Center News

Summer in Motown means car cruises and shows, and this year's "Autopalooza" promises to be the biggest ever with a lineup that includes a new returning event and a larger venue for one of its yearly traditions.

The MotorCities National Heritage Area and the Detroit Metro Convention & Visitors Bureau (DMCVB) announced its lineup for Autopalooza June 1, the summer-long celebration of metro Detroit's automotive culture, including cruises, races, shows and tours.

It kicks off with the Hot Rod Power Tour June 10 at Metro Beach in Macomb County. The Power Tour hasn't stopped in Motown since 2009 and will bring with it 3,000 cars and about 10,000 spectators.

An afterglow party at Warren City Hall Plaza at 7 p.m. that day will include a display of Hurt collector vehicles, including the unveiling of Watson Hurst's limited edition 100th Anniversary Chevrolet Camaro.

Also new this year is a new, larger venue for a metro Detroit automotive institution, the Concours d'Elegance, which was held for years at Rochester's Meadow Brook.

This year the Concours



PHOTO: GERALD SCOTT

Christopher Baum, vice president of the Metro Detroit Convention and Visitors Bureau, discusses summerlong "Autopalooza" events at a Warren city hall press conference last week.

d'Elegance makes it debut at the Inn at St. John's in Plymouth on the weekend of July 29-31.

The well-known collector car show will include a special presentation of more than 30 classic Indy 500 racecars in honor of that track's 100th anniversary this year.

The unofficial wrap-up of Autopalooza is the Woodward Dream Cruise on Aug. 20.

The world-famous cruise and car show along the nation's first highway has grown through the years to be the largest-attended one-day event in the nation.

Ford's Farley Leads Speaker's List at CAR Briefing

by Gerald Scott
Editor
U.S. Auto Scene

With the Mackinac conferences out of the way, up next is the annual CAR Management Briefing Seminars.

Sponsored by the Center for Auto Research (CAR) and held annually in Traverse City, the meetings bring together the best of the Detroit auto industry in the casual setting of Up North.

Leaders from Ford, GM, Chrysler, Toyota and Volkswagen, as well as major suppliers and the UAW, all gather together to read the tea leaves about where the global industry is heading.

The meetings run Aug. 1-4 at the Grand Traverse Resort & Spa near Traverse City.

Among the leading speakers this year is Jim Farley of Ford, who will be keynoting the plenary morning session on Wednesday, Aug. 3.

The Aug. 4 session will feature presentations from Mark Reuss of General Motors, Johnathan Browning, president and CEO of Volkswagen Group and James K. Kamsickas, co-CEO and president, IAC Group North America and Asia.

"Unprecedented profitability may be in the auto industry's future – but uncertainty related to predictable sales volumes, materials availability, cost and



Ford senior marketing executive Jim Farley.

delivery of energy and other policy matters – making this one of the most challenging eras for an industry that has survived tough times," said Jay Baron, chairman and CEO of the Center for Auto Research, and moderator of several of the sessions at this event.

"This year's strong lineup of speakers, combined with a number of networking sessions, should provide attendees with the content, context and con-

tacts that can help their companies prosper in the days ahead," he added.

The 2011 CAR Management Briefing Seminars – the 46th such offering of this prestigious industry event – begin Monday, Aug. 1, and continue three more days that week.

A full day will be focused on world-class manufacturing excellence, while additional sessions, offered throughout the week, will focus on purchasing, powertrain developments,

strategies for South America, policy, the connected vehicle and the concept of designing for technology.

Over the years, a number of the auto industry's most illustrious leaders have participated as its speakers and attendees. More than 1,000 attendees, including 100 journalists, are also expected to attend.

Other speakers at the event include Fiat and Chrysler CEO Sergio Marchionne and UAW President Bob King.

Ford Receives Military Support Award

DEARBORN – Ford Motor Company is being honored with the 2011 Secretary of Defense Employer Support Freedom Award. Sponsored by the National Committee for Employer Support of the Guard and Reserve (ESGR), the Freedom Award is the highest honor bestowed upon America's employers who provide exceptional support to their employees serving in the National Guard and Reserve.

Ford is one of 15 companies nationwide to be selected for this prestigious award. More than 4,000 nominations were submitted this year.

"We are proud of our employees who serve in the National Guard and Reserve and it is our privilege to support them," said Mike Bannister, Ford executive vice president, chairman and CEO of Ford Motor Credit Company, and executive champion of the Ford Veterans Network Group. "We thank ESGR and the Department of Defense for this recognition. We appreciate the honor, and we deeply appreciate all the men and women involved in military service."

The Freedom Award, now in its 16th year, is the highest in a series of employer recognition

awards given by the Department of Defense.

"To stand out among the many thousands of employers who firmly support our Citizen Warriors is a testament to the remarkable efforts of these 15 recipients," said Dennis McCarthy, Assistant Secretary of Defense for Reserve Affairs.

"On behalf of the Department of Defense, I congratulate the 2011 honorees and thank them for serving as outstanding partners in our nation's defense."

Ford received a total of six

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The Ford Willow Run Bomber Plant's B-24 Liberator assembly line during World War II.

Ford Earns Two 'Euro NCAP Advanced' Honors from Focus Car Development

COLOGNE, Germany – With the new Focus, Ford has become the first non-premium automaker to win two Euro NCAP (New Car Assessment Programme) Advanced awards.

The Focus was recognized for Active City Stop, which monitors the road ahead and brakes automatically if a collision is imminent, and Lane Keeping Aid, which uses a forward camera to detect if a vehicle drifts out of its lane and applies a small amount of steering input to alert the driver.

The Focus also earned Euro NCAP's maximum 5-star crash safety rating, including the highest possible dynamic score for child protection in both frontal and side impact collision tests. Focus also excelled in the adult and pedestrian safety cate-

gories.

"At Ford, our mission is to provide the outstanding levels of safety through accident avoidance technologies and advanced occupant protection systems, which makes this recognition from Euro NCAP incredibly gratifying," said Stephen Odell, chairman and CEO, Ford of Europe.

"We are proud that we have made these technologies available to so many people in an affordable car like the new Focus."

Dr. Andre Seeck, president of Euro NCAP, said: "The Euro NCAP Advanced Awards recognize safety innovation of the highest level and we are delighted that Ford has shown its commitment to the safety of its vehicles such as the new Fo-

cus."

Active City Stop helps reduce the risk of low-speed collisions by monitoring the road in front for stationary traffic and then braking automatically if the system detects a stationary vehicle in its path of travel and a collision is imminent.

At speeds up to 30km/h, a lidar (Light Detection And Ranging) sensor positioned at the top of the windshield scans the area up to around 7.6 meters ahead of the vehicle for possible obstacles. If the vehicle approaches a braking, slower moving or stationary vehicle in front and it determines that a collision is likely, the brakes are pre-charged. If the driver remains inactive (no steering or

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Stephen Odell, chairman and CEO, Ford of Europe, left, accepts two Euro NCAP Advanced awards from Dr. Andre Seeck, president of Euro NCAP.