# exentis group

Industrialized
Additive Manufacturing

# Annual Report 2019

exentis group

# Exentis Group –
## Industrialized Additive Manufacturing

**Exentis is the inventor and pioneer of**
**Exentis 3D Mass Customization® 3D screen printing technology.**

Exentis provides a comprehensively patented 3D technology platform. Exentis is the only 3D printing company in the world that is able to handle large-scale production: **Industrialized Additive Manufacturing. Offering free choice of materials.**

Exentis is a **technology company** that develops comprehensive production solutions for its customers within **development projects** and also handles the **production** of components and semi-finished goods. It focuses particularly on the **development of customised materials**.

**Customers** then **decide** whether **Exentis** should **make the components** or they should acquire their own production licence and **complete the manufacturing work at their own site**. In the latter case, Exentis acts as a **one-stop shop** and supplies the process expertise, the Exentis 3D production unit(s), printing screens, pastes and, if necessary, the operating personnel.

**Exentis 3D printing technology is universally applicable**: for industrial parts made of metal and ceramics or for the clean-room production of pharmaceutical or bioprinting products.

Instead of costly plant conversions, the customer can implement any desired geometric adjustments within a few days using new screen sets.
**Rapid tooling, for example, offers a considerable competitive advantage over injection moulding technology.**

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# Letter to the shareholders

## Dear shareholders,
## Dear friends of our company,

**Ralf P. Brammer**
President of the Board of Directors

In the 2019 financial year, Exentis was able to make significant operational progress as we advanced with the industrialization of 3D screen printing technology, Exentis 3D Mass Customization®.

As a pioneer in Industrialized Additive Manufacturing production, we generated a high volume of orders based on 29 existing projects in a total of twelve market segments. Additive manufacturing offers the manufacturing industry significant advantages in design, engineering and manufacturing processes and optimising supply chains. Even entry into previously untapped industrial markets is now possible through large-scale production based on Exentis technology.

As a technology leader in Industrialized Additive Manufacturing, we more than doubled our number of patent claims to over 1,800 in the 2019 financial year. This is part of a comprehensive strategy to protect our proprietary technology.

Our new Exentis 3D Innovation Centre was ceremoniously opened at a customer event at our headquarters in Stetten in the autumn. Fifty Swiss entrepreneurs were invited to what is normally our high-security area as our exclusive guests.

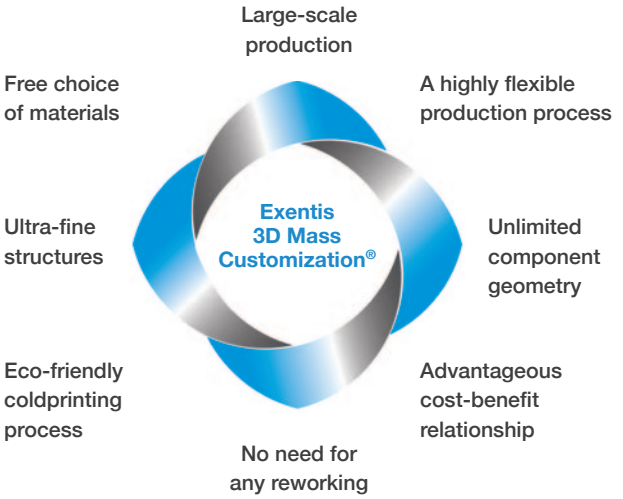
During the opening ceremony, we presented to the public world first: an Exentis 3D large-scale production unit capable of manufacturing up to 5 million components per year. The applications range from industrial parts to components for electromobility and even the industrial printing of living cells.

We have set up production capacity in southern Germany, which from now on will enable our custo-

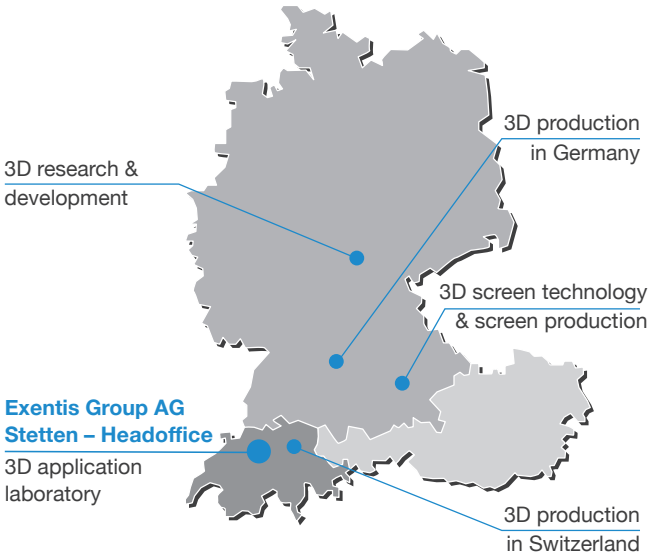
mers to produce more than ten million additional parts per year.

There are many advantages of using our technology. Almost every 3D process prevents any excess materials or waste. However, in contrast to most production processes in the young 3D industry, which create energy and environmental problems or often employ lasers, Exentis 3D Mass Customization® uses a cold printing process and has little or no negative effects on the environment or the operator. The environment and sustainability are serious issues for us. We have therefore dedicated a complete chapter to this important topic in this annual report.

## OUR PATENTED 3D SCREEN PRINTING TECHNOLOGY




## EXENTIS 3D DEVELOPMENT AND PRODUCTION LOCATIONS




Despite our operational progress, the economic side of our business remained below our expectations. The costs associated with the expansion were on target but there were unexpected supply bottlenecks at our production units. Unavailable units can neither manufacture goods, nor can they be sold, so the development of turnover and earnings was therefore unsatisfactory. Appropriate measures have now been initiated, so that this has only affected the past financial year.

Overall, 2020 has got off to a good start. We are working at full speed on the further implementation of our strategy: focusing on the three strategic business areas of e-mobility, fuel cells and medical engineering.

# Letter to the shareholders

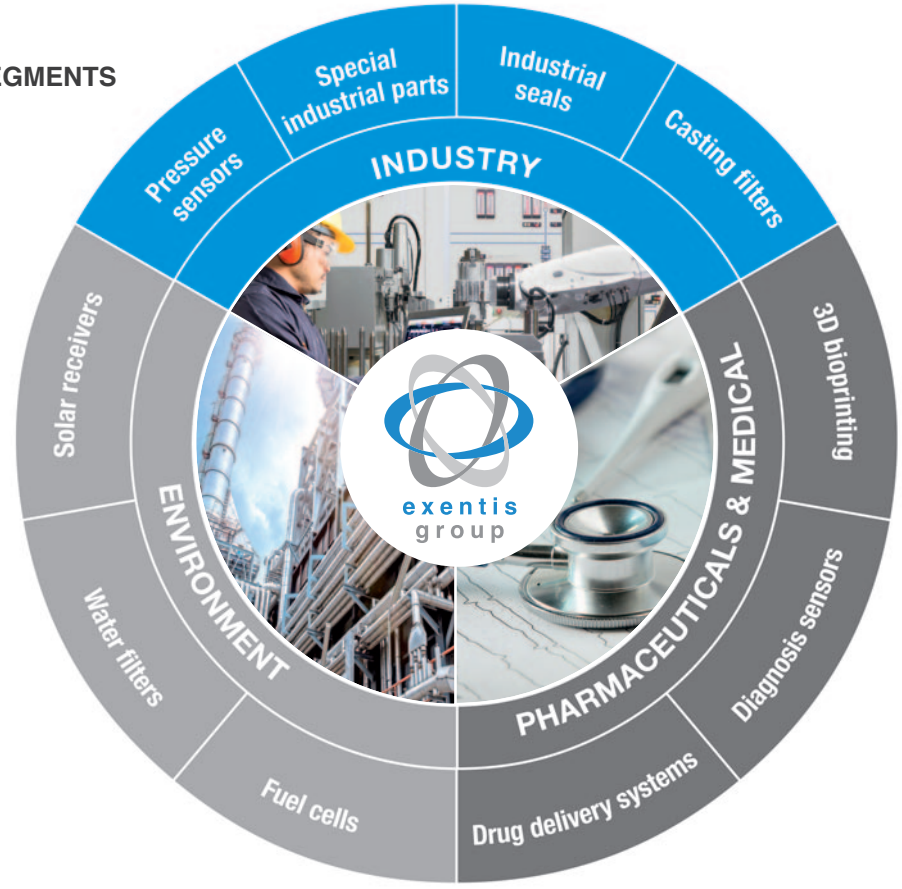
We are optimising and individualising our customer approach and working on increasing the effectiveness of each area of our business model.

We are also investing in the further recruitment and training of highly qualified employees. Since the beginning of June, Uwe Bögershausen has strengthened our management team as our new Chief Executive Officer. With his many years of experience in the successful development of 3D business models, among others, he represents a significant asset to our company.

On behalf of the Board of Directors, I would like to thank the entire team for their extraordinary commitment and their determination to establish Exentis 3D technology as an industrial standard. We also thank our customers, partners and shareholders for their support and trust.

Especially in the current Covid 19 pandemic, it has become clear that Exentis can rely on a strong corporate culture, a high level of employee commitment and established operational processes. Exentis is now benefiting from the industrialised technology that it has developed over the past few years.

**EXENTIS MARKET AND TECHNOLOGY SEGMENTS**



# Market environment

The year 2020 is barely six months old and it is becoming apparent that the outbreak of the Covid 19 pandemic will have consequences for many industries, both positive and negative. In the field of additive manufacturing, the opportunities outweigh the risks. The virus has mobilised companies throughout the industry to help overcome challenges such as medical supply shortages that have arisen as a result of the crisis. In a time of global demand, local additive manufacturing in the respective countries has played a crucial role in meeting on-demand-production needs and helped to reduce the disruption of supply chains, e.g. caused by China.

A mental leap back into 2019 shows that the additive manufacturing process has developed considerably. The global market for additive manufacturing exceeded CHF 10 billion in 2019. Over the last few years, the additive manufacturing market has displayed impressive growth and is following the predicted trend of development. However, the major part of this market volume is, as before, achieved through prototypes and pilot series, not through the mass production that Exentis 3D technology makes possible.

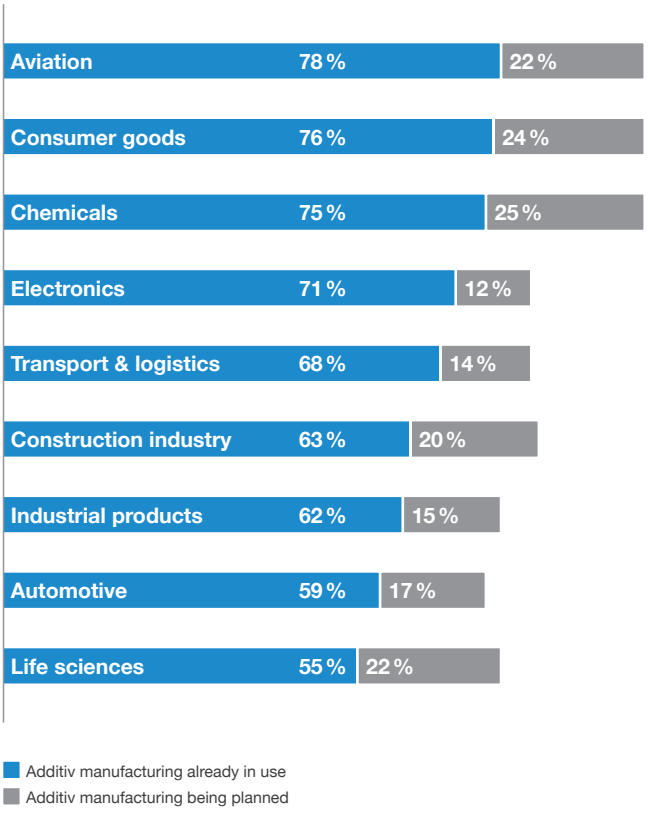
A key factor in this positive growth is the development of new 3D printing applications as companies continue to discover areas where 3D technologies can supplement traditional manufacturing processes to create added value.

In addition to these external factors, new players are constantly entering the Additive Manufacturing (AM) market, while takeovers and partnerships are still on the rise throughout the industry.

Major corporations and international groups are also entering the market and initiating further investment projects and research activities.

Other industries where the acceptance of 3D printing continues to increase significantly are constantly following suit. Almost all industries have discovered additive manufacturing for themselves (see graphic below).

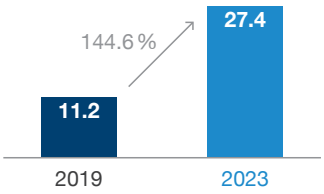
**INDUSTRIAL APPLICATIONS FOR ADDITIVE MANUFACTURING**



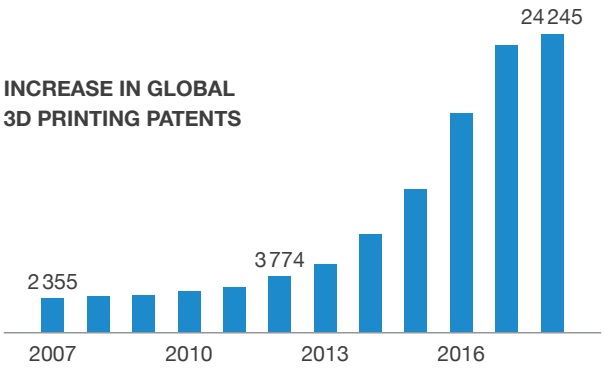

**The majority of aviation, consumer goods and chemical companies are planning for the future with additive manufacturing**

Source: EY's Global 3D Printing Report 2019

**MARKET GROWTH** [ in CHF bn ]




**INCREASE IN GLOBAL 3D PRINTING PATENTS**




Source: IPlytics

These trends are a welcome confirmation of their efforts for companies in the additives manufacturing environment and offer further opportunities to bring new technologies, applications and innovations to market.

