

## **WABCO at IAA Commercial Vehicles 2008: Innovation Roundup**

OnGuardMax™ Autonomous Emergency Braking (AEB) System – The industry's first autonomous emergency braking (AEB) system, WABCO OnGuardMax™, minimizes the response time for a vehicle to brake in collision imminent situations with moving or stopped vehicles. The revolutionary technology detects, analyzes and reacts to moving as well as stopped vehicles as the system simultaneously interfaces with braking and other systems in the truck such as engine, transmission and stability control to assist the driver. It ensures the most effective deceleration and can bring the vehicle to a complete stop.

Trailer Telematics – WABCO's new telematics technology for trailers enables operating efficiency improvements, resulting in significant cost savings for fleet operators, freight agents and logistics managers. The system provides continuous information such as location tracking and tracing, temperature, door status, tire pressure, load and other technical data and integrates with existing WABCO systems such as electronic braking (Trailer EBS). Fleet operators can access all of this information about their trailer from any location via a simple and easy-to-use internet portal.

Modular Automated Manual Transmission (AMT) System – The system's high degree of modularity significantly reduces the development time required for application to transmission and vehicle platforms, enabling faster time to market for vehicle and transmission manufacturers. It can be easily adapted to an existing manual transmission without changing it, further accelerating market introduction due to less development time and effort. Depending on the driver's preference, WABCO's new Modular AMT system can change gears in full automatic mode or as initiated by the driver.

High-Output Compressors – Innovative high-output single and twin cylinder compressor technology in WABCO Worldwide Modular Design (WWM) allows for higher performance at low weight. The new compressors include WABCO's innovative power reduction and temperature reduction systems that decrease power drainage during the off-load phase and allow for lower air temperature resulting in reduced oil carry-over. The new high-output compressor (single type) can replace standard twin-type compressors for special commercial vehicles and city buses resulting in improved space utilization and reduced total cost of ownership.

## **Compression & Braking**

New Generation Air Disc Brakes for Heavy Class Vehicles (NG22 MAX) – New high-performance brake at lowest weight for heavy duty trucks and busses. A newly designed monobloc calliper and reinforced single-piston clamping unit enable high brake torques of over 30,000 Nm.

Air Disc Brakes – PAN Range – Compact and light-weight design for all rim sizes enabling safe, reliable and efficient braking. The PAN range of air disc brakes is based on WABCO's reliable single-piston technology and finite element method (FEM) calculations, resulting in significant weight savings.

i-range Brake Chamber for air disc brakes – New light-weight design for all rim sizes offers a weight reduction of almost 10% compared with previous designs for easy axle adaption and maximized payload. The brake chamber is directly mounted on the air disc brake and improves force output up to 13Bar for higher braking performance.

Electrically driven compressor (e-comp) – Electrically driven air supply solution for brakes and other air demands in vehicles with hybrid drivelines. The modular concept enables an individual combination of different electrical motor sizes with various WABCO compressors so the e-comp can be customized for all vehicle requirements.

## **Air System Management**

Compact Air Processing Unit (APU) – Integrating air dryer, quad valve and oil pre-separation filter in a single, compact body, the new APU solution offers high performance with full functionality at optimum cost. The system requires less space, ensures easy assembly and rapid installation on any chassis, and features an innovative up-stream oil-separation filter.

Air System Protector Plus– Innovative coalescence technology for higher performance and lower service costs due to extended service life. Filters before and after desiccant bed increase protection levels against harmful aerosols, offering one of the highest oil separating performances currently available on the market.

System Saver 1200 Plus – New technology for improved drying performance and air usage efficiency. An integral purge tank improves air usage efficiency as no system air is required for drying the air dryer cartridge.

Air Control Unit (ACU) – Three-in-one solution for reliable and cost effective exhaust gas treatment. Integration of pressure limiter valve, solenoid valve and check valve in one single compact unit allows for simplified assembly and exchange, saving time and costs.

## **Aftermarket**

Automatic Landing Legs – New technology for enhanced safety and improved cost efficiency. Using the vehicle's existing air supply, the unique technology enables one of the fastest raising and lowering processes and leads to significant weight savings (over 25%) compared to electric systems.

WABCO University – Building on WABCO's global track record as a provider of professional training solutions, the new WABCO University offers effective and flexible training solutions that enable participants to increase their knowledge and skills and, as a result, optimize the productivity of their business. Its unique integrated portfolio of training, learning and consulting services includes four pillars: technical training, business training, E-learning, consulting services.

## **Live Demonstration during IAA**

Daily live demonstration of WABCO truck equipped with Driver Assistance System (DAS) at "Innovationsbühne" outside Hall 26: September 23 through October 2