



Austria*

* Austria's Leading Industrial Sectors:
Machinery, Electronics, Mechatronics

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Austria's Leading Industries

Machine manufacturing, electronics and the innovative mechatronics sector have achieved major successes in the world marketplace.

The ALMA project is being implemented in the world's driest desert. The Atacama Desert in Northern Chile is located at an altitude of 5000 meters. The temperature difference between day and night is 45 degrees Celsius. The most modern observatory in the world was established in this extreme environment as part of a joint project between the USA, Europe and Japan. It encompasses 64 mobile parabol antennas with a diameter of twelve meters. The electronics for the project come from a young and innovative company from Austria, namely the electronics and automation specialist PMS. Thus once again Austria is showing its colors in one of the most successful industries in the country.

Mechanical engineering (machine manufacturing) and electronics are the two of the most important industrial sectors in Austria. More than one quarter of all industrial employees work in these branches. Outstanding know-how in the field of mechatronics has transformed Austria into one of the leading providers of special purpose machines in Europe.

Attractive business location factors

Austria offers ideal conditions for multinational companies as well as small enterprises. High productivity and low taxes make the business location attractive. After all, according to the EU Commission, Austria scores points with the third highest productivity in the EU. Companies pay a corporate income tax of 25 percent – but nothing else. In addition, it is important to mention the geographical location between West and East. Ideal market access, an outstanding infrastructure and not least highly qualified employees are the ingredients required for success on the world market.

Top 5 Industries

Production sold in 2011, EUR billion



Quelle: Statistik Austria, April 2012

World Class Research and Education

Business and scientific communities work hand in hand

Austria's educational system is one of the best anywhere. Approximately two-thirds of adult Austrians have completed a secondary or higher education degree (OECD), one of the world's best track records. Austria is not only ranked first in the availability of highly-qualified employees, but third in terms of employee motivation (World Competitiveness Yearbook 2012).

Dual education system. One of Austria's specialties is the dual education system, a combination of theoretical and practical training practiced in apprenticeship programs and higher vocational schools. Curriculum and key courses of instruction are tailored to the needs of the business community. Companies such as Magna and Siemens professionally train apprentices and also offer the opportunity to complete an internship. It comes as no surprise that Austria is always ranked among the top five in world championship competitions in the field of mechatronics.

Research institutes supply know-how

Internationally recognized research and development institutes specializing in the fields of mechanical engineering, mechatronics and electrical engineering are located in the cities of Vienna, Linz and Graz. More than 60 university institutes and a series of research companies provide the entire spectrum of required services which companies expect in a thriving research environment, ranging from scientific know-how to the finished product. Some 13,500 graduates of science and engineering study programs are available to companies each year.



"The educational level in Austria is very high. Austria provides all the preconditions required which enable us to offer high technical standards and reliability".

Research / Education

Vienna University of Technology
→ www.tuwien.ac.at

Graz University of Technology
→ www.tugraz.at

Johannes Kepler University
→ www.mechatronik.uni-linz.ac.at

Austrian Research Centers
→ www.arcs.ac.at

Profactor
→ www.profactor.at

Linz Center of Mechatronics
→ www.lcm.at

voestalpine mechatronics
→ www.vatron.com

Upper Austrian Research GmbH (UAR)
→ www.uar.at

University of Innsbruck
→ www.uibk.ac.at/advancedmaterials

Campus 02
→ www.campus02.at

The University of Applied Sciences, FH Campus Wien
→ www.fh-campuswien.ac.at

FH Joanneum University of Applied Sciences
→ www.fh-joanneum.at

University of Applied Sciences Upper Austria, Wels Campus
→ www.fh-wels.at

Carinthia University of Applied Sciences
→ www.cti.ac.at

UAS Technikum Wien
→ www.technikum-wien.at

Vorarlberg University of Applied Sciences
→ www.fh-vorarlberg.ac.at

University of Applied Sciences Wr. Neustadt
→ www.fhwn.ac.at

Further information at:
→ www.innovationszentren-austria.at

Mechanical Engineering: Tops in Austria

The mechanical and plant engineering: R&D intense and export oriented

Nine speeds for the environment. In 2012 Chrysler is commencing production of a nine speed transmission at the Kokomo Transmission Plant in Indiana, USA. The vehicles can increasingly cruise around at an ideal and thus energy-saving speed range and thus further reduce fuel consumption. The machines needed to produce the extremely precise valve control components and other aluminum parts comprising a total of 450,000 per year are "Made in Austria" by Anger Machining based in Upper Austria.