A market study by SmartTech Publishing forecasts that global market for additive manufacturing will grow to more than CHF 53 billion in 2029. Renowned industry experts from international consultancies believe that the turnaround in additive manufacturing has now been achieved and predict a similarly strong market growth (EY's Global 3D Printing Report 2019) as more and more companies from different sectors come to view additive manufacturing as more than just a rapid prototyping production process.

The current stages of technology expansion, in particular Exentis Industrialized Additive Manufacturing technology, make it possible to print an almost unlimited number of materials even faster and without the need of any post-processing. The constant growth of new market players will also increase the level of demand in the market.

Based on the findings of the leading sector experts at Ernst & Young, 3D printing is an "essential element" in Industry 4.0, providing the link between advanced production or operating techniques and intelligent digital technologies; this is being described as the fourth industrial revolution. 3D printing is a forward-looking technology with significant growth and development potential.

Governments in the world's leading industrial nations have also recognised this development potential. Investment programmes running into billions have been launched for additive manufacturing during the last few years.

However, industrial companies themselves account for the far more significant share of this growth. General Electric, for example, has already invested USD 750 million in its subsidiary Concept Laser, a machine manufacturer using the selective single-laser melting technology in additive manufacturing. General Electric expects that half of its products will be directly or indirectly influenced by additive manufacturing in the future. The pipeline and potential of possible 3D printed components at General Electric could generate billion-dollar sums.

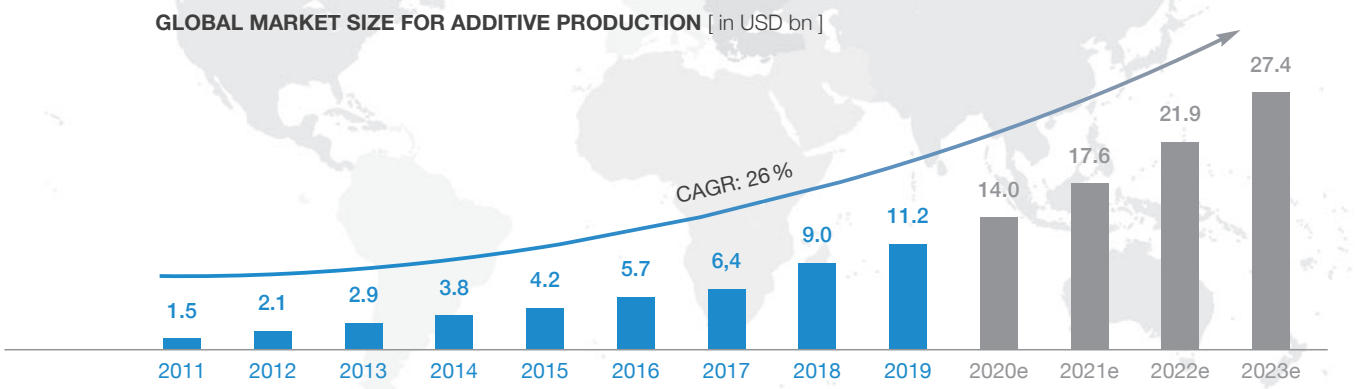
**The global market for additive manufacture is expected to reach CHF 53 bn by 2029.**

Developments in 3D technology also set an impressive pace in the past financial year. Analyses by AMFG's industry experts have identified some key developments and trends in the 3D market in 2019. These key developments are explained in more detail below.

3D metal printing continued its growth in 2019 through the creation of new processes and the development of existing technologies. The growing number of companies active within this segment reflects growing number of innovations in this area. Studies indicate that 3D-printed metal parts will overtake the printing of polymer parts in the coming next few years (EY).

The 3D printing of polymers is also continuing to gain ground. While metal printing has received a lot of attention in the press in recent months, the steady

## Market environment




Source: EY's Global 3D Printing Report 2019

growth of the polymer market has hardly made the headlines at all. However, the increasing number of industrial applications has had a positive influence on the demand for polymer components. Another important factor was the development of high-performance polymers that retain their mechanical properties even in very challenging industrial environments.

Software applications have also played an increasingly important role in all areas of the workflow as the industrialisation of additive manufacturing continues. While software has always been a decisive factor in component design and simulation, the production of industrial components requires control software that matches the specific requirements of the additive manufacturing process. As a result, software solutions for design and product development became more sophisticated in 2019, adopting technologies such as generative design and topology optimisation.

However, design and simulation solutions were not the only key factors in software. As production departments want to control and scale their 3D production, workflow software that can map and manage the production process has also become a key component in the production process.

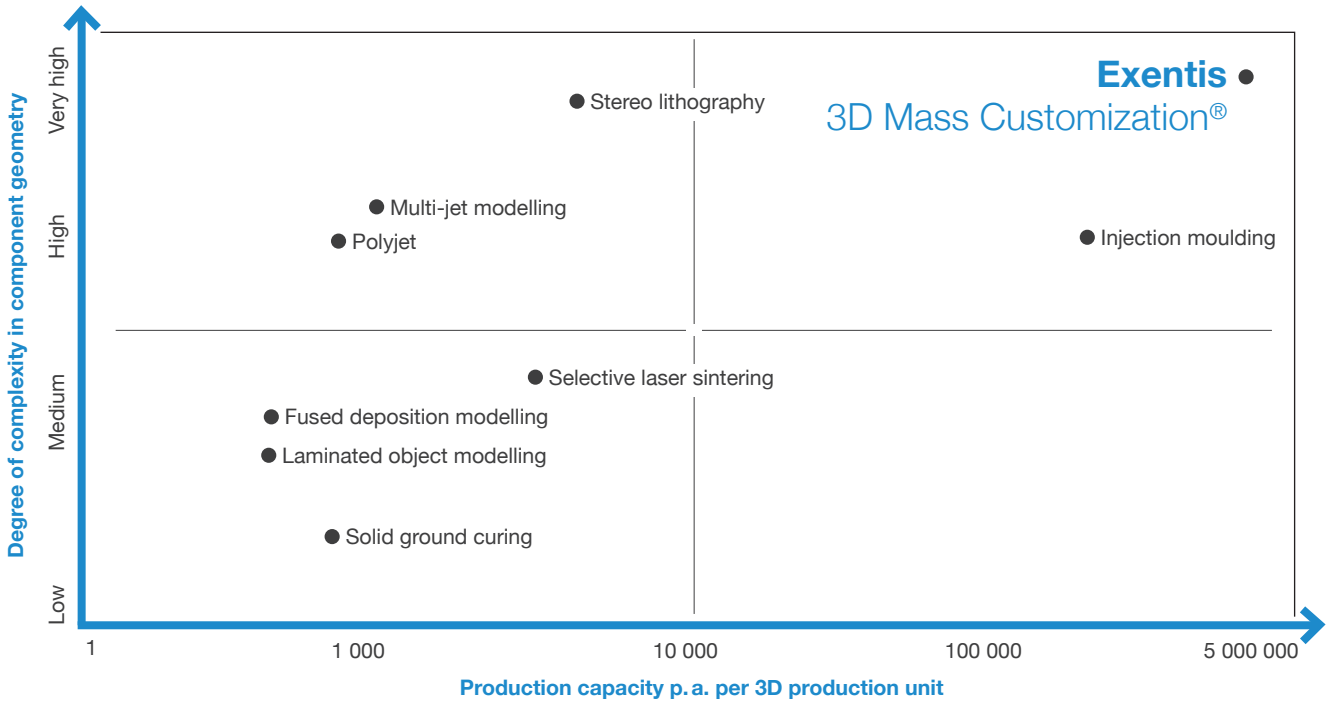
Additive manufacturing has become part of the general trend towards digitalisation within manufacturing industry. The widespread adoption of additive manufacturing will continue to grow and accelerate as manufacturers increasingly adopt digital strategies.

**Partnerships can help accelerate the market penetration of 3D technologies.**

Another key development in 2019 involved cross-segment automation. While additive manufacturing offers ground-breaking advantages for production, some isolated areas of the production process remain manual. As a result, automation solutions have been developed to shorten process times.

Partnerships and acquisitions can help accelerate the market penetration of 3D technologies. These developments could be seen throughout the industry. Examples include the takeovers of Concept Laser and Arcam by General Electric (2017); the acquisition of 3DSIM by ANSYS (2017); the takeover of LPW by Carpenter Technology Corporation (2018); the investment of USD 260 million in Carbon (2019); and the acquisition of Relativity Space (2019).

Two factors are driving the brisk M&A activities in the additive manufacturing market. Firstly, companies from outside the industry are acquiring technology companies in order to gain access to new techno-




logies and know-how. Secondly, the buyers are improving their positions along the value chain by expanding their range of products and services through takeovers and joint ventures. These drivers are underpinned by the desire of both established players and aspiring newcomers to the industry to increase their market share.

## Exentis 3D Mass Customization® technology in the current market environment

The chart above illustrates the comparison between Exentis 3D Mass Customization® technology and other 3D printing technologies. This assessment is based on the degree of complexity of the printed components and the output capacity per 3D production unit. Injection moulding has been included in the list as a benchmark and to generally locate the Exentis 3D Mass Customization® technology in comparison with traditional production methods.

The results of the technology comparison show that large-scale or mass production with a free selection of materials is not available in any of the other 3D printing technologies. The benefits of the Exentis 3D screen printing technology also go further than traditional production processes (e.g. injection moulding), as highly complex component geometries can be handled.

This continues to provide the Exentis Group with an outstanding unique selling point in the market and in the development of Exentis 3D Mass Customization®, Industrialized Additive Manufacturing, the unique and fully patented 3D screen printing technology.

## Future trends in additive manufacturing

It is already clear that 3D technologies will challenge and change global production, logistics and business models. An article in the Global Trade Review specialist journal even goes one step further; it suggests that 3D printing could replace as much as 40 % of global trade by 2040 due to disruptive changes to logistics and supply chains. Additive manufacturing is already changing global trade and production processes: production is moving closer to customers, transport times are being cut, customized production is being facilitated and warehousing is being reduced.

The current additive manufacturing market environment reflects the increasing maturity of additive manufacturing processes and offers a positive outlook for the future. Ernst & Young (EY) predicts growth rates will continue to exceed 15 %.

The further technological developments described below support the prognosis of continued above-average growth in the 3D market in the future. Further 3D-printable materials are being continually developed. In the past, the list of materials that could be

# Market environment

used for 3D printing has been limited and far away from the wide variety of materials that are often used in parts manufacturing.

The biggest shift within the industry is in the transition from plastic to metal printing. The processing of plastics will continue to be useful for prototypes and special components in future. The production of metal components, on the other hand, is a trillion-dollar market and therefore by far the most important.

The continuous increase in printing speed will remain a decisive factor in future too. While the printing times can vary depending on the complexity of the geometry, the quality of the final components and the materials used, the 3D printers now available on the market are already twice as fast as they were a few years ago.

Other large corporations will enter the 3D printing market in future. This will attract even greater media attention and create a situation where existing players will press ahead with innovations at an even faster pace. Big corporations however will also trigger their own research investments, a large number of customers and selling power – and expand the overall existing market, rather than challenging the turnover of companies already present in the market. 3D printing will be used more frequently in all production areas during the next few years. Most parts will still be manufactured using casting, forging, stamping, pressing or similar procedures. However, even 1 % of this global industry, which accounts for several trillion Swiss francs – the volume of metal parts produced every year alone accounts for one trillion Swiss francs – is a very large market for this “young” sector.

**In order for this to mature further, Exentis sees three central factors as paramount during the current year:**

- A renewed focus on enabling industrial-scale production with additive manufacturing through industrial solutions (several million components per year from a single 3D production system)
- A quest for more workflow and process connectivity
- Industrial cooperation through joint ventures driving the acceptance of 3D manufacturing processes in the industrial sector.

# Business model and strategy

### Exentis business model

Exentis Group AG basically offers its customers two possibilities for manufacturing their product idea on a large 3D scale using the Exentis 3D screen printing technology, the patented Exentis 3D Mass Customization®.

Exentis can manufacture the components or the customer completes the industrial production directly at its premises. A development project always precedes this process to guarantee the best possible success for the customer.

The following text describes the development project and the customer's decision to "make or buy" in greater detail.

### Development project

The development project is the central process stage between the customer's product idea or customised assignment and subsequent large-scale 3D production. The findings generated by the development project are of crucial importance to the subsequent industrialised additive manufacturing process.

A number of Exentis specialists work together during the development project. They first develop complex 3D models of the later component. The goal is initially to clarify whether a new component can be produced by combining various individual components, shapes or functions in the 3D printing process, so that the new product is much more efficient and functional than one or several of the previous components. Traditional manufacturing processes are normally not able to handle these kinds of degrees of complexity or geometries – for example, hollow structures to reduce weight or component web thicknesses that are not wider than a twentieth of a millimetre.

Once the object design has been finalised, extensive simulations and statistical process and quality checks take place to assess stability, critical geometry areas and the feasibility of later large-scale production.

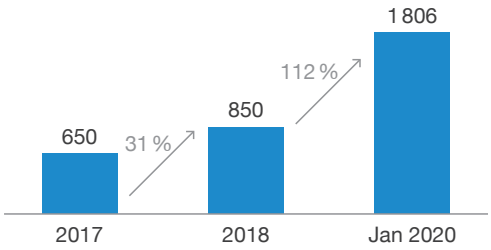
Our own Exentis subsidiary then develops and produces the 3D printing screens. They are optimised in terms of application technology, coating thickness, resolution capacity, mesh geometry and material.

