



**KEY FIGURES**

>13,000  
companies



320,000  
employees



60.7

CHF billion  
Exports within the  
MEM industry



7

percent  
MEM share of  
Swiss GDP



2<sup>nd</sup>

rank in  
per capita machinery  
exports



Sources: Swissmem; Federal Customs Administration, 2021

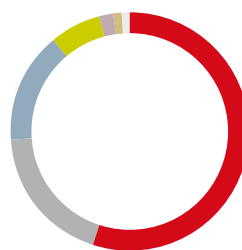
# THE SWISS MACHINERY, ELECTRICAL AND METAL INDUSTRY

**AT A GLANCE**

Employing around 320,000 people, the Swiss mechanical, electrical and metal industry (MEM) is Switzerland's biggest industrial employer. Due to its high standards regarding quality, precision, safety and reliability, this sector maintains its international competitiveness, despite the strong Swiss franc. Almost 80% of its products are exported, with 55% of them making their way to the EU. Switzerland ranks second in a comparison with other countries for per capita machinery exports. The reasons for this industry's success include an exceedingly high level of innovation: The companies are accustomed to having their products, technology and processes being continuously improved via means of significant investments in research and development.

**Exports MEM industry 2020**

Share of economic areas



EU28	55%
Asia	19%
North America	15%
Rest of Europe	7%
Latin America	2%
Africa	1%
Oceania	1%

Sources: Federal Customs Administration; Swissmem 2021

**Companies from the mechanical, electrical and metal industries**

Selection of companies with headquarters in Switzerland

- ABB
- Autoneum
- Bucher Industries
- Endress+Hauser
- Erowa
- Georg Fischer

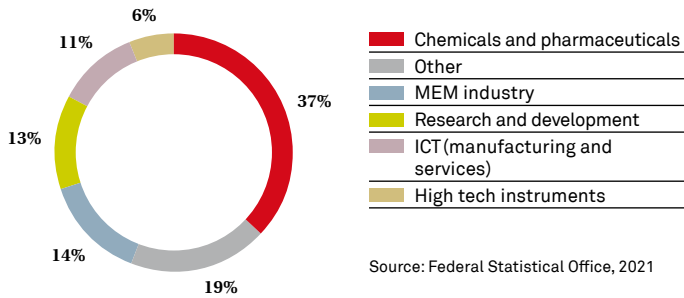
- OC Oerlikon
- Schindler Aufzüge
- Schmolz+Bickenbach
- Siemens
- Stadler Rail
- Sulzer

## RESEARCH AND DEVELOPMENT (R&D)

- The mechanical, electrical and metal industry (MEM) offers almost 20% of its positions in the field of research and development (R&D). In 2019, 14% of the entire R&D expenditure of the Swiss private sector was invested in the MEM industry.

### R&D expenses by industry

Total CHF 15 454 million at current prices, 2019



- Companies have **excellent access to qualified skilled workers** in Switzerland, thanks to the presence of top universities. Almost 9,000 people studied Engineering at the world-renowned ETH Zurich in 2020, and almost 4,000 people at EPFL.
- The MEM industry is currently training around 18,000 people and is thus one of the **largest training facilitators** in Switzerland.
- For decades, Switzerland has been **one of the leading nations in the world championships of vocational skills** - thanks to the Swiss vocational training system, which ensures high-quality, practical and versatile basic vocational training.
- The significant innovation potential of the MEM industry is also evident in the field of intellectual property. In 2020, the European Patent Office (EPO) granted 4,899 patents in Switzerland. In terms of the number of applications per million inhabitants, Switzerland is one of the top countries in Europe for the number of registered patents in fields relating to the MEM industry.

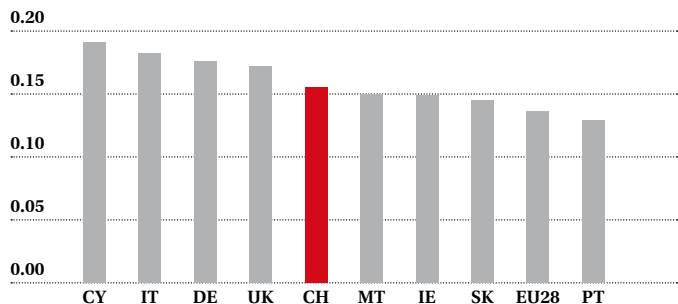
- The Swiss MEM industry is highly advanced in terms of its integration of innovation and production processes. This includes, in particular, the implementation of technology developed by the ICT sector. Switzerland has excellent specialists in these sectors.
- Switzerland's ten **National Thematic Networks (NTN)** offer a platform for the transfer of knowledge and technology between companies and public research institutes in fields particularly relevant to the MEM industry. This includes several important networks, including Carbon Composites Schweiz, Innovative Surfaces, Swiss Photonics, the Swiss Alliance for Data-Intensive Services, the Additive Manufacturing Network and the Logistics Network Association.

## COSTS AND FINANCING

- The Swiss Innovation Agency **Innosuisse** specifically promotes the transfer of knowledge and technology between companies and universities. It brings partners from these two areas together in applied research and development projects and provides assistance to startup coaching. Innosuisse funds half of the project if an innovator works with a Swiss institute.
- Eurostars is a joint program with the EU. SMEs that invest more than 10% of their turnover in research and development are eligible to receive financial support as part of the **Eurostars support program**. As a general rule, there are two calls for tender per year. Switzerland is funding projects with up to a maximum of 500,000 euros.
- Switzerland's **industrial electricity prices** are moderate by international standards at 15.5 centimes per kWh.

