

News release

For Immediate Release

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Raytheon Anschütz GmbH – Company Profile

Kiel, Germany, January 1, 2010. Raytheon Anschütz GmbH is one of the world's leading manufacturers of integrated bridge systems and nautical equipment such as gyro compasses, autopilots, steering control systems, monitoring systems, radar systems, electronic sea chart equipment and communication (GMDSS) for ships. In 1995 the Raytheon Company, USA, acquired the navigation business as well as the cinema business from the tradition-rich firm Anschuetz & Co. GmbH, founded 1905 in Kiel.

Raytheon Anschütz GmbH has a major share of the market for equipment for sea-going ships and ships for inland waterways. Today approx. 500 employees and a worldwide network of sales- and service representatives guarantee that all ships can be served "round the clock".

The gyro compass - product of a scientific passion

The development of the gyro compass is directly involved with the development of our firm. The young Dr. Hermann Anschuetz-Kaempfe had taken part in several polar expeditions around the turn of the century and had found that a dog sled was a very unsatisfactory means of transportation for valuable measuring instruments. It was his goal to reach the North Pole with a submarine, traveling under the ice. This task presented the great problem of finding a suitable course-keeping instrument, since the magnetic compass, of course, does not work properly near a pole.

While searching for a suitable course-keeper he stumbled upon the works of various important scientists on gyro instruments. However, the instruments described had excessively high bearing frictions in the gimbal ring and were therefore unsuitable in a practical sense. He built and tested countless models, because he was convinced that the gyro was the right course-keeper.

These problems fascinated Anschuetz; he was obsessed with them and concentrated now on finding the geographical north direction with the help of a gyro.

On September 1, 1905, he founded his own firm in Kiel. In 1906 his cousin Dipl.-Ing. Max Schuler joined the firm. The cooperation of the two was of decisive significance. In March, 1908, they presented the results of their work to the public:

The first gyro compass in the world which could be used on board ship!

At the same time Anschuetz developed, in

- 1909 the first plotting table for navigation, with which the course traveled was entered into a sea chart
- 1916 the first artificial horizon for airplanes, which made it possible to fly blind
- 1920 the first autopilot - the "Iron Helmsman"
- 1930 the course gyro for aviation.

As a patron of science and art, Anschuetz had made a part of his fortune available in the form of a foundation at an early date. So it was only logical that he transferred his majority share to the Carl Zeiss Foundation shortly before his death in 1931.

In the last years of the war, Anschuetz & Co. on the east side of the Kiel Fjord - at the mouth of the Schwentine River - was completely destroyed.

With the Zeiss Ikon AG, a further famous firm which was of world-wide importance in photo- and film technology belonged to the Zeiss family. When the parent firm Carl Zeiss, Oberkochen, decided to rebuild the precision- and optical instrument production in a film machine works of the Zeiss Ikon AG in Kiel, the cornerstone was laid for the new Anschuetz factory in the Kiel district Wik, as a direct neighbor of Zeiss Ikon AG.

Besides photo cameras and cameras for microphotography, the Zeiss Ikon AG in Kiel produced and distributed the tradition-rich ERNEMANN large-room projectors for motion picture- and studio technology.

In 1950, after the end of the blockage of capital, Anschuetz began with the development and production of gyro compasses and navigation equipment. Through their quality products, both firms soon recaptured their old markets and became a byword once again in the branch and in the region.

The rapid developments in the sector of camera-, video- and studio technology led to a close association of the two firms in 1976. Anschuetz took over the development and production of this product palette and independent distribution companies took over the marketing.

The strategic reorientation by the Zeiss group was the basis for the acquisition of Anschuetz' navigational business as well as the cinema business by Raytheon Company. The acquisition has been effective since January 1, 1995. To expand the product range in communication, Raytheon Anschütz acquired 1996 the Swedish company Standard Radio, which is today a part of Raytheon Anschütz.

On March 1st, 1999, the cinema business was sold. The new owner has founded a new company called ERNEMANN CinTec which has taken over the entire development, marketing and service activities from Raytheon Anschütz GmbH.

Today Raytheon Anschütz produces:

- Complete Integrated Bridge Systems,
- Gyro compasses for all types and sizes of ships,
- Repeater units such as analog and digital indicators,
- Autopilot- and track control equipment for maritime and inland navigation, with digital and adaptive controllers,
- Radar (ARPA) systems
- Electronic chart systems (ECDIS)
- Navigation Information Displays (NautoConning),
- Multi-Function Workstations for Radar/ECDIS and Conning
- Electrical steering control systems and combined steering stands (NautoSteer)
- battery monitoring equipment and steering stands for submarine,
- Echo Sounders,
- GPS/DGPS receivers,
- Global Maritime Distress and Safety Systems for A1 up to A4 (GMDSS),
- Rate-of-turn equipment,
- Marine Inertial Navigation System (MINS), a high performance ring laser platform system,
- Analog and digital navigation data distributors,
- User-specific software,
- Information- and training programs for board- and service personnel,
- Equipment for depot- and service stations.