**Exentis offers internal second source concepts through production in two countries.**

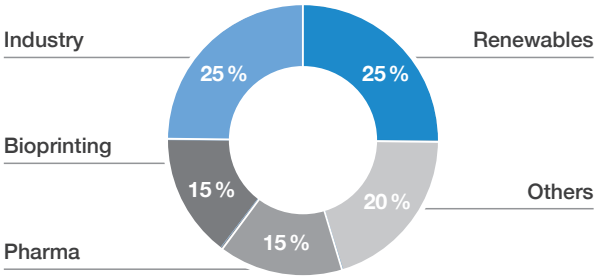
Exentis has the special metal or plastic screen meshes manufactured in Japan and therefore not only has a strategic source, but also the technical ability to optimise the printable structure with a limiting resolution of less than 25 micrometres. The mesh material and screen coating are tailored to the substance needing to be printed within the project-related screen development work. As a result, Exentis achieves component surfaces that require almost no reworking and therefore a very long serviceable life for the screens.

The material or paste is developed during the next stage. Material scientists, chemists and engineers work together to create the specifications set by the

**PATENT CLAIMS**




**PATENT PORTFOLIO**




customer as regards hardness, robustness, degree of porosity and the surface features that are required.

This can take place very quickly if the customer uses the varied printable materials at Exentis. The material development work takes more time, but is more individual if special requirements like electrically conducting ceramics or multi-material components are required.

Once the paste systems have been produced, the suitable printing parameters and the multi-dimensional sintering curves are developed for the component, if metal or ceramic pastes are used. The customer then receives sample parts that are subjected to extensive quality assurance procedures.

Once approved, the process parameters and the technologies to be used are documented. The customer receives cost/benefit analyses for purchasing the parts from Exentis or manufacturing them at its own premises. Most customers opt for a dual source strategy. That is to say, the customer commissions Exentis to start the production work until a specified number has been reached and establishes its own Exentis 3D screen printing production at its premises alongside this. Exentis is also able to offer the customer second source concepts internally to guarantee maximum reliability for deliveries.

### Industrial 3D production of customer components at Exentis

Exentis has had various production sites in Germany to serve the main market there and in Switzerland from the middle of 2019 onwards. These production sites are guided by the production parameters developed for Industrialized Additive Manufacturing at the central 3D Innovation Centre at Exentis' head office in Stetten, near Zurich. Exentis provides its customers with a set price for producing each individual component. Variations or material changes to the final component are possible using the "rapid tooling" facility – i.e. adapting the geometric of printing screens, within 1-3 days. As a result, Exentis customers can have smaller numbers of parts produced in a flexible and prompt manner; this would not be possible with conventional production methods like injection moulding and the associated lengthy and costly toolmaking procedures.

### Industrial 3D production at the customer's premises in the form of a one-stop shop

Once customers have decided whether to manufacture the parts at their premises themselves or ask Exentis to produce their components too, Exentis serves them from a single source.

**Exentis supports customers from their product idea to 3D printed products manufactured a million times over.**

The component geometries, the paste systems and the screens as well as the process parameters have already been defined and tested by now. Exentis then offers its services as a one-stop shop. That is to say, Exentis supplies everything that is required for customers to manufacture the components at their premi-

# Business model and strategy

ses alone. The first step is to issue a production licence for the specific component so that the customer can use the extensively patented Exentis 3D screen printing technology to manufacture its own items.

Despite all the flexibility of the Exentis 3D screen printing systems, it is necessary to specially tailor the 3D screen printing units to the components. This depends on the output quantity that is required or on special production environments such as clean rooms for bio-tissue production or highly efficient production lines for industrial parts. Exentis supplies the necessary paste systems, screens, process technology and training courses for the specific application and, if necessary, the operating personnel to start production. The sophisticated configuration of the sintering furnaces completes the range of services provided by Exentis for industrial parts.

## The Exentis strategy

The benefits of the Exentis 3D screen printing technology create considerable added value for customers. The overriding goal is therefore to anchor the patented Exentis 3D Mass Customization® process as the new industrial standard for Industrialized Additive Manufacturing.

## Additional focus on three strategic business areas

Exentis currently serves 12 growing market segments with 29 projects. An additional focus on the three strategic business segments is currently under development:

1. e-mobility
2. fuel cells and
3. medical engineering

In all three strategic business areas, Exentis is working with a go-to-market strategy with two strong partners in each case: One industrial partner which offers market access and demand from existing customers and usually combines several projects; and a scientific partner who can give Exentis access to the latest research results and innovations. These partnerships clearly demonstrate Exentis' strategic role as an integrated solution provider for large-scale production and 3D implementation of customer applications.

## Repatriation due to the corona virus as an opportunity

The Covid 19 pandemic has caused many governments to view with concern their dependence on China to produce and make available important raw materials and active pharmaceutical ingredients posing a threat to supplies for their citizens. In Europe, the USA, Australia, and Japan, Exentis is observing determined efforts to bring important parts of the industry and of pill production back into their own territory. This trend is usually referred to as "repatriation".

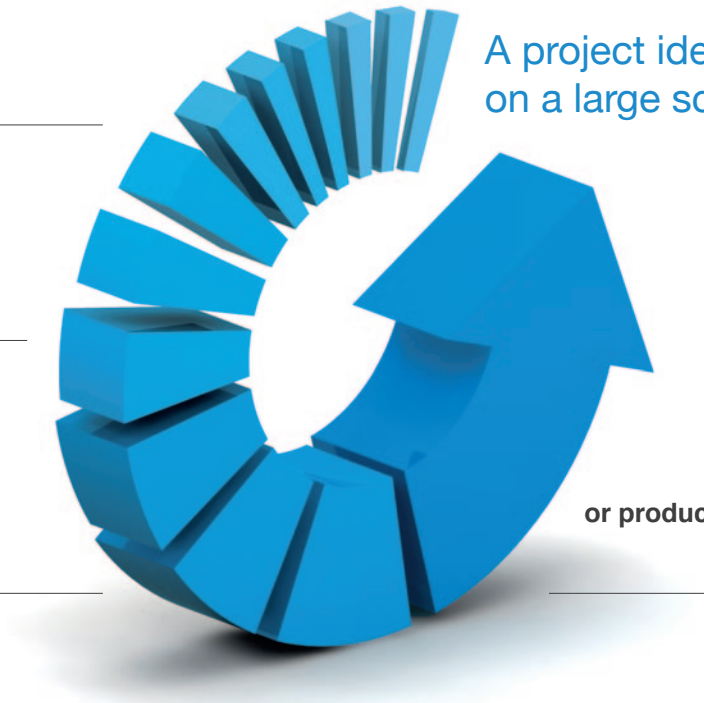
Exentis will examine each individual project and, where innovative 3D manufacturing technology appears to be particularly viable, draw up quotations. Therefore, Exentis will follow its customers and create 3D production systems, licenses or corresponding long-term, fully utilized production capacity.

## FROM THE PRODUCT IDEA TO LARGE-SCALE PRODUCTION

**Discussing the product idea or the challenge**

**Presenting 3D solution options**

**Agreeing a development project**




**Exentis supplies parts or production takes place at the customer's premises**

**Submitting the process technology, sample parts and a cost/benefit analysis**

## As market trends show, more and more major companies are expanding their conventional production with additive solutions.

Exentis has successfully issued licences for fully developed technology fields, for example, for renewable energy sources, pharmaceuticals or 3D bioprinting. Exentis believes that third-party companies, which handle their specific markets independently, are able to more quickly and extensively establish the Exentis 3D screen printing technology in the market. This is the reason why Exentis will not only act as an all-round provider of solutions, but also develop variations of the Exentis 3D screen printing technology and provide licences at a market or application level.

Exentis places great importance on its independence as a company. As market trends show, more and more major companies are partly replacing their conventional production by additive solutions. As Exentis has the most promising technology for Industrialized Additive Manufacturing at the moment, Exentis believes that it can develop this on its own and tap into the existing potential.

# Exentis 3D Mass Customization®

The Exentis DNA, i.e. the complex interplay of fields of expertise, ranging from the initial material composition to industrial production and delivery of the 3D-printed components, essentially contains six cornerstones, which are used at Exentis in a constantly developing and extensively patented process: Exentis 3D Mass Customization®.

## The Exentis DNA involves the complex interplay of fields of expertise.

The consistent objective is to solve customer tasks and provide innovative product solutions with functional value-added using mass production and Exentis 3D screen printing technology.

### Technological cornerstone 1: Material selection

The specific material requirements for the component are defined by the customer during the first stage. Selecting the right material from Exentis' range of material is extremely important. In addition to pure metals like iron, copper or refractory metals or alloys like steel (e.g. 1.4404/316 L), the 3D screen printing process can be used for ceramics (e.g. $Al_2O_3$, $ZrO_2$, SiC), glass, polymers, and even organic materials and biomaterials.

At the same time, the layered structure makes it possible to combine different materials in both palisade and lamellar-like layers, i.e. different materials can be combined next to each other as well as in layers. Composite materials, which also work very well with 3D screen printing, complete the range.

To ensure that the components have the properties specified by the customer after passing through the entire process chain, particular attention must be paid to the choice of the powdered starting material for ceramic and metallic materials.

The properties of the powder have a direct effect on its processability into screen printing paste, on its printing behaviour and also on the specification of suitable screen meshes. The powder decisively defines the achievable printing resolution. The exact understanding and control of the powder's properties is therefore crucial to the feasibility of extremely fine structures with wall thicknesses down to 50 micrometres, which corresponds to the diameter of a human hair.

The choice of powder influences the print resolution and is decisive for the resulting material properties. By carefully selecting the particle shape and particle size distribution of the powder, Exentis can determine important component characteristics such as porosity, electrical and thermal conductivity or mechanical properties.

### Technological cornerstone 2: Paste system development

The development of formulas for 3D paste systems, i.e. making powders suitable for printing, is the crucial technological element in the 3D printing process known as Exentis 3D Mass Customization®. This might be called the "Coca-Cola formula" for the Exentis 3D screen printing technology. It is possible

to produce components made of ceramics, metal and polymer systems or biomaterials using the 3D screen printing process.

In most cases, the starting material is a powder and paste systems are made from this by inserting a series of additives and using specially formulated paste preparation processes. The choice of material and expertise in the field of paste production go hand in hand.

While the issue of the highest possible degree of separation of the solid particles, their so-called dispersion, is of great importance in paste production for metals and ceramics, the focus is on the precise setting of the processing window with regard to temperature, moisture, oxygen content and light sensitivity for polymers and biomaterials.

These parameters must be defined individually for each material system and reflected in the formulation and production of the paste. In this respect Exentis is synonymous with precision, which is necessary to ensure that the desired properties can be reproduced, i.e. manufactured on an industrial scale. The precise configuration of the 3D screen printing paste's so-called rheological behaviour is also of very important in paste production. Rheology deals with the deformation and flow behaviour of matter and is crucial to the success of printing. The flow behaviour of screen-printing paste can be steered in the desired direction through the selection of suitable powders and the use of associated binders, plasticisers and other additives. The necessary viscosity profile of a paste is defined by a component's required geometry.

**It is essential to know all about how materials combine in order to guarantee the defined material properties in the component.**

The option of not only processing pastes with screens, but also so-called templates plays a major role in determining the pastes' rheological behaviour. Templates make it possible to maximise the printing hight of each layer of special components.

It is not only necessary to consider the printing aspects when making the pastes, but also what is required in the component after sintering. The chemical composition, porosity, mechanical and physical properties can be markedly affected by supplying additives to modify the pastes in the direction required.

### Technological cornerstone 3: Component-specific screen production

The production of highly accurate screens for 3D screen printing on a large scale involves complex requirements as regards the resolution capacity, perfect flow of the paste, sharpness of edges, the serviceable life of the screen accuracy and precision in the vertical structure.

Thanks to a strategic cooperation arrangement with the global technological market leader for polymer

# Exentis 3D Mass Customization®

screen meshes in Japan, Exentis has unrivalled access to high-quality meshes as the basis for manufacturing each individual Exentis production screen.

The combination of a statically optimised screen frame, high-performance meshes from Japan and a high-precision clamping technology creates a lining quality that allows for a long serviceable life for the screens with high-resolution accuracy and reproducibility in the production process.

The ongoing screen production process involves a photo-polymer coating in clean room conditions with the narrowest of tolerances for the thickness of the application and surface roughness. The specific final printing layout is then completed with high-resolution plots, creating detailed structures incorporating even the finest element structures.

Completed by tactile and visual checks in the quality control department, the Exentis screen leaves the in-house, industrial screen production department and becomes a value-adding tool for each Exentis 3D production system.

### Technological cornerstone 4: The 3D screen printing process

By integrating the z-axis into the industrial manufacturing process using the Exentis 3D Mass Customization® method and specially developed production systems, Exentis makes high resolution and highly productive screen printing accessible for 3D compo-

**THE EXENTIS 3D SCREEN PRINTING TECHNOLOGY**

| Selecting the certification regime | Material development | Paste system production | Screen development and production |
|---|---|---|---|
| • Industrial parts<br>• Aerospace industry<br>• Automotive<br>• Pharmaceutical product requirements<br>• Bioprinting<br>• Medical engineering products | • Metal, ceramics, polymers, biomaterials<br>• Morphology<br>• Grain size/distribution<br>• Particle form<br>• Granulates<br>• Purity<br>• Pre-treatment<br>• Quality assurance | • Viscosity<br>• Binding agents<br>• Plasticisers<br>• Additives<br>• Liquefiers<br>• Solvents<br>• Storage<br>• Pre-treatment<br>• Quality assurance | • Wire mesh material<br>• Wire angles<br>• Mesh diameter<br>• Mesh size<br>• Screen tension<br>• Frame<br>• Pre-treatment<br>• Templates<br>• Screen resolution of up to 30,000 dpi<br>• Quality assurance |

nent manufacture. Exentis is able to draw on its extensive experience in conventional 2D screen printing technology, a process that has been established and accepted for decades in manufacturing industry, e.g. in the large-scale production of solar cells, printed circuit boards and vehicle glass.

However, mastering 3D screen printing technology places its own special demands on understanding and controlling the crucial printing parameters. Essential parameters here are the precise adjustment of the lift-off, squeegee speed, squeegee pressure, squeegee inclination, squeegee material, shore hardness or amount of paste on the screen. In addition, there are parameters which are of particular importance in 3D screen printing technology, such as exact, micrometre-precise alignment of the printing screen to the already printed component for each individual print layer and the exact determination of the application thickness for each print layer.