Close to one quarter of Austria's entire industrial production is in the fields of machinery, plant engineering and metal products. The production value of this sector comprises about 23 percent of the entire material goods production in Austria, demonstrating its power by achieving an eleven percent annual growth rate.

The approximately 1,900 companies primarily manufacture for the global market. For example, large sectors featuring high export growth include plastic, construction and agricultural machinery. The mechanical engineering sector is one of the most active industries, with annual R&D expenditures of EUR 483 million.

Core strengths

- Special and custom machinery
- Boiler construction

Clusters and competence centers

Austrian Center of Competence for Tribology
→ www.ac2t.at

Materialcluster
→ www.materialcluster.at

Automobile Cluster
→ www.automobil-cluster.at

KnetMET Industrial Competence Network for Metallurgical and Environmental Process Development
→ www.industry.siemens.com/knetmet

IKMA Competence Center for Mechatronics and Automation
→ www.vatron.com

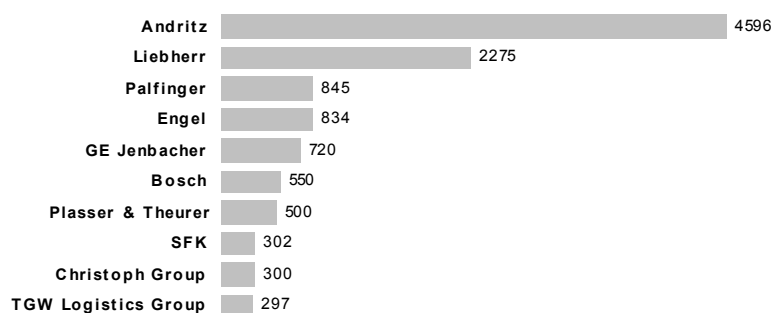
Light Metals Competence Center Ranshofen (LKR)
→ www.lkr.at

Other institutions at:

→ www.innovationszentren-austria.at

Top companies in the machine industry

Net sales revenues 2011 (EUR m)



