

Company Profile

iMAR Navigation GmbH
Systems for Inertial Navigation, Surveying, Stabilization and Control
Im Reihersbruch 3
66386 St. Ingbert / Germany

”He who stops being better stops being good”
(Oliver Cromwell)

1. Company Summary

iMAR Navigation, located in St. Ingbert, about 150 km southwest of Frankfurt, Germany and founded in 1992, has extensive longtime experience in the conception, development, manufacture, sales and support of inertial measurement systems applied to many tasks in navigation, surveying, stabilization, guidance, control and other general as well as specialized applications. These applications range through the entire applications spectrum from military to commercial, from the ocean floor to space, for unmanned and manned platforms.

iMAR Navigation develops and manufactures inertial navigation and control systems for general INS/GNSS based surveying applications as well as for e.g. aircraft testing, navigation and guidance, gravimetry, car and truck vehicle dynamics analysis and vehicle control, antenna and camera stabilization, flight path indicator stabilization, drillhead surveying and control, pipeline surveying, gyro stabilized target tracking, defense applications and many other. Strong research & development activities also cover machine vision based systems and deep-learning aspects (www.imar-navigation.de).

iMAR's team of more than 100 engineers, scientists and technicians has an unparalleled in-depth knowledge of the various inertial and aiding sensors, algorithms, hardware design and software engineering. This applied expertise achieves the highest measurement performance in the delivered systems, matched to each customer's specific requirements.

iMAR Navigation operates its own headquarters building which provides about 4'000 sqm space for development, manufacturing and customer education. The initial building in St. Ingbert was extended in 2014 to provide more space for manufacturing and development and a further building was opened in 2021 with additional 800 sqm for our teams of development and support. iMAR Navigation is certified according to ISO9001 (industrial) as well as EN9100 (airborne and military applications). Since 2011 iMAR Navigation is furthermore certified according to EASA Part 21G (aviation systems production organization). The design process for industrial and defense applications is based on the International Standard ISO/IEC 12207 or according to customer requests.

iMAR Navigation has an advanced testing and environmental certification centre for inertial systems. The equipment in our centre includes several single and multi axes turntables, a full motion simulator (hexapod) for payloads up to 1 ton with 3D translatory and 3D rotatory motion capability, a GNSS simulator, various other calibrated testing systems including two full mil/space-spec range temperature chambers, a 40 kN vibration and shock platform as well as a Zeiss coordinate measuring machine for quality assurance of the precise mechanical components. The modern production and engineering area is organized to meet both low and high volume system manufacturing with full traceability according to our quality standards.

In 2020 we founded Spezial-EMV GmbH (www.spezial-emv.com), one of the best-established EMI/EMC labs in the south-west of Germany, as a daughter company of iMAR. In 10/2022, after only 14 months of construction time, the new 650 sqm building had been opened on the iMAR Campus in St. Ingbert.

Customers of iMAR Navigation are general industries, automotive manufacturers, aerospace / aviation industry, defence industry, governmental organizations, medium and large size enterprises and research laboratories.

Beside of a direct highway connection (A6, 500 m; A8, 4 km) and a railway station “St. Ingbert - Rohrbach” nearby (5 minutes walk), also the business airport “Saarbrücken-Ensheim” is only 15 minutes away from the iMAR headquarters. The airports Frankfurt Main and Straßbourg (France) as well as Frankfurt Hahn are accessible via the highway within 90 minutes. Airport Metz (France) is located 60 km away, Airport Luxembourg and Straßbourg are about 80 km away.

iMAR Navigation GmbH has worldwide representatives.

2. Management

iMAR Navigation GmbH has been founded by Dr.-Ing. Edgar L. von Hinüber in 1992. His passion is system engineering, inertial navigation and sensor data fusion, control technology, electronics, mechatronics, image processing and to provide system designs with the iMAR team, which fulfil the demands of advanced localization, stabilization and control applications. He has studied electrical engineering, control and information theory at the Technical University of Hannover (Leibniz University), assisted to build up a chair for automation and control at the University of Saarbrücken 1989 for 5 years and received the “Eduard Martin Award” of the University of Saarbrücken in 1993 for his scientific work.

The task of iMAR Navigation is to combine and extend the scientific and technology subjects of inertial navigation, control, data processing, advanced sensors, GNSS, machine learning and mechatronics with the know-how of our highly skilled staff of engineers and technicians, quality assurance and support, to provide high professional and advanced engineering solutions and systems to the industrial, aviation, automotive, aerospace, military and commercial market.

iMAR Navigation is a German private owned company, registered in Saarbrücken. Dr. Edgar L. v. Hinüber is the CEO and owner.

Besides of the company business, since more than 15 years Dr. v. Hinüber is member of the program committee of the international DGON Inertial Sensors and Applications (ISA) Conference, held in October each year in Braunschweig with more than 60 years of tradition. He also had been a consultant of the delegation of the German Government's Federal Office of Economics and Export Control at the international Wassenaar Arrangement (control of dual use items related to inertial sensor and system technology) for more than 10 years. Dr. v. Hinüber is also expert member in certain ISO standardization working groups.

Head of Quality Management is Jasmin Schild, Andreas Urbano is the Production Manager and Dr. Alexander Dreyer is responsible for the Customer Support Division. Director Marketing & Sales is Ingo Bezold.