The challenge for ensuring the highest quality standards in the industrial 3D screen printing production process lies in mastering the interaction of the above-mentioned parameters with each other and is based on the models of dynamics and boundary surface physics.

Exentis 3D screen printing technology is predestined as the silk screen printing process for high z-axis values with ultra-high resolution in the range below 20 micrometres. This is the equivalent of two hun-

**COMBINES A LARGE NUMBER OF FIELDS OF EXPERTISE**

**3D screen printing parameters**

- Printing parameters
- Squeegee material/angle
- Printing speed
- Paste consistency
- Drying technologies
- Quality assurance

**3D screen production unit**

- Full automation in multi-layer operations
- Multi-table or inline layout
- Suitable for large-scale industrial production
- Printing cycle time of 2 - 3 seconds
- Integrated material drying
- Quality assurance

**Sintering for industrial parts**

- Dwell time
- Temperature profile
- Cooling cycles
- Air, inert gas
- Shrinkage parameters
- Geometry
- Tray material
- Documentation
- Traceability
- Quality assurance

# Exentis 3D Mass Customization®

dredths of a millimetre or one third of the thickness of newsprint, making it a process that enables super fine and extremely precise component dimensions and geometries.

### Technological cornerstone 5: Sintering

In addition to selecting materials, making the paste systems and screens and the 3D screen printing process for 3D production systems for specific components, sintering is another important area of expertise to achieve the desired component properties.

The materials only develop their relevant properties through the sintering of the individual imprinted solid particles of the so-called green body present immediately after printing through heat treatment just below the melting temperature of the respective material, thus creating a pore-free, dense and solid material and giving the component its final shape and final material properties.

The sintering of 3D screen-printed components is a two-stage process. The first stage involves debinding, where the organic additives dissipate completely from the so-called green bodies. The second phase, actual sintering, takes place at considerably higher temperatures and leads to the densification and solidification of the green bodies through complex material transfer processes.

The structure of the green body, its porosity, its additive content, the particle size distribution of the solid particles, the heating and holding times during debinding and sintering and even the cooling rate of the finished components all allow the precise tuning of the desired material and component parameters. This involves a solid understanding of each material system to guarantee customer success and achieve perfect results.

Some materials undergo phase transformation during sintering or require special furnace atmospheres and technology. To investigate thermal reactions during sintering, Exentis collaborates with leading research institutions in order to design the sintering programs and component-specific sintering curves economically using the most modern methods and analytical technology and to give the components the specified properties. Exentis has experienced experts who can transform this fundamental data into optimised sintering curves.

The perfect interplay of material understanding, in-depth analysis of the sintering processes and its adaptation to industrial furnace units is the basis for the success of 3D screen-printed components. Exentis can thus guarantee the reproducibility and high quality of the desired component, material and surface properties in the industrial manufacturing process.

### Technological cornerstone 6: Specific 3D production systems for components

Thanks to Exentis 3D Mass Customization®, new production concepts are being developed at Exentis based on the 3D screen printing technology; they are greatly increasing productivity and now enable annual production of more than 5 million components per individual production system for selected products.

Exentis designs, develops and documents the production systems, which are then individually and exclusively set up by special machine manufacturers. The 3D production units are constructed according to

a modular system, allowing flexibility in meeting customer wishes. Production units are perfectly adapted to customer requirements. Printing heights, process speeds, quality assurance systems, drying lines, the paste feed and output quantities can be optimally adapted for each component by the customer in cooperation with Exentis.

## New Exentis manufacturing concepts allow 3D production systems with millions of components per year.

Permanent monitoring of the workpiece properties using electronically controlled optical systems with high-resolution cameras is used for quality control on the line. This direct control of the component quality during the printing process is a decisive success factor of the Exentis production units.

Of particular importance in Exentis' production systems are the assurance of the highest precision and accuracy in the machine technology, so that the printing screen can be exactly positioned layer by layer and each printing cycle follows on perfectly from the previous one. If required, climate-controlled and conditioned enclosures enable the precise control of the pressroom climate to ensure that tight printing tolerances are met.

The 3D screen printing technology is a manufacturing process in which each layer applied is dried individually in a well-defined manner to enable the adhesive application of the next layer.

In addition to IR radiation to dry the layers, UV curing process systems are also used.

UV curing pastes are fundamentally different from IR hardening systems and particularly allow crucial advantages when structuring plastic components. Hardening something to form a finished component takes place using UV induced polymerisation and achieve its effects without any subsequent heat treatment (debinding, sintering); this is particularly beneficial for plastics – because of the low-temperature stability compared to metals and ceramics. As a result, it is possible to turn plastics or even conducting pastes into 3D structures.

Biomaterials require different production conditions to ceramics, metals or plastics. Clean rooms with appropriately certified production systems are necessary for large-scale production. Exentis has appropriately authorised management, documentation and production systems, which satisfy all the common requirements for manufacturing medical and pharmaceutical products.

Automated screen changes handle layout changes within the component geometry and even optional changes of pastes to vary the functions of components. Exentis has screen change systems, which can be timed in the production process using management software without any operator.

These six cornerstones are the foundation and essential unique selling proposition for the Exentis 3D screen printing technology. They guarantee technological and economic success in industrial production technology with the comprehensively patented Exentis 3D Mass Customization®.

# Sustainability

## Exentis 3D Mass Customization®

In addition to good compliance and a sophisticated risk management system, sustainability management has become standard for many companies. This system actively shapes the way we deal with our environment and resources and evaluates the impact of our own business model and technology on the environment. The aim is to align all company processes in a responsible manner that will also protect the world for our grandchildren.

The generic term sustainability embraces issues that preserve our environment and future and make it more worth living. The Corona pandemic also shows that sustainability is about more than just environmental management. It also includes social and health aspects. In order to protect the health of employees, Exentis supports the hygiene measures enacted by the Swiss authorities and actively implements them within the company. Travel activities have been limited to the bare essentials and far-reaching measures to prevent infection have been introduced on the premises in both Switzerland and Germany. Exentis is thereby also contributing to the containment of the pandemic. At Exentis, responsible action is a top priority, not only for customers, employees and shareholders but for our environment as well.

Additive manufacturing is viewed as a disruptive technology, particularly for large-scale industrial production. Because it will significantly change the way that products are made, it is necessary to draw up perspectives and principles, which do justice to the significance of market shares that will grow disproportionately at an early stage.

Exentis' technology, Industrialized Additive Manufacturing, offers four strong advantages that make industrial manufacturing processes more sustainable and future-proof:

### 1. Material efficiency

The Exentis technology is fundamentally different from traditional manufacturing technologies such as milling, grinding or punching, where up to 90 % of the initial material is removed to create the necessary geometry for the component. Material waste, which has to be disposed of, is a weak point in established manufacturing processes. But 3D screen printing processes enable components to be made through the efficient use of materials. Only the amount of material that the component requires is processed. While most 3D printing processes are limited to prototypes or small-scale series, Exentis 3D Mass Customization® already supports high-volume industrial series production.

### 2. Repatriating production to Europe

The Corona crisis has prompted a rethink among many decision-makers. The interruption of complex supply chains came as a surprise to many companies and has led to noticeable upheavals in the entire economy. Exentis 3D Mass Customization® fulfils all requirements to produce supply-critical components, medical consumables and drugs cost-effectively and flexibly in Europe again.

By producing screens in the shortest possible time, customers can tailor the volumes and geometries of components produced exactly to the needs of their end customers and stockpiling. Exentis 3D Mass Customization® offers for the first time the possibility

**SUSTAINABILITY**

**MATERIAL EFFICIENCY**
- Compared to conventional processes, only the required material is printed
- No scrap or excess material

**SAVING RESOURCES**
- Previous 3D printing processes consume considerable resources of energy and water
- Exentis has a gentle cold printing process

**OPTIMISING LOGISTICS CHAINS**
- Optimisation of just-in-time production through improved supply chains
- No time-consuming or costly tool or mould production required

**REDESIGNING INDUSTRIAL SYSTEMS**
- Optimisation through new decentralised production methods
- Outlook: hybrid process chains involving traditional and Industrialized Additive Manufacturing processes

of producing a range of product variations promptly, flexibly and cost-effectively. Set against injection moulding technology, which allows output volumes similar to those of Exentis 3D Mass Customization®, time-consuming and costly tool and mould construction is no longer necessary. This highly flexible production technology has many advantages for the customer. It minimises inventories and storage costs, and the fast and easily convertible screen printing technology can produce spare parts on demand.

The reduction of international transportation is another advantage for the responsible and rational use of resources.

### 3. Redefining industrial systems design

Industrialized Additive Manufacturing systems are not intended to completely replace traditional ones. In future, hybrid process chains will combine additive and conventional production processes. The opportunities inherent in Industrialized Additive Manufacturing will allow a redefinition of cost structures and thus a reformulation of industrial systems, which do not depend on making products from semi-finished materials. Flexible and easily installed technologies such as industrial 3D screen printing will play a major role in redesigning value creation systems, ecological assessments and associated production patterns.

### 4. Energy and water savings

Unlike most traditional manufacturing technologies, Exentis 3D screen printing technology is a cold printing process. This means that complex cooling processes, which are often based on water cooling, are no longer necessary. Instead of the sintering processes for individual components used in other 3D printing processes, Exentis combines thousands of industrial components and sinters them all in a separate final process stage. This saves both energy and water and relieves the environment.

Exentis is thus playing a leading role in establishing new and flexible product technologies for future generations. The more Exentis technology becomes established, the greater the effect will be for people and the environment.

# Business Development in 2019

After economically successful financial years in 2017 and 2018, a continuation of the positive business development based on Exentis' extensive customer project portfolio was both planned and expected for the 2019 financial year.

All the operational progress made in implementing the industrialization of the technology and the continued positive feedback from the markets notwithstanding, the 2019 financial year was characterised by supply bottlenecks in the availability of 3D production units and effected turnover. These supply bottlenecks and the consequent considerable delays in delivery led to declines in turnover and overall earnings in the 2019 financial year. Systems that are not available can neither produce parts nor can they be delivered to customers for in-house production.

Turnover from the sale of the 3D production units was thus largely postponed to the following year, which affected individual earnings items in the annual accounts and produced an overall negative result. The causes of these supply bottlenecks were investigated and analysed in detail. Relevant measures were initiated and are currently being implemented at the end of May 2020.

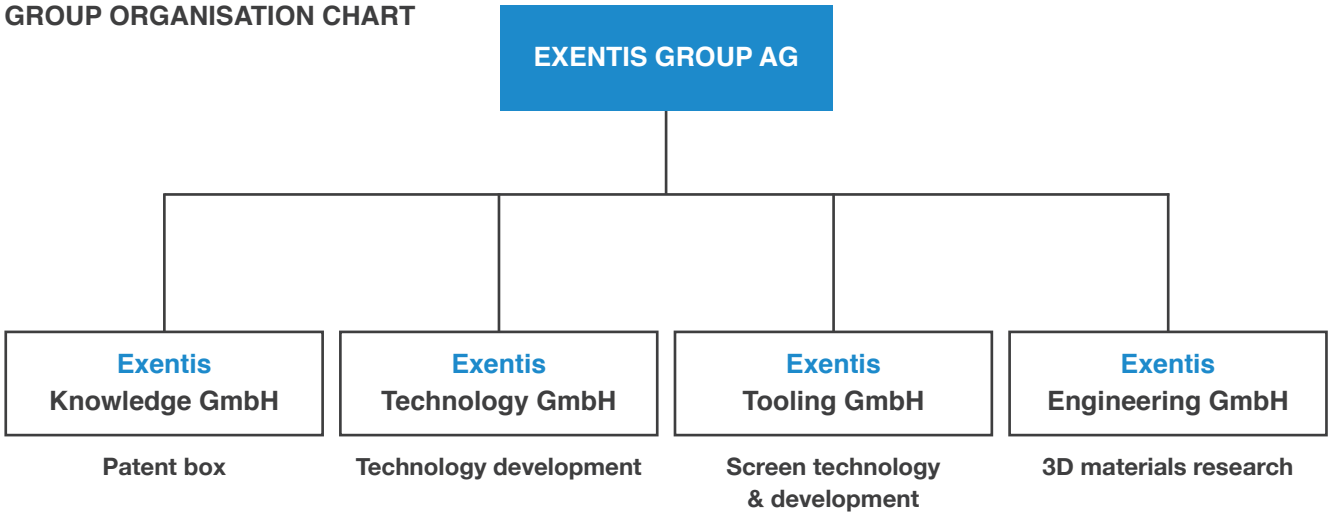
In addition to the 2019 financial year, the following presentations also reflect developments up to the end of May 2020 in order to provide a picture of business developments as complete as possible.

## Creating capacity for growth and scalability in the business model

### Exentis Group AG, Operating Holding, Stetten

Exentis Group AG, the Group's operating holding company, manages and coordinates the operating business of the entire Exentis Group. It is the central company at the headoffice in Stetten with full decision-making powers for the Group.

**GROUP ORGANISATION CHART**



Targeted investments were made in expanding production capacity at the Stetten site in the 2019 financial year. The ceremonial opening of the Exentis 3D Innovation Centre in November 2019 marked the realisation of this project. The recently completed Exentis 3D mass production unit was presented to more than 50 leading representatives from Swiss industry for the first time at this opening.

The significant enlargement of the original application centre will enable the development of new customer projects to be realised even faster. In addition to the investments in the Exentis 3D Innovation Centre in Stetten, manufacturing capacity was also expanded to handle large-scale production. Production facilities for 5 million or 10 million components per year are now available to complete customer projects at the business locations in Switzerland and Germany.