Global Market Leaders from Austria

Leading-edge firms with special know-how

Global market leaders (1st, 2nd or 3rd in the world) or No. 1 in Europe

Andritz: Plant engineering → www.andritz.com	Ochsner Wärmepumpen: Heat pumps → www.ochsner.de
AVL: Power machinery and aggregates → www.avl.com	pewag: Screws, chains, springs → www.pewag.at
Beda-Lutz Werke: Metal goods → www.benda-lutz.com	Plasser & Theurer: Locomotive and railway installations → www.plassertheurer.at
Bertsch: Environmental technology → www.bertsch.at	Pollmann: Automobile component supplier → www.pollmann.at
Binder + Co: Construction machines → www.binder-co.at	Polytechnik: Environmental technology → www.polytechnik.com
BOEHLERIT: Hard metal → www.boehlerit.com	Pöttinger: Agricultural equipment → www.poettinger.at
BWT: Apparatus engineering → www.bwt.at	REFORM-Werke Bauer: Agricultural machinery → www.reform.at
Constantia Teich: Packaging materials → www.constantia-teich.com	Röhren- und Pumpenwerk Bauer: Pipes and pumps → www.bauer-vo.com
Doppelmayr: Lifts → www.doppelmayr.at	Rosenbauer: Firefighting equipment → www.rosenbauer.com
Doubrava: Steel and shipbuilding → www.doubrava.at	SCHOELLER-BLECKMANN Oilfield Technology → www.sbo.at
Ebner Industrieöfen: Industrial furnaces → www.ebner.cc	Schukra Berndorf: Automobile component supplier → www.schukra.com
EMCO MAIER: Machine tools → www.emco-world.com	Silhouette: Medical and optical equipment → www.silhouette-international.com
ENGEL: Machines for the plastics industry → www.engelglobal.com	Starlinger: Textile machines → www.starlinger.com
EVVA: Locks, fittings → www.evva.at	Swarovski-Optik: Medical, optical equipment → www.swarovskioptik.at
Fried.v.Neuman: Sheet metal and metal goods → www.neuman.at	Teufelberger: Steel cables → www.teufelberger.com
Fröling: Steam and heating boilers → www.froeling.com	Thöni: Environmental technology → www.thoeni.co
Geislinger: Drive engineering → www.geislinger.com	TWG Mechanics: Storage technology → www.tgw-group.com
GREENoneTEC: Environmental technology → www.greenonetec.com	Unger Stahlbau: Steel → www.ungersteel.com
Greiner Extrusion: Machines for the plastics industry → www.greiner-extrusion.com	VAE Eisenbahnsysteme: Railway systems → www.voestalpine.com/vaee
Haas Waffelmaschinen: Waffle machines → www.haas.com	W&H Dentalwerk Bürmoos: Medical and optical equipment → www.wh.com
HB-Brditschka: Jewellery → www.lorena.at	Waagner-Biro Stahlbau: Steel construction → www.waagner-biro.com
Herz Armaturen: Fittings → www.herz.eu	Wild: Medical and optical equipment → www.wild.at
HOERBIGER VENTILWERKE: Valves → www.hoerbiger.com	Windhager: Steam and heating boilers → www.windhager.com
HTM Sport: Sheet metal and metal goods → www.tyrolia.com	Zizala: Automobile component supplier → www.zkwa.at
iSi: Automobile component supplier → www.isi-automotive.com	
Knill – Mosdorfer Verzinkerei: Steel → www.knillgruppe.com	
Lisec: Construction and mining machines → www.lisec.com	
Miba: Automobile component supplier → www.miba.com	
M-U-T: Environmental technology → www.m-u-t.at	

Electronics: Innovative Core Industry

Green intelligence ensures growth

A quantum leap in production technology: In October 2011 the German chip manufacturer Infineon succeeded in producing the first prototype of a thin wafer with a diameter of 300 millimeters. Two and one half times the number of chips can be mounted on these larger wafers. The development location for this innovation is in Austria's federal province of Carinthia. Infineon continues to expand research conducted in Austria: in June 2012 another research building for 500 employees was opened.

Export ratio of 75 per cent. The electrical and electronics industry is the second largest industrial employer in Austria, with close to 60,000 employees. The production value of this sector was close to EUR 12.8 billion in 2011. More than two-thirds of the products are exported. The branch is a pioneer in developing flexible working time models.

Many companies, from Alcatel and Hewlett Packard to Siemens and Sony, already take advantage of the numerous competitive advantages offered by Austria as a business location, and have set up their international R&D competence centers as well as production plants to manufacture quality products in Austria.

Green intelligence is the recipe for growth: intelligent energy systems, smart mobility and mobile communications were the top growth drivers in the year 2011. The energy technology segment expanded by 16 percent, and sales of components were up by an impressive 47 percent.

High R&D expenditures. The main reason for the remarkable success of the electronics industry is the disproportionately high research expenditures of the sector. The electrical and electronics industry accounts for about one-third of all Austrian industrial R&D investments.

Core strengths

- Railway supply industry
- Semiconductor technology
- Power engineering

Clusters

ECHEM - Applied Electrochemistry
→ www.echem.at

Competence Center for Automobile and Industrial Electronics (AI)
→ www.k-ai.at

ec3 - Electronic Commerce
Competence Center
→ www.ec3.at

Competence Center for Light Systems
→ www.k-licht.at

KERP – Competence Center of Used Electronic Device Recycling and Sustainable Product Development
→ www.kerp.at

Micro Electronic Cluster
→ www.me2c.at

Automobile Cluster
→ www.automobil-cluster.at

Mobility Cluster Vienna
→ www.clusterwien.at

Competence Center for Optoelectronics
→ www.tz-burgenland.at

Other institutions at:

→ www.innovationszentren-austria.at

Mechatronics at the Forefront

Future-oriented branch for intelligent products

The mechatronics branch – a fusion of machine construction, electronics and information technology – is a pulsating high-growth sector. Mechatronics is considered to be one of the most important innovation drivers, encompassing some 6,900 companies in Austria (2011). 341 firms in the Mechatronics Cluster Upper Austria alone generate revenue of more than EUR 11 billion, employing a work force of 57,330 people.

