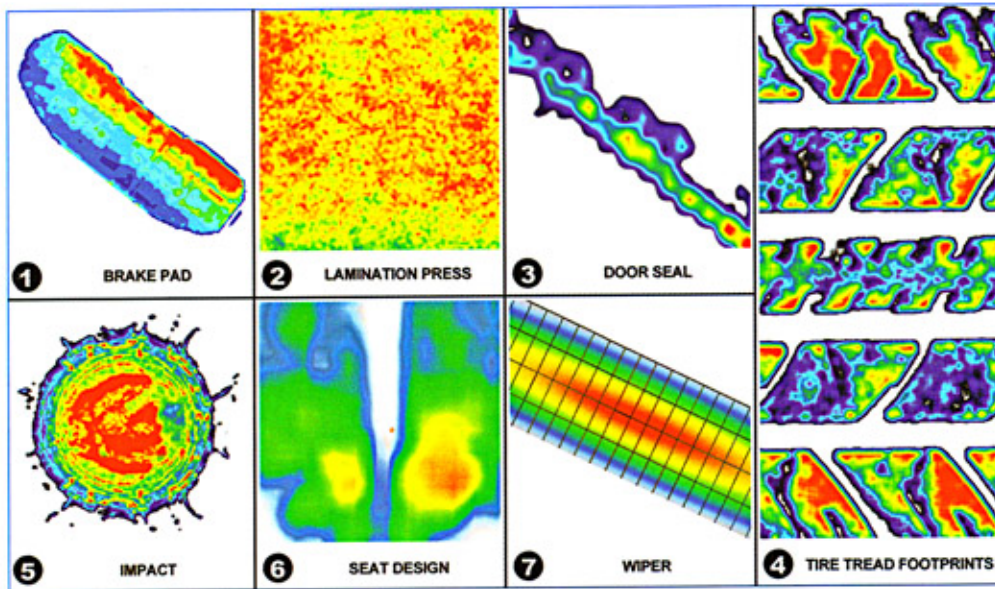


## Real-Time Surface Pressure Mapping Technology

Tactilus® is a matrix-based tactile surface sensor – essentially an “electronic skin” that records and interprets pressure distribution and magnitude between any two contacting or mating surfaces and assimilates the collected data into a powerful Windows® based tool kit.



Specifications	
Technology	Piezoresistive/Resistive
Pressure Range	0.1 to 2,000 PSI (0.007 to 141 kg/cm <sup>2</sup> )
Array Size	Up to 64 x 64 lines
Thickness	From 12 mils (0.3 mm) & up
Area	Customizable from 0.16 in <sup>2</sup> to 1,900 in <sup>2</sup> (0.4 mm <sup>2</sup> to 12,250 cm <sup>2</sup> )
Scan Speed	Up to 1,000 hertz
Spatial Resolution	Customizable from 0.04 in (2 mm) & higher
Accuracy	± 10%
Repeatability	± 2%
Hysteresis	± 5%
Non-linearity	± 1.5%
Calibration	Pre-calibrated for specified pressure

Each Tactilus® sensor is carefully assembled to exacting tolerances and is individually calibrated and serialized.

The architectural philosophy is modular, allowing for portability, easy scalability, and simultaneous data collection from up to four discrete sensor pads. Tactilus® employs sophisticated mathematical algorithms that intelligently separate signal from noise, and advanced electronic shielding techniques maximize the sensor's immunity to noise, temperature and humidity. Extensive calibration techniques ensure accuracy during testing, while also saving valuable time by avoiding extensive calibration procedu-

res. The next generation software interface also improves the accuracy of the readings by taking into consideration the creep and hysteresis effects natural to the sensors.

Any application or test where pressure lies between 0.1 PSI (0.007 kg/cm<sup>2</sup>) to 2,000 PSI (140.61 kg/cm<sup>2</sup>) will benefit from a Tactilus® analysis. The customization capabilities include sensors that will conform to difficult shapes like door seals, seats, wipers, tires, and many others.

Tactilus® is a tool kit designed by Sensor Products Inc. that consists of an electronic sensor element (« skin »), signal conditioning elec-

tronics and software. The sensor skin is a thin flexible or rigid sheet that is densely packed with sensing points or pixels. These sensing points can be spaced as close as 2 mm (0.08") apart and can collect data as rapidly as 1,000 readings per second. ■

► [www.sensorprod.com](http://www.sensorprod.com)

### En bref...

Fiat Group Automobiles' new Style Centre inaugurated on July 2, 2007 puts all the research and design activities of the Fiat, Lancia, Fiat Professional, Abarth and Maserati brands into one Style department. An industrial building within the Mirafiori complex called "Officina 83", which had served originally as a machine shop, was refurbished to provide a headquarters for the new Centre. The workforce numbers about 200 people, aged 37 on average, with professional skills ranging over the entire styling process: designers, "digitisers" and model makers.

PSA Peugeot Citroën a signé le 29 juin dernier un Memorandum of Understanding avec le constructeur automobile chinois Hafei portant sur une étude de faisabilité pour la création d'une joint venture à 50/50. Ce projet porte sur la fabrication de véhicules de transport de personnes (moins

de 10 places) destinés au marché chinois. La production devrait être assurée par l'usine Hafei située à Shenzhen (Chine). Filiale du groupe aéronautique AVIC, Hafei a produit 260 000 véhicules en 2006.

The one millionth new Fiat Panda rolled off the production lines of Fiat Auto Poland in Tychy on September 5, 2007. Destined for the Italian market, the car is a "cheeky" red 4x4 mounting a 1.2 petrol engine. In detail, 82,292 units have been produced to date for the Polish market while 917,708 units have been exported to 68 countries, all over Europe but also to Japan, Australia, South Africa, Venezuela, Guadalupe and Martinique. Production began in the Tychy plant in south Poland in May 2003.

PSA Peugeot Citroën vient de franchir début septembre la barre des 10 millions de véhicules équipés d'un moteur HDi Ce

succès intervient moins de 10 ans après le lancement par le constructeur français de cette technologie en 1998. Le moteur HDi a permis à PSA Peugeot Citroën de maintenir et de développer son leadership dans le domaine des motorisations Diesel et de la maîtrise des émissions de CO<sub>2</sub>.

Le Royaume du Maroc et l'Alliance Renault-Nissan ont signé un protocole d'intention pour l'implantation d'un complexe industriel dans la région de Tanger. Le montant des investissements capacitaires prévus pour ce projet est estimé à 600 millions d'euros, avec une première phase à 350 millions. Le site aurait une capacité de 400 000 véhicules, ce qui en ferait l'un des centres de production automobile les plus importants du bassin méditerranéen. Il disposerait, dans une première étape, d'une capacité opérationnelle de 200 000 véhicules, à partir de 2010.