The existing management team was also expanded to take in the technological and entrepreneurial skills of Dr Martin Dressler and Uwe Bögershausen. As Deputy Chief Technology Officer, Dr Dressler will continue to push ahead with technological industrialization in the strategic business areas. Uwe Bögershausen will assume the role of Chief Executive Officer as from 1 June 2020. He brings with him extensive international management board experience for establishing and managing fast-growing companies. Through his activities in companies in the field of additive manufacturing, Uwe Bögershausen has accrued many years of market experience in establishing successful 3D business models.

The Exentis Group will continue to significantly increase the number of employees in the financial years 2020 and 2021 in order to acquire and process the numerous production orders from the most diverse market segments. This will occur primarily in the areas of business development, application management and technical screen printing. New positions will be gradually established in the administration department and support functions to ensure compliance with the Exentis Group's own administrative and organisational requirements. In principle, all positions and vacancies will be subject to continuous requirement planning and monitoring to ensure that the organisation and culture remain lean and efficient.

**The demand-driven expansion and enlargement of the Exentis 3D Innovation Centre enables the simultaneous on-site development and production of components in Stetten.**

The increase in the Exentis Group's personnel capacity through the recruitment of highly qualified employees is supported by various recruitment strategies and channels. The build-up of personnel development and production capacities is aimed at significantly reducing the average time required for development projects and offering customers large-scale production services even faster.

Individual services by designated specialists will initially be provided on the basis of project-related consultancy contracts. If the total cost of these services exceeds the normal annual salary for the sector, these specialists will then be offered a permanent

# Business Development in 2019

employment relationship. We have already been able to fill vacancies in the compliance, patents and quality management departments in this way.

### Exentis Technology GmbH, Operating Subsidiary, Jena

The Free State of Thuringia in Germany offers an outstanding environment for attracting innovative technologies. In addition to generous start-up and research funding, the state also boasts numerous universities and an unparalleled innovation climate.

Here you can find the universities of Jena, Erfurt and Ilmenau as well as the Fraunhofer Institute for Ceramic Technologies and Systems. This forms a unique, geographical innovation cluster for material development work. This innovative environment is designed to ensure that Exentis Technology can develop new issues within development projects to prepare them for series production.

This is why Exentis Technology has moved into extensive laboratory and production space at the Pharmapark in Jena. It will allow it to press ahead with many development projects in conjunction with local research institutes.

The development of the Jena site continued through the last financial year and was completed at the end of October 2019. Material engineers, application managers and screen printing experts work for Exentis Technology at the Jena location.

### Exentis Tooling GmbH, Operating Subsidiary, Velden

One of Exentis DNA's main areas of expertise is the development and production of high-quality and durable screens.

In order to be able to guarantee consistently high quality in screen and template production, the Exentis Group has set up its own screen development and production company in southern Germany: Exentis Tooling GmbH.

Customers are becoming increasingly aware that Exentis 3D screen printing technology does not require the use of time-consuming and costly tools. Instead, the company offers the production of screens within 24 hours – Rapid Tooling – in order to implement and carry out any geometric adjustments the customer wants to make on the component immediately.

In the Exentis 3D Mass Customization® screen printing technology, the screens are nothing more than the tools used in other manufacturing technologies. However, the Exentis screens can be made within a few hours and have their own integrated CAD computer technology and are far cheaper than traditional tools for conventional manufacturing processes. This ensures a high degree of flexibility for the Exentis Group and its customers with very fast response times to customer requests for changes.

### Exentis Engineering GmbH, Non-Operating Subsidiary, Hillscheid

The basic development of the Exentis 3D Mass Customization® screen printing technology, which was partly carried out in Hillscheid, has been largely completed and was transferred in full to the Exentis Technology site in Jena.

By smoothly transferring technology among the other subsidiaries, the Group is able to use the latest technology developments at any time.

### Exentis Knowledge GmbH, Non-Operating Subsidiary, Stetten

Exentis Knowledge GmbH serves exclusively as a central “patent box” and pools all the patents and patent claims within the Exentis Group.

The number of patent claims of the Exentis Group more than doubled from 879 patent claims in the 2018 financial year to 1,806 patent claims on 31 December 2019. This positive development represents a strong technological signal and is the result of ongoing investments in the Exentis Group’s technological and process developments in 3D screen printing technology.

The 1,806 patent claims filed are divided into 75 patents, patent applications and a large number of utility models.

As a technology company, it is essential to make deliberate and professional investments in ongoing research work and technological developments. This is why a large number of further patents are currently being prepared to extensively safeguard the ongoing technological and process developments in Exentis 3D Mass Customization® production technology in the international sphere.

## Broadening technology leadership

### Further developing the Exentis 3D Mass Customization® technology

A major element in the continual development of technology leadership for Exentis involves deliberate investments in further technological advances. Based on the continuing technological investments and the assurances gained through patents during 2019, production volumes per 3D production unit were significantly increased again, more printable material classes were introduced, and even more complex component geometries were handled.

The development and industrialization projects set up in the 2019 financial year demonstrate the cross-industry application possibilities and the high demand for 3D screen printing technology as an industrialised additive manufacturing process. Among other things, solutions for components in the fields of medical engineering, sensor technology, energy technology, e-mobility, semi-conductor technology, as well as in general industry or thermal management were processed. Our ability to produce the material properties in each case plays a major role here.

### Delivery of the world’s first inline 3D production unit for large series production

The Exentis Group has taken a major innovative step with the delivery and sale of the world’s first inline 3D production units for high-volume production. The combination of the inline concept and the unrestricted choice of materials makes the 3D production of components possible in any material composition. The fully automated inline concept on an Exentis 3D production unit with a production capacity of several million components per year underscores the fact that the Exentis Group is the only 3D printing company to implement industrially proven additive manufacturing.

### Expanding research and sales cooperation arrangements

The Exentis Group was able to continue deepening its cooperation with universities, research institutes and industrial partners during 2019. The partnerships were concluded in the major expertise areas of material development, process technology and engineering services and even included project acquisition.

# Business Development in 2019

The cooperation partners include thyssenkrupp Materials, ESK-SIC, KVT-Fastening, the Swiss Materials Science and Technology Research Institute EMPA, the Fraunhofer Institute in Germany, and other university chairs, including the Swiss Federal Institute of Technology ETH, the University of Applied Sciences Northwestern Switzerland and the Friedrich Schiller University in Jena.

### Setting up a "one-stop-shop" for customers

Business development is crucially important for the Exentis Group. As an integrated solutions provider, the Exentis Group enables its customers to produce large series of components with a free choice of materials and ultra-fine geometries.

Successful business development in Exentis' view is based on an interdisciplinary approach and focuses on customers or customer requirements. Technical training and excellent specialist expertise are the basic requirements when recruiting employees for business development. As a result, the business development employees in the Exentis Group can communicate with their customers at the same technological level.

Exentis acts as a proactive service provider for customers. Exentis is breaking new, innovative ground, primarily in the fields of its market image and customer communications. The organisation has short and highly valued communication routes for customers with clearly defined and highly efficient responsibilities within the organisation through its "single point of contact" customer communications.

Regardless of whether customers decide to have Exentis produce the components or acquire their own production licence and manufacture the items at their own premises, all the services are made available to customers as a "one-stop shop" service. This includes extensive process and operational expertise, the Exentis 3D production units tailored to the production volumes and component requirements, the printing screens individually manufactured by Exentis and defined pastes as well as employee training courses and the operating personnel, if required. There is an "all-round-carefree-package" for all Exentis customers.

### Attending selected trade fairs

The strategy introduced in 2018 of attending, making forum contributions and guest speeches at selected trade fairs was continued in 2019 too. The experience and findings gained from attending trade fairs in 2018 were used to plan trade fairs in 2019.

The Exentis Group attended the following trade fairs as an exhibitor or speaker:

**Exhibitions**

- Additive Manufacturing Expo in Lucerne
- Swisstech in Basel
- Rapid.Tech + FabCon 3.D in Erfurt
- Filtech in Cologne
- Formnext in Frankfurt
- The Hagener Symposium in Hagen

**Lectures and Presentations**

- Advanced Functional & Industrial Printing Conference (AFIP) in Düsseldorf
- Swisstech in Basel
- Meeting ETH Alumni in Zurich
- KVT Technology Days in Dietikon
- Formnext in Frankfurt
- The Hagener Symposium in Hagen

The responses and customer enquiries from those attending the trade fairs and the current market environment show that the Exentis 3D Mass Customization® technology continues to be the only 3D printing technology in the market that is suitable for large-scale production. It is important to make customer contacts and examine possible cooperation within development projects with the many interested visitors at the trade fairs.

## Consistently pursuing the chosen path

The presence of the Exentis Group at trade fairs and the targeted communication with customers will play an important role in the further expansion of the company. This will continue to spread knowledge about Exentis Industrialized Additive Manufacturing.

### Outlook

### Consistently pursuing the chosen path

The Exentis Group successfully passed many milestones in 2019.

The current market environment in the wake of the Covid 19 pandemic is a challenge for the entire industry and its full impact cannot yet be fully assessed at this time. The Exentis Group has taken precautions to minimise the impact of the pandemic on its business activities. They include implementing all the official regulations in Switzerland and Germany as well as more extensive Exentis internal rules related to conduct and hygiene.

The results achieved strengthen the Board of Directors and the Management Board to consistently continue on their chosen path. The main guarantees for success on this common path are:

- Intensifying existing and establishing new sales and development cooperation arrangements
- Recruiting highly qualified employees and creating further growth capacity
- Focusing on the 3 strategic business fields of e-mobility, fuel cells and medical engineering
- Continuing to roll-out the Exentis Industrialized Additive Manufacturing technology, internationally too

Learn more about Exentis on YouTube “Exentis Group”

# Corporate Governance

# Corporate governance report

## Group structure

Exentis Group AG is the pioneer and inventor of the 3D screen printing technology, the patented Exentis 3D Mass Customization®. The innovative 3D screen printing technology enables Exentis Group AG to be the only 3D technology company in the world to handle industrialized large-scale production through Industrialized Additive Manufacturing.

As an integrated solution provider, Exentis Group AG enables the large-scale series production of components with a free choice of materials and ultra-fine geometries. Industrialized Additive Manufacturing creates a new degree of flexibility in 3D manufacturing processes and replaces the time and cost-intensive tool production involved when using established manufacturing technologies. Exentis optimises the entire process chain from the development project to the industrial production of millions of components for strategic applications such as e-mobility, fuel cells or medical engineering.

The registered office of the company is Im Stetterfeld 2, 5608 Stetten, Switzerland.
The consolidated group of companies encompasses the following (correct in June 2020):

- Exentis Technology GmbH, Jena, Germany
- Exentis Tooling GmbH, Velden, Germany
- Exentis Engineering GmbH, Hillscheid, Germany
- Exentis Knowledge GmbH, Stetten, AG

You will find detailed information about the consolidated group of companies in the audited financial statement.

## Shareholders

On 31 December 2019, approximately 70 % of the share capital of Exentis Group AG was owned by the founders, major individual shareholders and management. The remaining 30 % of the share capital was held by over 100 individual shareholders and employees.

## Capital structure

On 31 December 2019, the share capital of Exentis Group AG amounted to CHF 1,172,380 and consisted of 11,723,800 registered nominal shares with a par value of CHF 0.10 per share. The share capital was fully paid in on 31 December 2019.

At the time of preparing the 2019 financial statement in mid-May 2020, the share capital amounted to CHF 1,194,440, consisting of 11,944,400 registered nominal shares with a par value of CHF 0.10 per share. The share capital was also fully paid in.

The shares carry full voting and dividend rights. There are no preference shares. Exentis Group AG did not hold any treasury shares on the balance sheet reporting date of 31 December 2019. Each share grants each shareholder one equal vote.

## Annual shareholders' meeting in June 2019

The annual shareholders' meeting of Exentis Group AG took place on 28 June 2019. Those attending voted on the following agenda items:

1. Approval of the annual financial statements of Exentis Group AG for the 2018 financial year and the report of the statutory auditor BDO AG
2. Use of the 2018 balance sheet profits
3. Exonerating the members of the Board of Directors for the 2018 financial year
4. Election of the auditors

All the agenda items were unanimously adopted by the shareholders attending the meeting.

## Issue price for Exentis shares

The value of one Exentis Group AG share was CHF 7.50 on 31 December 2019; technically, the Company was therefore worth CHF 87.9 million.

## Advisory Board

The Advisory Board of the Exentis Group acts as an independent advisory body. It supports and advises the Board of Directors, and in certain cases management too, both strategically and as a sparring partner.

It is gradually attracting many renowned business personalities who, by combining integrity and their own corporate success, can pass on experience and establish relations in their own networks as stakeholders in the Company.

The Advisory Board consists of 4 members:

### Dr Gero Büttiker

Dr Büttiker has had decades of experience as a successful entrepreneur and investor in the steel industry and related sectors.

### Prof. Dr Michael Klein

Professor Klein has broad professional expertise and personal experience as a manager at the interface of business, science and politics, for example as Secretary General of acatech (The German Academy of Science and Engineering).

### Prof. Dr Jens Günster

Professor Günster holds a chair at the University of Goslar and is head of department at Germany's Bundesamt für Materialwissenschaft.

### Prof. Dr Ulrich S. Schubert

Professor Schubert holds a chair at the University of Jena and has developed a polymer portfolio with several thousand variants.

The appointment of leading academics to the Advisory Board provides Exentis Group AG with additional specialist know-how in the field of materials science and research, as well as expanded access to industrial clients.

The Board discussed important strategies for the further development of the company in several meetings in 2019 and the first half of 2020.

## Board of Directors

The Board of Directors is the Group's highest management body and normally performs its duties as a committee. The Board of Directors at Exentis Group AG consists of four members.

The responsibilities of the Board of Directors are regulated in the Swiss Code of Obligations and also in the statutes of Exentis Group AG. The members of the Board of Directors are elected by the normal annual shareholders' meeting for a period in office of three years. The President is elected by the members of the Board of Directors for a period in office of three years. There are no restrictions on re-election for the members or the President of the Board of Directors.