### European industrial electricity prices

in CHF/kWh, medium voltage



Sources: Swissmem, Federal Statistical Office, Eurostat

- The **Swiss Made** label stands for quality, precision, safety and reliability – attributes which contribute to buyers abroad being willing to pay higher prices for Swiss products. The price differences compared to rival foreign products are partly a result of the strong Swiss franc and the high price and wage levels in the country.
- The **Initiative Industrie 2025** is a national platform for informing, sensitizing, networking and promoting Swiss companies around topics from Industry 4.0. Various measures are being implemented with the aim of safeguarding and expanding the competitiveness of the manufacturing industry in Switzerland and of networking and promoting its stakeholders ([www.industrie2025.ch](http://www.industrie2025.ch)).
- The **annual fees for Swiss patents** were **reduced** on 1 July 2019. Patent protection and therefore the costs of innovation are now cheaper. These lower fees benefit innovative Swiss companies, and especially SMEs.

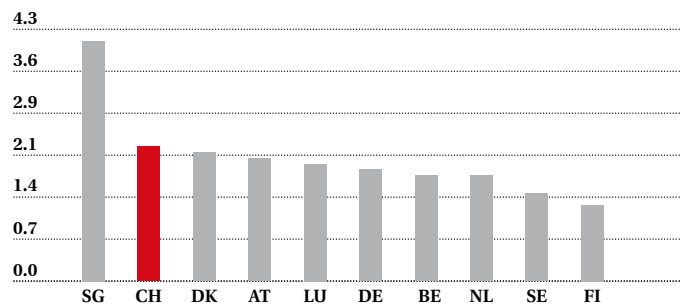
### FRAMEWORK CONDITIONS AND MARKET ENTRY

- With exports accounting for almost 80% of their output, the MEM industries are **highly export-oriented**. The fact that the Swiss MEM companies employ over 500,000 people outside of Switzerland is another indication of their close intertwinement with the world economy.
- One of the world's most comprehensive networks of **free trade agreements** provides Swiss companies with access to the most important export markets including the EU and China. With an export share of 55%, the EU is by far the most important sales market for the MEM industry, followed by Asia (18%) and the USA (15%).

- Switzerland ranks **second** behind Singapore in a comparison with other countries for **per capita machinery exports**. Swiss companies are among the world's leading providers in numerous product areas.

#### Machinery Exports per Capita

in thousands of EUR



Source: Swissmem, Panorama 2019, VDMA

- **Mutual recognition agreements** (mutual recognition of conformity and quality controls) between Switzerland and the EU, the EEA, the EFTA, Canada and Turkey reduce the additional import/export costs associated with various product regulations. The corresponding agreement with the EU encompasses 20 product types, including machinery, vehicles, electronic devices and construction equipment.
- **Swiss Export Risk Insurance SERV** insures export transactions of Swiss companies against non-payment due to political or commercial risks and can help avoid liquidity shortages. A consultation is free of charge.

## TESTIMONIAL



ADRIAN STEINER  
CEO of Thermoplan  
[www.thermoplan.ch](http://www.thermoplan.ch)

“Switzerland is the right production location. The level of training of the employees here, who are reliable and make high-quality products possible, also speaks in favour of this. We find very good employees in Central Switzerland, both in terms of their requirements profile and loyalty.”

## CURRENT DEVELOPMENTS

- The free trade agreement with China, which came into effect in 2014, is of particular importance for the MEM industry: Within ten years, 92% of all products of the MEM industry will be free of all customs duties, which should have a positive influence on the growth of companies exporting to China.
- In 2019, the Swiss electorate voted in favor of the Federal Act on Tax Reform and Old-Age Insurance Financing (“STAF”). This tax reform ensures an **internationally accepted** corporate taxation system (see factsheet at [www.s-ge.com/corporate-taxation](http://www.s-ge.com/corporate-taxation)).
- Following the pandemic-related slump in business in 2020, the situation has now improved significantly for the majority of MEM companies. According to Swissmem, the Swiss association of MEM industries, almost 90% of companies evaluated the current business situation to be satisfactory to good.

## CONTACTS AND FURTHER INFORMATION

### Authorities and regulators

[State Secretariat for Education, Research and Innovation SERI](#)  
[sbfi.admin.ch](http://sbfi.admin.ch)

[Federal Institute of Metrology](#)  
[metas.ch](http://metas.ch)

[Innosuisse – Swiss Innovation Agency](#)

[innosuisse.ch](http://innosuisse.ch)  
> [National Thematic Networks NTN](#)

[Swiss Export Risk Insurance](#)  
[serv-ch.com](http://serv-ch.com)

[Swiss Federal Institute of Intellectual Property](#)  
[ige.ch](http://ige.ch)

### Publications

[Collective employment agreement of the industry](#)  
[swissmem.ch](http://swissmem.ch)

### Associations and networks

[arcm.ch](http://arcm.ch)  
[fhs.ch](http://fhs.ch)  
[micronarc.ch](http://micronarc.ch)  
[seca.ch](http://seca.ch)  
[swissmechanic.ch](http://swissmechanic.ch)  
[swissmem.ch](http://swissmem.ch)  
[switzerland-innovation.com](http://switzerland-innovation.com)  
[unitetra.ch](http://unitetra.ch)

### S-GE resources

[Handbook for Investors](#)  
[s-ge.com/handbookforinvestors](http://s-ge.com/handbookforinvestors)

[More fact sheets on Switzerland as a business location](#)  
[s-ge.com/factsheets](http://s-ge.com/factsheets)

This factsheet was produced with the kind support of Swissmem.

### WE OFFER FREE CONSULTATION

Are you expanding in Europe and considering Switzerland as a business location for your company? Here, you can get free advice and support through the entire evaluation and settlement process: we will connect you unbureaucratically with the cantonal business promotion agencies and provide you with expert contacts for practical issues such as taxes or real estate.

Get in touch with us: [s-ge.com/invest](http://s-ge.com/invest)