Constructed in modular form, the product palette **Bridge Control** permits individual adjustment to all required areas of application, e.g. maritime navigation, inland navigation, coastal navigation and the demanding yacht market.

Firm Data

Form of enterprise: Private limited company
founded: January 1, 1995

Court of registration: Inferior Court Kiel, No. HRB 4086

Capital stock: Euro 14 634 000

Managing Director: Dr. Lueder Hogrefe

Site of firm: Factory 1, Zeyestr. 16-24, 24106 Kiel-Wik
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Service - round the clock

A qualified team of service engineers supports more than 200 service stations which serve Raytheon Anschütz all over the world.

In continuous training courses our service partners are trained about the newest Raytheon Anschütz products and see to it that each Raytheon Anschütz equipment system is installed, maintained and repaired quickly and competently.

Customer-friendly logistics in the mother factory in Kiel, which works closely with our service partners, assure that spare parts are supplied quickly and effectively.

The areas of the company:

The wide-spread production palette, the high standard of quality and the flexibility required on an international market demand a strong organization. This is represented by the company functional divisions.

Research & Development

Customer-oriented development and construction are the tasks which stand in the foreground. This includes the precision-technical construction of mechanical equipment and the development of electronic components including the related complex control technology and software generation. For this, high-performance CAD equipment and computer systems are available in the different departments.

Through the use of our equipment in safety-relevant control functions of sea-going ships or ships for inland waters, environment-specific trials and type tests are required before introduction to the market. These measures are planned and realized by a special test laboratory. The results and experiences of these trials are taken into account in unit- and system development and thus are passed on directly to our customers.

The sales activities are planned and coordinated by the Marketing and Sales departments in Kiel.

In a firm with over 1,300 customers in more than 90 countries, a sales- and service net encompassing the whole world is a must for entrepreneurial success.

The optimal price/performance ratio for our customers can only be guaranteed when the individual adaptation of our modularly-constructed equipment is carried out according to demand. The consulting services are provided by experienced salespeople and distribution- and project engineers as the discussion partners of the customer.

The continuous readiness of our equipment on board ships on all the oceans is a great obligation. It requires an efficient logistics system to provide spare parts "round the clock". This will be supported with an E-Commerce program which is available via our WEB www.raytheon-anschuetz.com

The service department in Kiel is assisted in this by qualified service partners at all focal points of the oceans. Qualification of our partners in the field is assured through continuous, intensive training in our home factory by our service personnel.

Navigation officers can take advantage of this training program as well as maintenance crews on moving vessels or at repair depots.

Supply Chain (Produce, Procure, Deliver) and Quality Management

The transformation of the constructive specifications into a manufacturing process oriented to the latest state of the art is the emphasis of the Production department. The areas Production, Purchasing, Production Planning and Quality Assurance realize the goal of supplying our customers with economical, reliable equipment and systems to schedule.

An efficient production planning and -control system (PPS) connects all areas of the firm.

From the sales contract over the disposal, procurement of material, production, its control and quality assurance, even individual customer wishes are fulfilled quickly through an efficient data processing system.

Modern manufacturing, flow of material and test technologies for precision mechanics, electronics and assembly are prerequisites for the Raytheon Anschütz product palette.

The technologies are planned and realized in all production areas by a qualified team of employees. Through early inclusion of the quality planning and quality assurance planning in all phases of development and production of equipment and systems, a major contribution is made toward optimizing of quality- and reliability characteristics.

In order to reach this goal, Raytheon Anschütz maintains a quality assurance system according to [ISO 9001:2008](#), which is approved at annually intervals by the public orderer.

Management - Finance and Auditing, Controlling

The special position of being a leader on the world market in different areas of specialization, the extremely many-faceted production palette with a very great manufacturing depth and the internationality of the customer, set the tone of the management and controlling.

As a juristically independent firm with a balance sheet obligation a review system is implemented which is coordinated with the entire concern.

The continuous need to be competitive with respect to international competitors and the obligation to guarantee an optimal price/performance ration place high and at the same time flexible demands on the cost monitoring, the controlling department.

The inner transparency of the firm which this requires is provided by effective data processing. This makes it possible to get information quickly and to take into account the changing factors affecting costs and, in the end, prices.

Human resource and social areas

The greatest resource of any firm is its employees. The employment of qualified experts to achieve the firm's goals is therefore the first principle of the personnel department. In a weak economical region which is characterized by administration and garrisons, this is a particular challenge for a human resource department.