### Ralf P. Brammer, Chairman of the Board

- Responsible for coordinating the Board of Directors and the Management Board
- Ralf P. Brammer has extensive expertise in establishing and managing young companies. He is an entrepreneur, has been on numerous Boards of Directors and was CFO in the financial services industry with a focus on capital markets and value management for many years
- Studied industrial engineering and information technology; MBA (Seattle, USA)

### David L. Deck, Member of the Board of Directors

- David L. Deck has a profound knowledge of financial management and a broad network of contacts in the field of corporate finance
- He has been involved in setting up numerous companies in the fields of medical engineering, biotechnology and innovative production methods

**Maximilian Büttiker,**
**Member of the Board of Directors**

- Maximilian Büttiker has had many years of experience in and a broad knowledge of steel production and the financial sector
- He worked for many years at the management level for a steel group in the machining area in the USA and Canada; and successfully introduced CRM and SAP in the sales department
- He worked for a large Swiss bank in corporate and investment banking for many years. Supported and finalised several transactions in the SME field and in-depth experience in the M&A and structured finance fields
- A master's degree in Communication Sciences & Media Research from the University of Fribourg

**Dr Marco Siegrist,**
**Member of the Board of Directors**

- Dr Marco Siegrist has extensive experience in the industrial implementation of challenging, material-driven innovation projects.
- Winner of numerous awards for young entrepreneurs
- Manages change processes in industry as a management consultant and interim manager
- A master's degree in material sciences and a doctorate in metal physics and technology at ETH Zurich

The Board of Directors, in its capacity as the highest supervisory and organisational body, guided the development of the company until the end of May 2020 in 5 face-to-face meetings and 4 further video conferences.

## Management Board

The management is responsible for the operational management of the company. In the 2019 financial year and the first half of 2020, Dr Martin Dressler and Mr Uwe Bögershausen were appointed to the Management Board as additional members. The six members of the Management Board are responsible for the following divisions:

**Uwe Bögershausen, Chief Executive Officer**
(since 1 June 2020)

- Mr Bögershausen has extensive international executive board experience in building and managing fast-growing companies and establishing successful 3D business models
- He has been responsible for successful growth financing and IPOs over the past 13 years, including SLM Solutions Group AG, aleo solar AG and Derby Cycle AG
- An economics graduate

**Urs Hirsiger, Chief Sales Officer**

- Mr Hirsiger has 25 years of international management experience in the industrial sector, especially in the development of global sales structures and product portfolios
- Professional experience in various management functions at Vortex Solutions, Extrude Hone, Tornos, Alphasem, GF Machining Solutions, Vaillant and Hunkeler
- A business economics and executive MBA from the Lorange Institute of Business in Zurich and Corporate Governance for the Board of Directors at the Swiss Board School at the University of St. Gallen

**Klaus Radakovics, Chief Financial Officer**

- Mr Radakovics has extensive management and project experience at international banks, consultancies and auditors such as KPMG, Synpulse, the Austrian Trade Commission in Chicago
- He is responsible for all the tasks in the financial and administration departments. Broad experience in risk management, financial modelling and corporate valuation
- He has a master's degree in finance and accounting from the University of St. Gallen, studied business administration at the Vienna University of Economics and Business Administration and is a Certified Valuation Analyst (CVA)

**Dr Martin Dressler,**
**Deputy Chief Technology Officer**
(since 1 October 2019)

- As Deputy CTO, Dr Dressler is responsible for application management, the application teams in Jena and Stetten as well as the technological Exentis DNA, including continuous innovation coordination
- 15 years of experience in leading research facilities for additive manufacturing processes, including Fraunhofer IFAM, Swiss Federal Lab and EMPA
- A doctorate in material sciences

**André Stämpfli, Chief Operating Officer**

- As COO, Mr Stämpfli is responsible for component manufacturing, screen production, supply chain management, quality management and purchasing.
- Over 15 years of practical experience in sustainable structural and process optimisation in operations implementation and supply chain management as well as project and change management
- Degree in mechanical engineering (ETH) and a master's degree in corporate and technology management and business administration (MAS ETH MTEC/BWI)

**Dr Srdan Vasic, Chief Technology Officer**

- Dr Vasic is responsible for the technological basis of the Exentis Group, especially with regard to key accounts and external communications
- Responsible for the following companies: Exentis Technology GmbH, Exentis Tooling GmbH, Exentis Engineering GmbH and Exentis Knowledge GmbH
- His experience combines materials technology and process engineering know-how with a pronounced customer focus. He previously worked for Oerlikon Balzers Coating AG, Novartis, the Swiss Federal Institute of Technology and the Swiss Federal Laboratories for Materials Testing and Research (EMPA).
- PhD and graduate in materials engineering

# Notes:
# Financial Report

## CONSOLIDATED PROFIT AND LOSS STATEMENT

| [in CHF] | Notes | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|---|
| Turnover revenues | 4.1 | 4 059 531 | 9 019 402 |
| Production costs for the services provided to achieve the turnover revenues | | (2 757 550) | (2 716 926) |
| **Gross profits** | | **1 301 981** | **6 302 476** |
| Other revenue | | 236 328 | 288 798 |
| Personnel expenses | 4.2 | (4 132 596) | (1 654 805) |
| Administration expenses | 4.3 | (3 047 409) | (2 356 144) |
| **Operating profit before amortisation/depreciation** | | **(5 641 696)** | **2 580 325** |
| Amortisation/depreciation and impairments on property, plant and equipment and intangible assets | | (2 332 434) | (895 743) |
| **Operating result** | | **(7 974 130)** | **1 684 582** |
| Revenue from the sale of subsidiaries | | – | 1 |
| Financial income | 4.4 | 2 746 | 30 241 |
| Financial expenses | 4.4 | (326 856) | (300 620) |
| **Profit before income taxes** | | **(8 298 240)** | **1 414 204** |
| Income tax expenses | 4.5 | 308 626 | 636 172 |
| **Net losses (profit in previous year)** | | **(7 989 614)** | **2 050 376** |
| Regarding the profit after income taxes, the following were attributable to: | | | |
| Shareholders in the parent company | | (7 989 614) | 2 050 376 |
| Non-controlling shareholders | | – | – |

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

| [in CHF] | Notes | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|---|
| **Net profit** | | **(7 989 614)** | **2 050 376** |
| Non-reclassifiable amounts | | | |
| Actuarial gains and losses from defined benefit pension plans | 6.1.6 | (723 259) | (94 980) |
| Reclassifiable amounts | | | |
| Currency conversion of foreign business operations | | 56 295 | 164 303 |
| Other result | | (666 964) | 69 119 |
| **Total result** | | **(8 656 578)** | **2 119 495** |
| Regarding the total result, the following were attributable to: | | | |
| Shareholders in the parent company | | (8 656 578) | 2 119 495 |
| Non-controlling shareholders | | – | – |

## CONSOLIDATED BALANCE SHEET

| [in CHF] | Notes | 31.12.2019 | 31.12.2018 |
|---|---|---|---|
| **Assets** | | | |
| Property, plant and equipment | 5.2 | 5 156 329 | 2 382 316 |
| Intangible assets | 5.1 | 14 717 611 | 15 526 687 |
| Other financial assets | | 77 880 | 11 004 |
| Deferred tax claims | 4.7 | – | 567 955 |
| **Non-current assets** | | **19 951 820** | **18 487 962** |
| | | | |
| Trade accounts receivable | | 4 444 185 | 8 036 824 |
| Other receivables | | 218 304 | 106 735 |
| Inventories (advanced payments)[1] | | – | 914 458 |
| Turnover revenue not yet invoiced | | 2 444 646 | 2 054 334 |
| Accruals | | 108 096 | 13 500 |
| Cash and cash equivalents | 5.6 | 4 197 563 | 2 409 243 |
| **Current assets** | | **11 412 795** | **13 535 094** |
| | | | |
| **Total assets** | | **31 364 615** | **32 023 057** |

| [in CHF] | Notes | 31.12.2019 | 31.12.2018 |
|---|---|---|---|
| **Liabilities** | | | |
| Subscribed capital | 5.4 | 1 172 380 | 1 078 670 |
| Profit-neutral changes in equity | | (965 722) | (298 757) |
| Reserves and additional paid-in capital | | 30 687 478 | 25 772 879 |
| Balance carried forward | | (8 759 358) | (769 744) |
| Share of equity attributable to the parent company's shareholders | | 22 134 778 | 25 783 048 |
| Share of minority shares | | – | – |
| **Equity** | | **22 134 778** | **25 783 048** |
| | | | |
| Pension provisions | 6.1 | 1 403 431 | 367 192 |
| Non-current rent liabilities | | 1 963 213 | – |
| Loan liabilities | 5.3 | 1 268 687 | 357 905 |
| Deferred tax liabilities | | 543 640 | 1 641 547 |
| **Non-current debts** | | **5 178 971** | **2 366 644** |
| | | | |
| Trade accounts payable | | 482 327 | 394 559 |
| Current rent liabilities | | 435 417 | |
| Other liabilities | | 793 868 | 472 648 |
| Deferred income | 5.5 | 2 339 254 | 3 006 157 |
| **Current debts** | | **4 050 866** | **3 873 364** |
| **Debts** | | **9 229 837** | **6 240 008** |
| | | | |
| **Total assets** | | **31 364 615** | **32 023 057** |

[1] Offset with outstanding invoices based on the progress made in projects

## CONSOLIDATED CASH FLOW STATEMENT

| [in CHF] | Notes | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|---|
| **Cash flow from operating activities** | | | |
| Net losses (profits in previous year) | | (7 989 614) | 2 050 376 |
| Correction to net losses by the expenses/ earnings not affecting liquidity | | | |
| Depreciation and amortisation | | 2 332 434 | 895 743 |
| Changes to the consolidated group of companies | | – | (324) |
| Share-based remuneration with compensation through equity instruments | | 1 179 973 | 149 185 |
| Other non-cash transactions | | (575 414) | (740 784) |
| Changes in assets and liabilities | | | |
| Increase/decrease in trade accounts receivable | | 3 592 639 | (5 809 183) |
| Increase/decrease in inventories and turnover revenue not yet invoiced | | 524 146 | (2 967 792) |
| Increase/decrease in accrued income, other accounts receivable and taxes paid or owed | | (206 165) | 3 249 |
| Increase/decrease in trade accounts payable | | 87 768 | 43 303 |
| Increase/decrease in other liabilities and leasing liabilities | | 762 923 | – |
| Increase/decrease in accrued expenses, current provisions and other liabilities | | (666 903) | 3 093 496 |
| **Net inflow/outflow of cash and cash equivalents from operating activities** | | **(958 212)** | **(3 283 730)** |
| **Cash flow from investment activities** | | | |
| Interest received | | 2 746 | 30 241 |
| Payments for property, plant and equipment | | (1 465 208) | (1 023 832) |
| Payments for non-current financial assets (deposits) | | 66 876 | |
| Payments for intangible assets | | – | (150 000) |
| Changes to the consolidated group of companies | | – | – |
| **Net inflow/outflow of cash and cash equivalents from investment activities** | | **(1 529 338)** | **(1 143 591)** |
| **Cash flow from financing activities** | | | |
| Incoming payments from the issue of company equity instruments (net minus payments of commission) | 5.3 | 3 775 996 | 7 136 192 |
| Incoming payments from loans received from third parties | | 1 000 000 | – |
| Incoming payments from loans received from associated parties | | – | – |
| Repayments of loans | | – | (1 360 709) |
| Leasing payments (rental charges) | | (441 703) | |
| Interest payed | | (37 665) | (67 280) |
| **Net inflow/outflow of cash and cash equivalents from financing activities** | | **4 296 628** | **5 708 203** |
| **Net increase in cash and cash equivalents** | | **1 809 077** | **1 280 882** |
| Cash and cash equivalents at the start of the financial year | | 2 409 243 | 1 174 471 |
| Effects of changes in exchange rates | | (20 757) | (46 109) |
| **Cash and cash equivalents at the end of the financial year** | | **4 197 563** | **2 409 243** |

## CONSOLIDATED STATEMENT OF EQUITY CHANGES

| [in CHF] | Subscribed capital | Profit-neutral changes in equity | |
|---|---|---|---|
| **Figures on 31.12.2017** | **910 786** | **(367 876)** | |
| Annual profits | | | |
| Currency effects | | 164 099 | |
| Actuarial profits and losses from defined benefit retirement plans | | (94 980) | |
| Overall results | | | |
| Increases in share capital (net minus costs of increasing capital) | 167 884 | | |
| Participation programme | | | |
| **Figures on 31.12.2018** | **1 078 670** | **(298 757)** | |
| Annual losses | | | |
| Currency effects | | 56 295 | |
| Equity component on convertible loan | | | |
| Actuarial profits and losses from defined benefit retirement plans | | (723 259) | |
| Overall results | | | |
| Increases in share capital (net minus costs of increasing capital) | 93 710 | | |
| Participation programme | | | |
| **Figures on 31.12.2019** | **1 172 380** | **(965 722)** | |

| | Reserves & agio | Balance carried forward | Equity | Ratio of minority shareholders | Equity held by Group shareholders |
|---|---|---|---|---|---|
| | **18 655 386** | **(2 820.120)** | **16 378 176** | **1 650** | **16 376 526** |
| | | 2 050 376 | 2 050 376 | (1 650) | 2 052 026 |
| | | | 164 099 | | 164 099 |
| | | | (94 980) | | (94 980) |
| | | | 2 119 495 | (1 650) | 2 121 145 |
| | 6 968 308 | | 7 136 192 | | 7 136 192 |
| | 149 185 | | 149 185 | | 149 185 |
| | **25 772 879** | **(769 744)** | **25 783 048** | **–** | **25 783 048** |
| | | (7 989 614) | (7 989 614) | – | (7 989 614) |
| | | | 56 295 | | 56 295 |
| | 52 340 | | 52 340 | | 52 340 |
| | | | (723 259) | | (723 259) |
| | | | (8 604 238) | | (8 604 238) |
| | 3 682 286 | | 3 775 996 | | 3 775 996 |
| | 1 179 973 | | 1 179 973 | | 1 179 973 |
| | **30 687 478** | **(8 759 358)** | **22 134 779** | **–** | **22 134 779** |

# Notes on the consolidated accounts for the 2019 financial year

## 1. General Information

Exentis Group AG ("Exentis") is an independent, premium provider of intelligent mass production solutions with its patented 3D screen printing technology, known as Exentis 3D Mass Customization®; it offers individual component geometries for large-scale production with free choice of materials. The Group focuses on customised product solutions, which Exentis either handles and produces itself or the customer by means of a production licence. These solutions particularly include customised products for the automotive, industrial or renewable energy sectors.