Tops in Europe. Regardless of whether it involves medical devices, tools, wood processing machines or the automotive sector, Austria has developed an outstanding know-how in the production of custom and special purpose machinery. One key reason is the intensive cooperation which has evolved between the scientific and business communities in the field of mechatronics: approximately 200 to 300 R&D specialists are available to companies. The mechatronics study program offered by Johannes Kepler University in Linz is the most popular course of studies at the Faculty for Natural Sciences and Engineering.

Clusters and competence centers

Mechatronics Cluster Upper Austria
→ www.mechatronik-cluster.at

Cluster Mechatronics Tyrol
→ www.standort-tirol.at

TechnoGate
→ www.technogate.at

Industrial Competence Center for Mechatronics and Automation
→ www.ikma-linz.at

Linz Center of Mechatronics
→ www.lcm.at

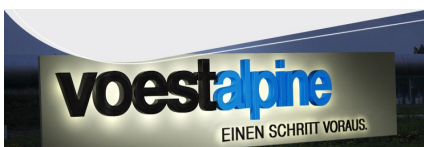
VRResearch Center for Tribotronics and Technical Logistics
→ www.v-research.at

Mechatronics Development Center of the Mahle Group
→ www.mahle.at

Materials Center Leoben
→ www.mcl.at

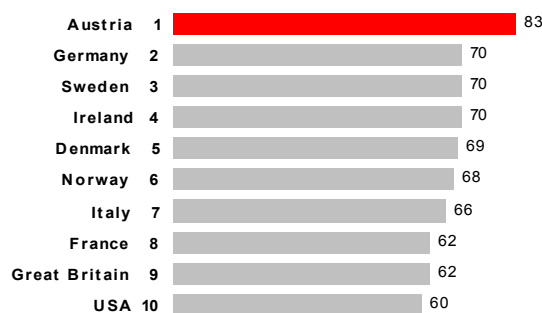
Other institutions at:

→ www.innovationszentren-austria.at



“One of our future priorities will continue to be ensuring the qualifications of employees. They represent our potential. The training center in Linz instructs 50 – 60 trainees on an ongoing basis, above all in the fields of mechatronics and electronics”.

Companies have come and stayed (% of direct investments/after 3 years)



Source: OECD

SMEs Exploit Advantages

Multinationals such as Infineon, Voith and Liebherr bundle their know-how in Austria

In addition to numerous multinational companies, Austria is an ideal business location for small and mid-sized companies such as Felder, Durst, Mendel or Ratgeber.

Electronics

Infineon: Chips “Made in Villach” are used around the world

Infineon Austria, subsidiary of the Infineon Group, operates in the field of automotive and industrial electronics. An international team researches, develops and produces microchips. The production of microchips takes place in Villach, where the company's Competence Center for Power Semiconductors is based. Research and development centers are located in Villach, Graz, Klagenfurt and Linz. Infineon continues to invest heavily in its Austrian subsidiary. On balance, investments will total EUR 250 million in 2012. Infineon is ranked fourth among companies carrying out R&D in Austria, investing about 16 percent of its revenue in R&D.

→ www.infineon.at

Philips: Global competence center

For the Dutch electronics group Philip, Austria is an important high-tech business location with competence centers of global importance. In addition to the Philips headquarters for its Healthcare, Consumer Lifestyle and Lighting segments, Vienna is also home to the High Tech Campus Vienna, which includes a developmental center and production facilities. One of the company's five global competence and development centers for its Consumer Lifestyle business is located in Klagenfurt. It develops product innovations for the world market in the fields of body care, hair care, household appliances, health and wellness. Philips employs a work force of 640 people in Austria.

→ www.philips.at

Mechanical engineering

Voith: R&D competence

Three divisions of the German Voith Group are represented at the St. Pölten facility in Lower Austria: Voith Paper (paper technology), Voith Turbo (drive systems) and Voith Siemens Hydro Power Generation (power plant technology). The competence center for electrical drive components and system solutions for cardboard and packaging paper machinery is located in Austria, with responsibility for research and development, product development, construction, sales, marketing and controlling. In addition, the St. Pölten facility is the production center for paper rolls. A large percentage of the rollers used by Voith Paper in its paper machines around the world are manufactured in St. Pölten.

