

**ASX ANNOUNCEMENT**

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**ATG'S SPRINTEX SUPERCHARGER CONFIRMED AS WORLD'S MOST EFFICIENT SUPERCHARGER SYSTEM**

**Key points**

- **Peak isentropic efficiency of 83.89% achieved in latest testing of ATG's patented Series 5-150 Sprintex® Supercharger**
- **Typical automotive superchargers have isentropic efficiency of less than 70% - Isentropic efficiency is a key measurement of supercharger performance and efficiency**
- **An efficiency island of more than 80% was also achieved across more than one third of the operating speed range of the S5-150**
- **The high isentropic efficiency of ATG Superchargers allows vehicle manufacturers to build supercharged engines without the need for intercooling**
- **This delivers smaller engine packages at a lower cost and results in a significant increase in overall vehicle energy efficiency**

Automotive Technology Group Limited (ASX: ATJ) (ATG) is pleased to announce that the latest testing program of its patented low emissions, high fuel efficiency Sprintex® Supercharger has confirmed it as the world's most efficient automotive supercharger system.

The Company's engineering department recently completed a test program on the latest development of the patented Sprintex® Series 5 Supercharger range. The testing has delivered outstanding results.

One of the key measurements is isentropic efficiency. The Sprintex® Series 5 Supercharger recorded a peak isentropic efficiency of 83.89%. By comparison, a typical automotive supercharger has isentropic efficiency of less than 70%.

Isentropic efficiency is the measure of 'useful work' done by a thermodynamic device - in this instance a supercharger. The remaining energy used (non-useful work) is described as entropy and is emitted as heat.

A lower isentropic efficiency figure means a larger percentage of energy used to drive the supercharger unit is dispensed as heat. This in turn requires the use of an intercooler to radiate the heat into the atmosphere.

The low entropy of the ATG Sprintex® Supercharger range allows vehicle manufacturers to build supercharged engines without the need for intercooling. This delivers smaller engine packages at a lower cost and results in a significant increase in overall vehicle energy efficiency.

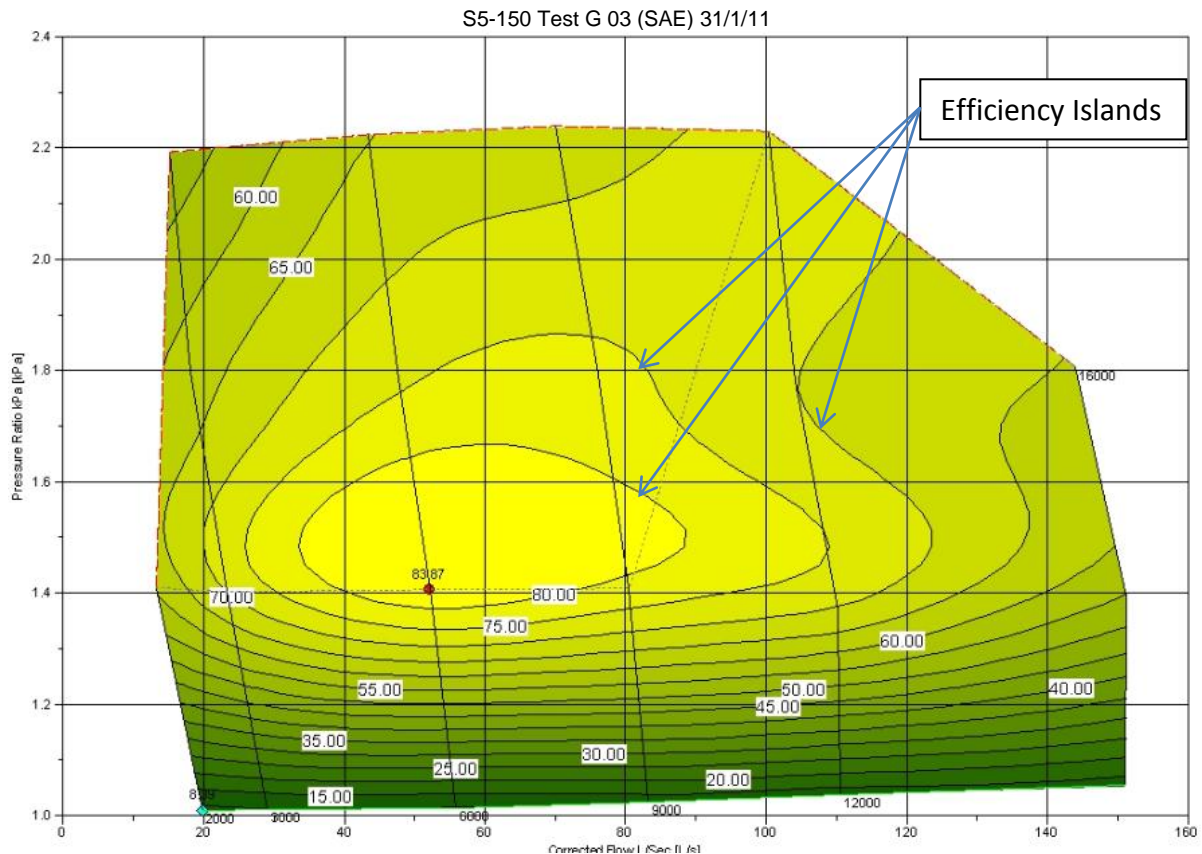
It also results in the use of smaller engines in family cars and a significant reduction in fuel consumption and CO<sub>2</sub> emissions.

In addition to the outstanding isentropic efficiency result, the test program also delivered an 'efficiency island' of above 80% across more than one third of the Sprintex® Series 5 Supercharger's operating speed range. Also of key importance is that vehicle manufacturers Original Equipment Manufacturers, (OEMs) are active in developing engine downsizing

programs, to deliver increased or equivalent performance from smaller, more efficient engines. ATG has been able to achieve these exceptional efficiency benchmarks at very low compressor speeds.

The Sprintex® Series 5 Supercharger (S5-150) is particularly suited to engine downsize programs for cars with engines as small as 1.2 litres. The S5-150 can achieve a pressure ratio of 2.2 atmospheres at a supercharger speed of just 3000rpm (equivalent to 1000-1500 engine rpm). This could allow a 1.2-1.5 litre engine to make twice as much power and torque as a normally aspirated engine of the same size.

The efficiency achieved in the chart below is particularly noteworthy in that the S5-150 has a small capacity of just 0.58 litres per revolution. Typically, a small supercharger has a high leakage to capacity ratio and is less efficient than a larger unit of the same type.



ATG continues to improve the efficiency of its patented Series 5 Sprintex superchargers and will update the market further as new benchmarks are reached and surpassed.

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## **About Automotive Technology Group**

Automotive Technology Group listed on the ASX in May 2008. It is the designer and manufacturer of the patented low emissions, high fuel efficiency Sprintex® supercharger product range. The Company's vision is to be a leading developer and manufacturer of innovative green automotive technologies to world markets, in particular in the manufacturer of superchargers.

Motor vehicle and motorcycle manufacturers are increasingly turning to Superchargers to help meet tougher vehicle emissions and fuel efficiency targets being set by governments globally, and the Sprintex® Supercharger achieves these two goals while ensuring that engine performance is not compromised.

The Company operates from a specialist research and development, and manufacturing facility in Perth, Western Australia. Visit [www.ATGgroup.com.au](http://www.ATGgroup.com.au) for more information.