

# **AVL DiTEST**

Future Solutions for Today

## **Press Kit 2010**

Technology from Austria measures everything under the hood.

## **AVL DiTEST develops integrated solutions for tomorrow's automotive after sales industry**

From standard family car checkups to telemetric data in a Formula 1 race, electronic engine data analysis – or vehicle diagnostics for short – is the current norm in the automotive service branch. Austrian company AVL DiTEST ([www.avlditest.at](http://www.avlditest.at)) has established itself as one of the world's leading suppliers of vehicle diagnostics technology. Developments from the Graz-based company of the AVL Group are regarded as the technological benchmark in Europe. In its 10-year history, the Styrian company has twice been awarded the German Trade Award for Innovation. TÜV and DEKRA, the largest certification bodies in Europe, their Japanese counterpart NAVI, and prestigious automakers such as BMW and Peugeot put their trust in the technological know-how from Austria. In 2010, AVL DiTEST was nominated for the Austrian State Award for Transport 2009, the highest distinction from the Federal Ministry for Transport, Innovation and Technology, for their innovative measurement instrument for hybrid vehicles.

### **A car's heart beats electronically**

"Automobiles took the leap from purely mechanical to predominantly electronic systems long ago," says Dipl.-Ing. Gerald Lackner, chairman of the AVL DiTEST board. With airbags, ABS and ESP, vehicles have become more comfortable, more powerful and, above all, safer. Yet, as an inevitable consequence, automobile inspection and fault diagnostics have developed into a highly complex process. At first, many auto workshops only barely managed to keep pace with this development. The radical change in the technological environment threatened the existence of many small and medium sized enterprises. Lackner asserts: "With the AVL DiTEST package of automotive measuring devices and diagnostic software, we equip workshops and inspection bodies with latest-generation tools that once again allow efficient fault diagnostics!"

### **AVL DiTEST: Growth with automotive competence**

With their products in the core domain of automotive development, the Austrians rapidly asserted themselves against suppliers from the strongholds of the automotive industry and became a technological leader. With the takeover of the two main competitors GRUNDIG and PIERBURG in 2002, the Graz-based company grew into one of the biggest suppliers on the market for vehicle diagnostics technology. Alongside vehicle diagnostics and fault finding, emissions analysis is the third mainstay in the core business of AVL DiTEST. "We have managed to keep up technologically with the global legal initiatives for improving standard emissions testing for road traffic. In many countries, even outside Europe, AVL DiTEST exhaust instruments apply as a certification reference," says Gerald Lackner. Particularly spectacular was the Austrians' certification success against the global competition in Japan, where legally binding emissions controls were introduced only three years ago. Together with its international subsidiaries, AVL DiTEST employed 201 employees by the end of 2009, 71 of which in Austria.

The large number of employees is qualitatively supported by long-term technological partnerships with major automakers. AVL DiTEST even ventured into a new field on behalf of Volkswagen AG to develop an innovative measurement instrument for hybrid vehicles. The AVL DiHybrid detects overvoltages and tracks down insulation faults in the high-voltage circuit. This helps to prevent deadly electric shocks when working on the motor vehicle. The module connects via USB to a controlling PC or laptop. The first 100 AVL DiHybrid devices were delivered as early as March 2010. This highlights the strong trend towards hybrid vehicles in the long-term business plan of the high-tech company in Graz. AVL DiTEST president Lackner concludes: "We consider hybrid vehicle instrumentation a central pillar for our company in the medium term."

### Development of AVL DiTEST 1999 – 2009

#### 1999 (year established)

Total revenue:	<b>€ 7.1M</b>	Employees: <b>35</b> (of which in Graz: <b>35</b> )
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#### 2009

