

Theissl Systems: Special measurement technology since 2021

Mario Theissl's master's thesis resulted in a patent – and he used this, together with a large portion of entrepreneurial spirit, to found Theissl Systems in 2021. Since then, he has been manufacturing specialised measurement technology for the automotive industry.

Birgit Baustädter

The coming year will be intense for Theissl Systems. The company is moving out of its premises at TU Graz's Campus Inffeldgasse and into its own company building in the new Koralmpark. A lot has happened in the years since the company was founded in 2021. The product portfolio, which originally consisted of a minimally invasive flow sensor for electric motors, was expanded and the number of employees increased to nine full-time equivalents. The company is still active where it all began: as a supplier of specialised measurement technology to the automotive industry.

While studying electrical engineering, Mario Theissl worked at the Styrian company AVL and at the Institute of Machine Components and Methods of Development at TU Graz, where he saw a gap in the market: "When developing drivetrains, numerous sensors are required to record their condition. The solutions available on the market are often too large or do not fulfil the metrological requirements. So I decided to develop a solution myself." He then did this as part of his master's thesis, which ultimately resulted in a patented, minimally invasive flow sensor that measures the distribution of lubricant in vehicle transmissions.

The product range of Theissl Systems has since been expanded to include a wide variety of special measurement technology and includes the development, production and installation of wireless measurement systems for temperature and torque measurement for electric motors in electrically powered vehicles. The temperature measurement of permanent magnets in electric motors is particularly relevant because excessive

temperatures can damage the motor. The measuring systems from Theissl are equipped with a large number of sensors and are so small and project-specific that only minimal reworking is required on the test engine. In recent years, the company has become a series development supplier to car manufacturers worldwide.

Despite the big move away from Graz, Theissl would like to continue running an office on the TU Graz campus – primarily for joint projects.

"The proximity to TU Graz is of enormous importance to us."

"Students can gain valuable experience in joint projects and I offer them flexible work opportunities during their studies. This is also very important for our recruiting."



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