→ www.austria.voithturbo.at

→ www.sanktpoelten.voithpaper.de

Rosenbauer: A renowned brand

Rosenbauer is present everywhere and anywhere where fires arise. The Austrian company is one of the world's largest manufacturers of fire extinguishing systems and pumps.

Rosenbauer, ranked number two globally, delivers fire-service vehicles across the globe, including fire-fighting vehicles and equipment for Saudi Arabia or for the U.S. Army. One well-known example of Rosenbauer's product portfolio is the Panther, the most technologically advanced fire-fighting vehicle one can purchase on the world marketplace. → www.rosenbauer.at

Andritz: The global player

The Andritz Group in Graz is the largest machine construction company in Austria. The product line of this global player is quite extensive, encompassing plants, systems and services for hydropower plants, the pulp and paper industry, the steel industry and other specialized industries. Recently, Andritz grabbed a large piece of the pie of large contracts such as the huge Belo Monte hydropower plant in Brazil, projects of the utility company AES Gener in Chile and the new Beyhan-1 hydropower station in Turkey. → www.andritz.com

Mechatronics

Keba: Specialist for automation

The automatic cash machine on the corner may have been produced by Keba, the Austrian automation specialist. The company's specialties are industrial, banking and service automation, as well as control systems, electronics, information technology and mechatronics. Its key customers are financial institutions, service and lottery companies. For example, all lottery outlets are equipped with terminals provided by Keba. Keba invests about 20 per cent of its annual revenues in research and development, with a work force of 760 people.

→ www.keba.at

Celestica: 3D Ultrasound

The Canadian Celestica Group has been operating in Austria since 2010 with its development specialist AlliedPanels, which focuses on the field of "imaging diagnostics" – ultrasound, X-ray, computer tomography and mammography devices. The Healthcare Centre of Excellence for Europe whose specialty is 3D ultrasound technology is also located in Austria.

→ www.celestica.com

Liebherr: Good climate when traveling

With its heating, ventilation and air conditioning systems, Liebherr Transportation Systems ensures a pleasant environment for passengers, whether on streetcars or on high-speed trains. Liebherr Transportation Systems, located in Lower Austria, specializes in climate control projects for railway vehicles such as streetcars, subway cars, public transportation systems, double-deck and high speed trains, integrating its broad-based experience in the aeronautics and rail traffic segments. The multinational German company Liebherr maintains five production locations in Austria.

→ www.liebherr.com

The Best Contact Partner for Business Location Issues

As a consulting company set up by the Republic of Austria, ABA-Invest in Austria (ABA) is the top choice of international investors

- **Personalized advisory services.** ABA-Invest in Austria is staffed by longstanding, experienced **investment consultants**. ABA offers you competent employees who will personally take care of you, and provide all the necessary-contacts you require in Austria. Contact ABA-Invest in Austria at the beginning of your project so that you will be given optimal support.
- **Comprehensive information pool.** ABA-Invest in Austria can provide you with all the up-to-date data on **Austria as a business location**. ABA supplies information about branches, technologies and market developments, as well as the overall political and economic environment.
- **Competent consulting.** ABA-Invest in Austria advises you on the **choice of an optimal site**. ABA provides information on labor and tax issues, informs you about the best possible investment subsidies, researches current real estate costs or assists you in solving different problems which may arise when setting up business operations in Austria.
- **Vigorous support.** ABA-Invest in Austria helps you in **handling formalities** and dealing with public authorities. Together with you, ABA will complete applications for investment grants or operating licenses, and supports you working in close cooperation with the respective regional investment promotion agency.
- **Long-term service.** ABA-Invest in Austria offers long-term consulting services-and investor support. Even after the project has been completed, ABA is available to provide support services for further investments and developmental steps.
- **International links.** ABA-Invest in Austria operates a **global network**. ABA puts its offices in New York and Tokyo at your disposal to serve as cooperation-partners, and also identifies the right contacts at the foreign trade offices of the Austrian Federal Chamber of Commerce.

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