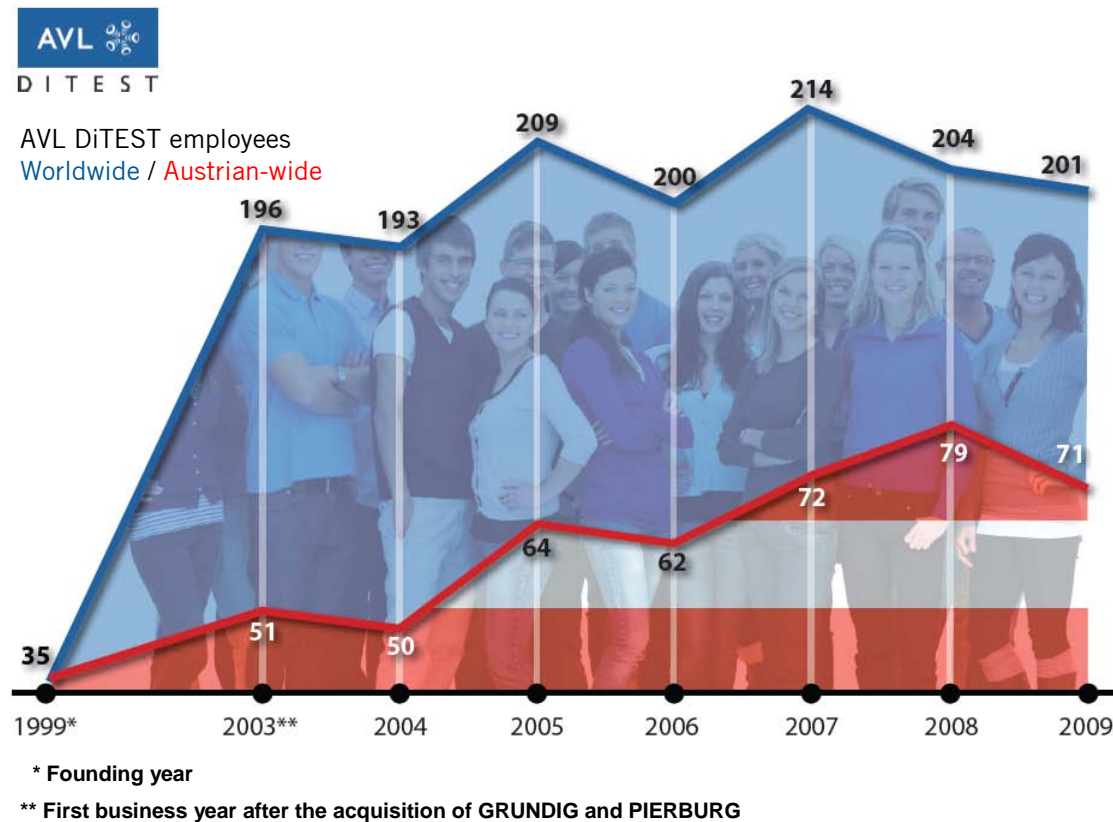
Total revenue	<b>€ 38.1M</b>	Employees: <b>201</b> (of which in Graz: <b>71</b> )
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President Lackner is pleased with the revenue of 38.1 million euros generated in 2009: "With this good result – and in spite of the international crisis in the automotive sector – we fell only 3% short of our projected revenue target for 2009. We were even one hundred percent spot-on for EBIT, and thus achieved our ambitious plan."

### Internationalization brings with it employee growth in Graz

The vehicle diagnostics specialists pursued a consistent growth strategy from the very outset. From the time they were established, about ten years ago, the Styrian company managed to more than double the number of jobs in Graz. The number of employees in the entire AVL DiTEST group already passed the 200 mark in 2005, and has never dropped since. AVL DiTEST president Lackner states: "In the past, AVL DiTEST continually expanded its core team in the R&D sector and in the core areas of customer care. Today, we employ 71 people in Graz. That means we have increased the number of qualified jobs at AVL DiTEST in Graz by nearly 50 percent since 2003."

## Through internationalisation to an increasing number of employees in Graz - Austria



For Gerald Lackner, this success is a classic example of how an internationalization strategy can permanently secure highly-qualified jobs in Austria: “The decision to base the company’s headquarters in Graz had nothing to do with national pride, as it could be perceived. The present structure of the electronics sector would certainly allow us to base significant parts of the value added chain – such as production and development – anywhere in the world. After all calculations, however, Graz quite simply came out as the best location in terms of productivity. We are especially gratified that this applies not only to development, but also to production.”