Exentis is convinced that it can offer customers added value with its specially selected or in-house developed product solutions using a wide range of materials and optimised printing concepts. Guided by the requirements of its customers, Exentis offers 3D printing solutions to optimise product specifications, design and performance and above-average increases in profits for customers. The financial year corresponds to the calendar year for all the companies that are part of the consolidated group. The valuation used in the consolidated accounts is based on historical purchase and production costs. The profit and loss statement is structured according to the total cost method. The accounts for the parent company and its subsidiaries are included in the consolidated accounts, based on standard accounting methods.

Amounts in the consolidated accounts are listed in Swiss francs (CHF), unless otherwise noted. Both individual and total figures represent the value with the smallest rounding difference. If additions are made to the individual figures, slight differences may occur compared to the totals that have been reported.

The Board of Directors of Exentis Group AG voluntarily commissioned the preparation of these financial statements and approved them on 26 May 2020.

## 2. Principles of accounting

### 2.1. Standards used

The consolidated accounts have been prepared in line with the International Financial Reporting Standards (IFRS) and in accordance with the stipulations in Swiss law. The accounting methods used in the consolidated accounts valid on 31 December 2019 comply with the methods used in the previous year, apart from the exceptions explained below.

The following new or amended IFRS standards had to be used for the first time in the 2019 financial year:

| Standard / Interpretation | | Effects |
|---|---|---|
| IFRS 16 | Leases | Capitalising usage rights and recognising them as a liability |
| IFRIC 23 | Uncertainty over Income Tax Treatment | None |
| Various | Annual improvements to the IFRS standards 2015-2017 cycle (Changes to IFRS 3, IFRS 11, IAS 12 and IAS 23) | None |

The Group used IFRS 16 in line with the modified retrospective method for the first time on 1 January 2019; according to this, the accumulated effect of this first usage on 1 January 2019 is recognised under Retained earnings. The comparative information was therefore not adjusted for 2018, that is to say, it is presented according to IAS 17 and the associated interpretation, as in the past.

The Group uses IFRS 16 for contracts, which had been previously identified as leases or non-current tenancy arrangements and had been recognised on the balance sheet as operating leases according to IAS 17 or leases, which were concluded or amended after 1 January 2019. As a lessee, the Group recognises on the balance sheet leases, all of which have largely been transferred to the Group with all the risks and opportunities associated with the ownership of the underlying asset, usage rights and leasing liabilities. In the case of property leasing contracts (non-current tenancy contracts), the Group decided not to separate non-leasing components and instead recognise leasing and associated non-leasing components as a single leasing component.

The Group has used a number of simplified rules when using IFRS 16 for leases.
In detail, the Group has

- neither used usage rights nor leasing liabilities for leases, the term of which ends within 12 months after the time of its first use;
- neither used rights nor leasing liabilities for leases where the underlying asset value is low (for example, copying machines);
- not taken into consideration the initial direct costs when assessing the usage right at the time when it was first used; and
- retrospectively set the term of leases.

The following new or amended standards or interpretations have already been adopted by the IASB, but did not have to be used until the 2020 financial year. The company will not use the new standards prematurely.

| Standard / Interpretation | | To be used from | Expected effects |
|---|---|---|---|
| | Changes to the references to the general concept in the IFRS standards | 01.01.2020 | None |
| IFRS 3 | Business Combinations | 01.01.2020 | None |
| IFRS 17 | Insurance Contracts | 01.01.2021 | None |
| IAS 1 / IAS 8 | Definition of “Essential” | 01.01.2020 | No major changes expected |
| IFRS 10 / IAS 28 | Changes to IFRS 10 und IAS 28 selling or investing assets between an investor and associated company or joint venture | Pending | Final assessment pending |

## 2.2. Accounting estimates and discretionary decisions

When using the consolidated balance sheet and assessment methods shown here, managers have to judge circumstances, make assessments and assumptions related to the carrying amounts of assets and debts, which cannot necessarily be established from other sources. The estimates and the assumptions underlying them are based on past experience and other factors considered to be relevant. The actual values may differ from the estimates.

The assumptions underlying the estimates are subject to regular review. If a change only affects one period, changes to estimates are only considered at this time. If the changes affect the current and the following reporting periods, they are considered in this period and the following one.

Please find below the most important cases where discretion has been exercised, which managers have used as part of applying the Company's balance sheet and assessment methods, as well as the most important effects of exercising discretion on the amounts reported in the consolidated accounts. The most important assumptions regarding the future and the other main sources of valuation uncertainty at the end of the reporting period are also specified, which could create a significant risk that would make it necessary to extensively adjust the asset and debt figures that are disclosed within the next financial year.

- As regards the assumptions underlying the assessment of the technology/applications, we believe that there is a major valuation uncertainty regarding the development and market launch date. The Company has made assumptions about the market entry for the various projects. The Company has estimated developments regarding the market entry of the different applications, which form the basis for assessing the technology. The assessment of the technology depends on whether the assumptions made regarding the market entry can be met. Based on a sensitivity analysis, the Company assesses the risk of value impairment for the technology because of possible delays to the market launch as follows: if the market entry is delayed by more than 24 months compared to the Company's plan, the value in use will continue to exceed the carrying amount.

- As regards the revenue recognition of income from sales of production systems, the degree of completion is estimated on the basis of the external production of the most important components.

- As regards recognising deferred tax assets for losses carried forward, the future revenue potential is set by the Company and deferred tax assets are estimated for what will probably be off-settable losses carried forward.

- When assessing accounts receivable and work that has not yet been invoiced, the Company estimates the default risk on the basis of the information available about the customers.

## 3. Major accounting methods

### 3.1. Principles of consolidation

The consolidated accounts contain the statements for the parent company and the companies that it controls (subsidiaries). The Company controls another firm if it:

- can exercise authority to dispose of the holding company,
- is exposed to fluctuating profits from its holding, and
- can affect the profits because of its disposal powers.

Control of subsidiaries is exclusively derived from holding the majority of voting rights in the companies concerned within the Exentis Group.

Subsidiaries are included in the accounts for the first time when they are acquired. That is the time when the Company achieved control over its subsidiary. If control is lost, subsidiaries are removed from the consolidated group.

The initial consolidation of subsidiaries takes place according to the acquisition method. It envisages an assessment of the assets acquired and debts taken over by the parent company using their fair values at the time of the acquisition. The purchase costs for the acquisition match the fair value of the service provided in return. If the purchase costs of the acquisition plus the value of the shares of other shareholders and the fair value of any shares held before achieving control (gradual acquisition) exceed the fair value of the identified assets and liabilities, the Company estimates goodwill. Conversely, the Company recognises the difference as directly affecting net income after again reviewing the purchase price allocation.

Goodwill from acquisitions is not amortised according to schedule, but its value is reviewed every year (impairment test) and is amortised to its lower realisable amount if its value has fallen.

Internal Group transactions, balances and unrealisable profits from supply and performance relations between the companies in the consolidated group have been fully eliminated. The same applies to unrealised losses, unless the transaction indicates a fall in value of the asset that is carried forward.

## 3.2. Changes to the consolidated group

There were no changes to the consolidated group during the year under review.

## 3.3 Information about subsidiaries

| Subsidiary | Main business | Located | Share of voting rights 31.12.2019 | Capital share 31.12.2019 |
|---|---|---|---|---|
| Fully consolidated subsidiaries | | | | |
| Exentis Knowledge GmbH | Marketing its own and outside technological expertise using industrial property rights | Stetten | 100 % | 100 % |
| Exentis Engineering GmbH | Research and development into own and outside 3D technologies | Hillscheid (DE) | 100 % | 100 % |
| Exentis Technology GmbH | Project development and production of industrial 3D components | Jena (DE) | 100 % | 100 % |
| Exentis Tooling GmbH | Development and production of 3D screen technology | Velden (DE) | 100 % | 100 % |

## 3.4. Revenue recognition

Revenues are assessed at the fair value of the consideration received or to be received and are reduced by expected customer returns, discounts and other similar deductions. The Company generates revenue from completing development projects, developing and marketing paste system and screen technologies, 3D printing of customer products and issuing production licence agreements and making available 3D process technologies and 3D production units. Revenue is recognised according to IFRS 15 as soon as control of the goods and services has passed to the customer. This can take place at a point in time or over a period. As regards the development and marketing of the paste system and screen technology (sale of production systems), revenue is recognised over the development period, as the customer controls the asset value that is generated. This involves customised production units; alternative use is not possible. When

production systems are sold, individual payment deadlines are agreed, which differ from the revenue recognition over the development period. The Company uses the following revenue recognition principles:

| Recognising revenue at the time when control passes | Recognising revenue over a period |
|---|---|
| • Development projects (milestones) | • Sale of production systems (making available 3D process technologies and production systems) |
| • Production and development licence agreements (when signed) | |
| • Sale of paste systems and screen technologies (when supplied) | • Services and maintenance of 3D production systems (over the term of the contract) |
| • 3D printing of customer projects (when supplied) | |

The guarantee risk for the Company is low. It is true that normal guarantees are provided, but the Company can make use of the suppliers' guarantee systems for any technical guarantee cases. Customers will also probably purchase maintenance contracts from the Company for the production systems.

## 3.5. Income taxes

The expense on income tax represents the total current tax expense and deferred taxes.

Current or deferred taxes are recognised in the profit and loss statement, unless they are connected to items that are either recognised under Other results or directly under Equity. In the latter case, the current and deferred tax is also recognised under Other results or directly under Equity. Deferred taxes, which result from the first entry of a corporate merger on the balance sheet, are considered as part of the revaluation of the net assets in the acquired company.

The current tax expenses are determined on the basis of the taxable income for the year. The taxable income is different from the annual profits in the consolidated profit and loss statement because of expenses and revenue that is taxable in later years or is never taxable or deductible for tax purposes. The Group's liability for current taxes is calculated on the basis of current tax rates or those due to apply in the near future.

Deferred taxes are recognised for the differences between the carrying amounts of assets and liabilities in the consolidated accounts and the relevant tax values. Deferred tax liabilities are generally recognised on the balance sheet for all temporary taxable differences; deferred tax assets are recognised if it is probable that taxable profits will be available to offset the losses from reversing deductible temporary differences. The Company does not estimate any deferred tax assets and liabilities for temporary differences, which result from the initial recognition of goodwill or from a business transaction that is not a corporate merger and does not affect the tax results or the results according to IFRS at the time of its initial recognition.

The carrying amount of deferred tax assets is reviewed on the reporting date every year and their value is reduced if it is no longer probable that adequate taxable income will be available to fully or partially realise the claim.

Deferred tax liabilities and assets are determined on the basis of expected tax rates or tax laws that will probably apply at the time of settling the debt or realising the asset.

## 3.6. Intangible assets

### 3.6.1. Technology

The Company has an intangible asset in the form of the 3D screen printing technology in conjunction with numerous patents. The asset was assessed when IFRS were used for the first time. This value is used as the purchase price. Amortisation is recognised as an expense on a straight-line basis over the expected period of usage of 20 years; the amortisation starts when the first revenue is recognised. The expected period of usage and the amortisation method are reviewed on each reporting date. The Company takes into consideration any changes in estimates prospectively.

The Company reviews on each reporting date whether there are any indications that the value of the technology has been impaired. Possible indications for impairment can come from a delay to the market entry of the products to be manufactured using the technology or unexpected difficulties in developing the products for commercial viability. If any such indications are identified, the Company checks whether it is possible to generate a net inflow of liquid funds by selling parts of the technology or individual patents or by using them internally, so that at least the carrying amount of the asset is covered. If this is not the case, the Company recognises impairment in value in the profit and loss statement amounting to the difference to affect the net income.

There were no indications to suggest possible impairment for the technology in the current financial year or the previous one. The increasing number of development projects and the demand for our technology from customers confirm this. The restricting factor is currently the availability of the input systems (production units) and personnel to complete the projects.

The Company also has contractually agreed rights, which guarantee royalties for the Company. If these rights are purchased, they are capitalised at their purchase price and later amortised in line with the incoming royalties. The Company checks on each annual reporting date whether there are any indications for impairing the rights. Indications for impairment can come from delays to the relevant applications, as a result of which royalties may be received later or not with the expected amount. If these indications can be recognised, the Company checks whether the cash values of the royalties that are then expected during the term at least cover the carrying amount of the rights. If this is not the case, the Company enters impairment amounting to the difference to affect net income on the profit and loss statement.

There were no indications of possible impairment of the rights during the current financial year or in the previous year.

If the reason for the impairment, which was recognised in the past, no longer applies in part or completely in the following period, the carrying amount of the asset must be increased to affect net income. The appreciation in value must be restricted to the value that would have resulted if no impairment had been recognised for the asset or the unit generating the cash flow in previous years. The realisable net inflow of cash through the asset in cash and cash equivalents may not be exceeded by the appreciation in value either.

### 3.6.2 Goodwill

The goodwill resulting from a corporate merger is recognised on the balance sheet at the purchase costs minus any necessary impairment in value and must be reported separately on the consolidated balance sheet.

For the purposes of checking for any impairment, the goodwill is divided into the Group units generating cash and cash equivalents through the acquisition, if there is an expectation that they can create a benefit from the synergies in the merger.

