

RUAG Space

The growing importance of space travel to life on Earth remains a key driver of the dynamic market environment that this sector operates in. As a leading supplier of satellites and launch vehicles, RUAG Space continues to hold a stable position and is investing in the future.

Business performance

In a challenging market environment, RUAG Space achieved an operating result of CHF 24 million (CHF 38 million) with a slight downturn in sales, amounting to CHF 339 million (CHF 377 million). The primary causes of this were delays in decision-making processes affecting new telecommunications projects. At the same time, RUAG Space continued to invest in strategic areas of growth: the US market, new products and industrialisation.

The USA represents by far the largest space market and the one with the strongest growth. RUAG Space was able to expand its business activities in the USA based on its role as a global supplier with a leading position in Europe. It made investments in its Alabama and Florida production sites, and began production projects for its customers United Launch Alliance and Airbus OneWeb Satellites. It also expanded its portfolio of electronic and mechanism products, looking ahead to the needs of future satellite constellations. As well as this, further investments were made in establishing new, more efficient production processes for thermal systems – at the Berndorf site in Austria among others – and in mechanisms for semiconductor production in Coswig, near Dresden. These steps have made RUAG stronger in the face of growing competition surrounding commercial and institutional projects.

RUAG Space achieved some important milestones in the field of electronics in 2019. EDRS-C, the European data highway satellite operated by the European Space Agency (ESA), successfully commenced operation during the year, with supercomputers from RUAG Space controlling the payload and other subsystems of the satellite. The European space telescope CHEOPS is also controlled by on-board

electronics from RUAG Space. Additionally, RUAG is working together with a partner company to deliver on-board and on-the-ground electronics that will provide secure data transmission for the new space station that NASA is planning. The Lunar Orbital Platform, as it is known, is intended to provide a gateway for regular travel to the Moon from 2024 onwards. RUAG is also anticipating growth in the area of exploration through its new development office for electronic products in Denver, Colorado, which opened in 2019. As well as this, RUAG is working with new US companies on the commercial telecommunications market, including San Francisco-based internet provider Astranis. It has also been competing for contracts in European projects relating to navigation satellites and terrestrial observations. Decisions on these will be made in the coming years.

The OneWeb communications network saw the launch of its first six satellites in spring 2019. The first phase in the network of satellites being created is set to encompass some 650 satellites, with additional launches scheduled for 2020. To ensure that the satellites are released correctly, a RUAG dispenser is placing each individual one securely in position in its destination orbit. RUAG is also supplying the satellite structure. For OneWeb, RUAG Space USA produced some 750 satellite panels at its Titusville, Florida site within six months – amounting to more than 30 satellites per month, a production rate that no other facility in the world has managed to rival. Thanks to a new dispenser system from RUAG, it was also possible to place satellites for Canada's RADARSAT Constellation Mission safely in orbit. This unique vehicle launch method sent three large satellites into space and incurred lower costs in the process. RUAG structures and heat protection equipment contributed to the European space data highway project (EDRS-C) launched in 2019. In terrestrial applications, meanwhile, RUAG expanded its production of mechanisms used in semiconductor manufacturing. It produces thermal insulation solutions for the energy and medical sectors, to name a couple of examples.

In 2019, the European launch vehicle Ariane achieved a significant milestone through its 250th trip into space. This marked a special event for RUAG as well: since Ariane was first launched in 1979, an on-board computer from RUAG Space has been guiding the vehicle to its destination and a RUAG payload fairing has been protecting its precious cargo – with a successful outcome every time. At their autumn 2019 meeting, ESA ministers gave the green light to commissioning the new European vehicle, Ariane 6, which will also use RUAG Space payload fairing of around 20 metres in height. With a view to creating smoother journeys into space, RUAG Space successfully tested a new, shock-proof jettison system for payload fairings in 2019. The year also saw US launch vehicle Atlas V undertake numerous successful launches with carbon structures and payload fairings from RUAG. Every month, there are launches of several US and European vehicles equipped with RUAG adapters that secure the satellites and release them in orbit. A real highlight of the year came in the form of a contract from Mitsubishi Heavy Industries, which will see RUAG provide payload fairings for Japan’s new H3 launch vehicles.

Outlook

At their November 2019 meeting, European space ministers demonstrated a remarkable sense of commitment to advancing space travel in Europe – and to European industry. The European Space Agency member states resolved to enact the biggest increase that the ESA’s budget has ever seen, which will bring it to more than EUR 14 billion over the coming years. Additionally, the European Union intends to invest further in Europe’s presence in space, and in world-leading navigation, climate protection and communication systems. Given its position as Europe’s leading space supplier, RUAG hopes to play a key role in these projects in the future.

Brief profile

RUAG Space is the leading supplier of products for the space industry in Europe and has a growing presence in the United States as well. With 12 sites in six countries, the division specialises in components for use aboard satellites and launch vehicles. Its competencies fall into three areas: electronics for all space applications, mechanical and thermal products for satellites, and structures and separation systems for launch vehicles.

Customers and partners

ESA, NASA, ArianeGroup, Airbus Defence and Space, Airbus One-Web Satellites, Thales Alenia Space, OHB, United Launch Alliance, MAXAR, Boeing, Lockheed Martin, Mitsubishi Heavy Industries, Northrop Grumman

Facts and figures

Net sales:	CHF 339 million
EBITDA:	CHF 37 million
EBIT:	CHF 24 million
Employees (FTE):	1,265
Based in:	Switzerland, Sweden, Austria, USA, Germany, Finland

RUAG will continue to take advantage of opportunities in specific areas of the US market. This will involve NASA’s projects relating to exploration of the Moon and Mars, plus the growing market in the area of satellite constellations for telecommunications and terrestrial observation.

However, the longer the corona crisis lasts, negative effects on the business results for 2020 must be expected.