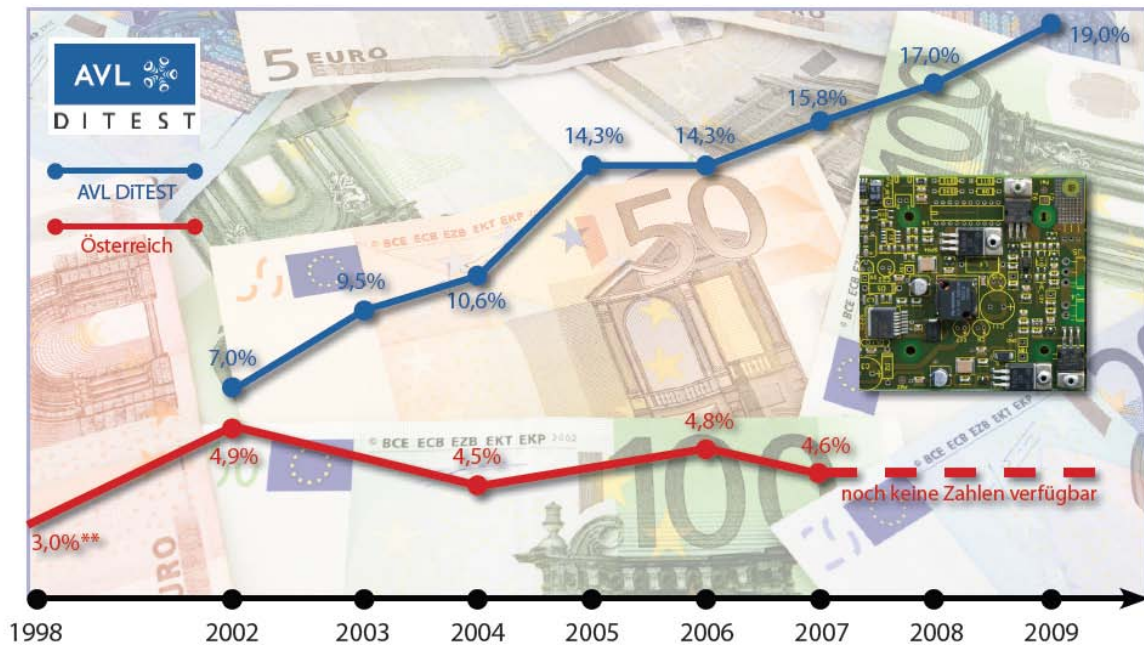
### AVL DiTEST: Innovation comes from investment

Lackner is securing AVL DiTEST’s technological lead on the automobile diagnostics market with a sustainable investment program: “AVL DiTEST has a solid foundation and is very well positioned on the vehicle diagnostics market. That is why we did not cut back the investment quota for 2009. Quite the opposite, in fact – we are increasing the R&D quota of investments this year to 19%, measured on net sales. ”This is a clear demonstration of how crucial innovation is in the business model of the Austrian vehicle diagnostics specialists.

## Development of R&D investments at AVL DiTEST

Development of R&D investments at AVL DiTEST since 2002 (measured by net sales)

Average development of R&D investments of economic sectors 33 and 34 according to ÖNACE 2003\* (measured by sales) in Austria



\*Economic sectors (ÖNACE-2003-division/-groups/-class, sorted according to OECD/Frascati-reference book:  
33: measurement and control technique, optics – without 33.1 medical technology  
34: motor vehicle and vehicle parts; Source: STATISTIK AUSTRIA

\*\* incl. 33.1 Medical technology; Source: STATISTIK AUSTRIA

These figures create a research-friendly climate in the company, which in turn has a positive effect on the motivation and enthusiasm of the highly qualified employees, says AVL DiTEST president Lackner: “We also reinforce this effect by implementing a targeted training and advanced training program for our entire team.” Key components of the training plan are teaching cultural awareness as well as building entrepreneurial thinking and promoting team spirit. Lackner explains: “We need this because we work with flat hierarchies at AVL DiTEST.”

### Enquiries and picture material:

#### AVL DiTEST

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## AVL DiTEST Brief History

**From 1946** – After starting up the engineering bureau in 1946, Prof. Dr. Hans List succeeds in developing AVL into the world's largest independent research institute for internal combustion engines and into a company that contributes significantly in the design of the modern engine and automobile industry. Information at [www.avl.com](http://www.avl.com)

**1980** – With the ultra-light clamp-on transducers for recording expansion in the diesel injection line and the injection tester, two AVL developments, AVL succeeds in making a breakthrough in diesel engine diagnostics. This was the first time the diesel injection system could be tested without opening the engine compartment. The foundation stone for AVL DiTEST is thus laid.

**1992** – The business unit “Diagnostics Technology” is set up to develop and market emissions testers for gasoline and diesel engines for official emissions testing.

**1993** – With the implementation of the official German Emissions Test (AU – Abgasuntersuchung), AVL's modular emissions testers (4-gas analyzer, opacimeter and the 400 series of combination devices) establish themselves as the leaders in quality and technology.

**1994 - 1999** – Advancements in emissions testers lead to certifications in all major European countries. A Europe-wide sales and service network is formed with subsidiaries in Germany, France and Spain.

**1996** – The second generation of emissions testers, the 4000 series of modular 4 and 5-gas analyzers, opacimeters and combination devices is presented. The AVL diesel measurement chamber is the most advanced measurement chamber featuring an automated linearity test. Only one exhaust probe is required for all exhaust pipe diameters.

**1997** – The AVL DiSpeed 490, a unique speed-measuring device that analyzes the structure-borne and air-borne sound of engines, is presented to the market. The AVL DiSpeed is the easiest, quickest and most universal way to measure the speed of gasoline and diesel engines both statically and dynamically.

**1999** – AVL DiTEST is established as a legally independent member of AVL Holding. The joint venture contract with XIAMEN HITEC ENGINE DIAGNOSTIC EQUIPMENT CO., LTD., China is signed.

**2000** – AVL DiTEST GmbH (Germany) and AVL DiTEST France S.A.S. (France) are established.

**2002** – With the acquisition of Grundig Instruments and Pierburg Hermann, AVL DiTEST becomes a leading supplier of vehicle diagnostics solutions.

**2003** – The product range of all companies in the AVL DiTEST Group is unified. The idea for a comprehensive vehicle diagnostics platform is born.

**2004** – The new emissions testing and vehicle diagnostics station AVL DiX is presented at the trade fair AUTOMECHANIKA 2004 in Frankfurt. Customers of the AVL DiTEST Group's product range include prestigious automakers such as BMD, DaimlerChrysler, Peugeot and the German certification body DEKRA.

**2005** – The 1000th AVL DiX vehicle diagnostics station is delivered. German Trade Award for Innovation goes to the AVL DiTEST development AVL DiX Drive.

**2006** – German Trade Award for Innovation goes to AVL ProBike 220/420.

**2007** – AVL DiTEST is the world's first manufacturer to present a diesel emissions tester certified for the Japanese market. 15,000 devices were to be delivered by 2010.

**2008** – AVL DiTEST presents a new cooperation with KTM. Tailored vehicle diagnostics platforms are developed for contract workshops of the KTM and Husaberg motorcycle brands.

VW re-outfits its workshops around the world with instrumentation technology newly developed by AVL DiTEST.

**2009** – AVL DiTEST's long-standing basic research into "alternative drives" becomes tangible, with a concrete pilot project for a customer. VW awards the first worldwide contract to develop automotive instrumentation for hybrid vehicles.

**2010** – AVL DiTEST is nominated for the Austrian State Award for Transport, the highest distinction from the Federal Ministry for Transport, Innovation and Technology, for their measurement instrument for hybrid vehicles developed for Volkswagen AG.

## AVL DiTEST

### Summary of important basic information

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An AVL company

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Internet: <http://www.avlditest.at>

#### President, Chairman

Dipl.-Ing. Gerald Lackner

#### Managing Director, Commercial Administration and Finance Division

Dr. Werner Oratsch

#### Business Fields

- Emissions testers for diesel and gasoline vehicles
- Universal speed measurement and clamp-on transducers
- Diagnostic tools and platforms for family cars and heavy trucks

#### Established

In 1992 as a business unit of AVL List GmbH

In 1999 as AVL DiTEST, an independent company within AVL Holding.

#### Subsidiaries and Joint Ventures

AVL DiTEST GmbH, Germany

AVL DiTEST S.A.S., France

XIAMEN HITEC ENGINE DIAGNOSTIC EQUIPMENT CO., LTD., China (Joint Venture)

#### Agencies

In over 50 countries around the world