Units generating cash and cash equivalents, to which one part of the goodwill has been assigned, must be checked at least once a year for any impairment. If there are any indications of impairment for a unit, it may be necessary to complete impairment tests more frequently.

Impairment occurs if the realisable amount of a cash-generating unit is less than its carrying value. The realisable amount is the higher figure arising from the value in use and fair value minus any sale costs. The expenditure on any impairment primarily diminishes the carrying amount of the goodwill assigned to a cash-generating unit. Any remaining amount must be proportionately assigned to the other non-current assets in the unit on the basis of their carrying amounts.

Any impairment of goodwill is directly recognised in the profit and loss statement. Any impairment of goodwill may not be reversed in future periods.

#### 3.6.3 Research and development costs

Research costs are not capitalised, but recognised as expenses at the time when they are incurred. Development costs are only capitalised as an intangible asset if an intangible asset can be identified, which provides a future economic benefit, and if the costs of this asset can be reliably determined.

#### 3.6.4 Other intangible assets

Patents and trademarks are reported on the balance sheet at their purchase or production costs minus any accumulated amortisation. The balance sheet entries for intangible assets from corporate mergers like trademarks, patents and customer relations are made at purchase costs that match the market value at the time of acquisition, minus any accumulated amortisation. The scheduled amortisation of patents is based on the term of the industrial property rights.

### 3.7 Non-current assets kept for sale

A non-current asset or a group of disposable assets must be classified as kept for sale if the associated carrying amount is realised mainly through a sales transaction, rather than through continued usage. This condition is only considered to have been met if the non-current asset or a group of disposable assets is immediately available for sale in its current state and the sale is highly likely. In this sense, it must be assumed that the sales transaction, to which management has committed itself, must be concluded as quickly as possible after this kind of classification. Any impairment from the initial classification is recognised in the profit and loss statement. Assets kept for sale and groups of disposable assets are no longer amortised.

### 3.8 Inventory (advanced payments)

The valuation of advance payments for unfinished products is made using the lower value arising from the purchase costs and net sale value. The purchase costs for acquired inventories are determined after deducting allowances and price discounts. A similar degree of completion is used as for the sales transactions in question. The net sale value is determined as estimated sales revenue in the normal course of business, less the estimated costs until completion and the estimated costs required for the sale.

### 3.9 Property, plant and equipment

The usage rights for property (IFRS 16), office and business equipment, IT systems and technical installations and machines covered by property, plant and equipment are recognised at their purchase or production costs minus any accumulated depreciation and any impairment in value.

Depreciation is calculated according to the linear method over a period of use of 3 – 20 years. The expected periods of use, residual values and depreciation methods are reviewed on each annual reporting date and all the necessary estimation changes are taken into consideration prospectively. If any units already being used are taken over, the usage period is adapted according.

| Type of unit | Period of usage employed |
|---|---|
| Usage rights for property | According to the contract in question, normally 5-10 years |
| IT equipment and furniture | 3 – 8 years |
| Production machines | 5 – 8 years |
| Tenant improvements | 8 – 20 years |
| Advanced payments for machines | No depreciation |

Property, plant and equipment must be removed from the balance sheet at the time of their disposal or when no further economic benefit is expected from them. The profit or loss arising from the sale or decommissioning of any property, plant or equipment is determined as the difference between the sales revenue and the carrying amount of the asset and is recognised to affect net income.

### 3.10 Accounts receivable

The Company capitalises accounts receivable at the time when an enforceable claim is incurred. Initial recognition takes place at their fair value plus any transaction costs. The following assessment takes place at amortised purchase costs according to the effective interest method.

Impairment of accounts receivable is recognised if the cash value of the expected inflow of cash does not cover the carrying amount of the account receivable. When assessing whether any impairment exists, the Company is guided by the payment behaviour of its debtors and other information received, which might indicate economic difficulties on the part of the debtor. The cash value is determined using the effective interest rate for the financial asset. If the reason for any impairment made in previous years disappears, an appreciation must be made to the minimum figure arising from the realisable amount and the amortised purchase costs to affect net income.

### 3.11 Cash and cash equivalents

Cash and cash equivalents are assessed at their purchase costs. This involves cash in hand.

### 3.12 Provisions

Provisions are formed if the Group has a current liability (of a legal or factual nature) arising from a past event and it is probable that the fulfilment of the liability is linked to the outflow of resources and a reliable estimate of the amount of the provision is possible.

The amount of provision entered is the best estimate that is required on the annual reporting date to meet the current liability. Any inherent risks and uncertainties in the liability must be considered. If a provision is assessed on the basis of the estimated cash flows required to meet the liability, these cash flows must be discounted, if the interest effect is fairly large.

If it can be assumed that outside third parties will reimburse parts of or all the economic benefits required to settle the provision, this claim is capitalised as an asset, if the reimbursement is almost certain to happen and its amount can be reliably estimated.

### 3.13 Financial liabilities

Financial liabilities are recognised if a Group company becomes the contractual party for a financial instrument. Its acquisition valuation is set at the fair value minus any transaction costs.

### 3.14 Currency conversion

The annual accounts of fully consolidated subsidiaries, whose functional currency is not the Swiss franc, are converted to the corporate reporting currency of Swiss francs using the modified reporting date exchange rate method. The conversion of the assets and liabilities takes place at the exchange rate on the reporting date. Items in the profit and loss statement must be converted at the average annual exchange rate. Equity items are converted at historical exchange rates at the times when they accrued for the Group. The currency difference emerging from any conversion is recognised under Other results without affecting them. The accumulated currency conversion differences recognised under Equity are reversed when a Group company leaves the consolidated group of companies to affect net income.

The Group's reporting currency is Swiss francs (CHF).

| [CHF / EUR] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Annual average exchange rate (converting revenue and expenses) | 1 11242 | 1 15487 |
| Final exchange rate for year (converting assets and liabilities) | 1 08700 | 1 12690 |

### 3.15 Employee pension scheme

The actuarial calculations of the expenses and obligations arising from defined benefit retirement plans are performed by qualified experts according to the projected unit credit method. The last actuarial assessment was made on 31 December 2019. The current service costs, the past service costs from changes to the scheme and plan settlements as well as the administrative costs are recognised under Personnel expenses and the interest costs on the net liability are recognised under Financial expenditure. Actuarial profits and losses are entered under Other earnings.

### 3.16 Public sector grants

Any grants promised by the public sector, which are not specifically earmarked for the purchase of property, plant and equipment, are realised as Other income over the term of the relevant support programmes. An entry is made, as soon as it is conceivable that the Company will provide the services and the support was agreed.

## 4. Information on the consolidated profit and loss statement

### 4.1 Revenue from contracts with customers (turnover revenue)

The breakdown of Group revenue from contracts with customers for the financial year (without earnings from financial investments) can be summarised as follows:

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Turnover revenue from the sale of production systems | 3 480 928 | 5 214 153 |
| Turnover revenue from services and licences | 578 603 | 3 805 249 |
| Subtotal | 4 059 531 | 9 019 402 |
| Minus revenue reductions (discounts) | – | – |
| **Total** | **4 059 531** | **9 019 402** |

Revenue from external customers comes from the sale of production systems, the provision of services and the sale of licences. Revenue from services and licences is recognised at a particular time, revenue from turnover from the sale of production systems is recognised over the production period. The proportionate revenue per period is measured using the external completion of the most important components in the production systems by the suppliers.

## 4.2 Summary of personnel expenses

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Wages and salaries | 3 473 497 | 1 298 565 |
| Social security expenses | 211 719 | 113 576 |
| Plans with defined benefits/employee benefits | 362 534 | 156 068 |
| Other personnel expenses | 84 846 | 86 596 |
| **Total** | **4 132 596** | **1 654 805** |

## 4.3 Other operating expenses

The classification of the remaining operating expenses for the financial year can be summarised as follows:

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Rental expenses[2] | (29 178) | 142 169 |
| Vehicle expenses | 14 248 | 44 288 |
| Maintenance and energy expenses | 334 777 | 64 291 |
| Levies, fees and insurance expenses | 31 980 | 28 359 |
| Consulting, accounting and Board of Directors expenses | 1 526 849 | 1 532 868 |
| Advertising, sales and travel expenses | 391 628 | 182 036 |
| Travel and representation expenses | 242 486 | 116 542 |
| Electricity, water, waste disposal | 58 035 | 7 465 |
| Administrative expenses | 387 728 | 218 163 |
| Other operating expenses | 88 856 | 19 963 |
| Losses from disposal of fixed assets | – | – |
| **Total** | **3 047 409** | **2 356 144** |

## 4.4 Financial earnings and expenses

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Interest on bank accounts | (134) | (214) |
| Interest on loans | (37 531) | (67 280) |
| Total interest expenses | (37 665) | (67 494) |
| Foreign currency losses (net) | (289 191) | (233 126) |
| **Total financial expenses** | **(326 856)** | **(300 620)** |
| | | |
| Interest earnings on financial assets | **2 746** | 30 241 |
| Foreign currency profits (net) | – | – |
| **Total financial earnings** | **2 746** | **30 241** |

[2] The Group has been using IFRS 16 since 1.1.2019; leasing expenses for property (rental expenses) is therefore entered newly as amortisation of the relevant usage right.

## 4.5 Income taxes

### 4.5.1 Income taxes recognised in the profit and loss statement

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Current taxes | | |
| Income tax earnings/expenses during the current financial year | (67 495) | (20 515) |
| Deferred taxes | | |
| Deferred taxes expenses recognised in the current year | 376 122 | 656 687 |
| **Tax expenses recognised for the current period** | **308 626** | **636 172** |

The tax expenses for the financial year can be reconciled as follows for the net income during the period:

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Pre-tax earnings | (8 298 240) | 1 414 204 |
| Tax expenses/income with a tax rate of 18.6 % (previous year: 22 %) | 1 825 614 | (311 124) |
| Deferred tax income on the capitalised technology | 131 874 | 88 732 |
| Adjusting the deferred tax liability because of a change to tax rates | (746 399) | – |
| Amortisation of deferred tax assets due to loss | – | – |
| Effects of non-tax-deductible expenses and earnings | (453 512) | 306 378 |
| Effects of profits, for which no deferred tax claims were recognised | – | – |
| Effects of losses, for which deferred tax assets were recognised | – | 567 955 |
| Effects of losses, for which no deferred tax claims were recognised | (473 286) | – |
| Tax rate differences | 24 336 | (15 769) |
| **Income tax expenses recognised in the profit and loss statement** | **308 626** | **636 172** |

An average income tax rate of 18.6 % (22 % in the previous year) was assumed to determine the current taxes on the generated profits. This expected average tax rate matches the weighted average of tax rates for the consolidated companies.

Swiss voters had adopted the Federal Tax Reform and Pension Funding Act on 19 May 2019. The tax reform was adopted then by the parliament of the Canton of Aargau on 17 September 2019 and became law on 1 January 2020.The Group therefore adjusted its tax rates accordingly.

### 4.5.2 Deferred tax receivables and liabilities

Please find below an analysis of deferred tax assets and liabilities. The deferred tax liabilities concern the intangible asset, the tax value of which is below the IFRS carrying amount.

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Deferred tax assets | 1 818 197 | 567 955 |
| Deferred tax liabilities | (2 361 837) | (1 641 547) |
| Entered on the balance sheet | (543 640) | |

**Deferred tax assets**

| | | |
|---|---|---|
| Tax losses carried forward | 1 557 159 | 567 955 |
| Pension provision | 261 038 | – |
| **Gross amount** | **1 818 197** | **567 955** |
| Valuation adjustments | – | – |
| Balancing figures | – | – |
| **Balance sheet value** | **1 818 197** | **567 955** |

**Deferred tax liabilities**

| | | |
|---|---|---|
| Intangible assets | (2 349 975) | (1 641 547) |
| Convertible loan | (11 862) | |
| Property, plant and equipment | – | – |
| **Gross amount** | **(2 361 837)** | **(1 641 547)** |
| Valuation adjustments | – | – |
| Balancing figures | – | – |
| **Balance sheet value** | **(2 361 837)** | **(1 641 547)** |

Based on the expectations of the Board of Directors, the tax losses carried forward in Switzerland can most properly be used within the statutory deadline, which is why appropriate deferred tax assets have been created.

Deductible temporary differences, unused tax losses and unused tax credits, for which no deferred tax liabilities were recognised, can be presented as follows:

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Tax losses | 473 286 | 114 472 |
| **Total** | **473 286** | **114 472** |

## 4.6 Earnings after income taxes

The annual earnings can be attributed to the shareholders as follows:

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Shareholders in the parent company | (7 989 614) | 2 050 376 |
| Non-controlling shareholders | – | – |
| **Total** | **(7 989 614)** | **2 050 376** |

The annual earnings include the following expenditure:

### 4.6.1 Impairment and appreciation of assets

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Impairment of intangible assets | (89 803) | – |
| Impairment of accounts receivable | – | – |
| Appreciation of accounts receivable | – | – |
| Impairment of deferred tax assets | – | – |
| **Total** | **(89 803)** | **–** |

### 4.6.2 Amortisation/depreciation

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Scheduled depreciation of property, plant and equipment | 1 081 655 | 176 469 |
| Scheduled amortisation of usage rights from leases | 441 703 | |
| Scheduled amortisation of intangible assets | 809 076 | 719 274 |
| Impairment of financial assets | – | – |
| **Total** | **2 332 434** | **895 743** |

### 4.6.3 Research and development costs recognised as expenses

| [in CHF] | 01.01.2019 – 31.12.2019 | 01.01.2018 – 31.12.2018 |
|---|---|---|
| Research and development expenses (contained in production costs) | (106 797) | (113 102) |

# 5. Information about the consolidated balance sheet

## 5.1 Intangible assets

The carrying amounts for the intangible assets on the reporting date can be found in the following table:

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Technology (including patents) | 12 634 275 | 13 353 549 |
| Goodwill | – | 89 803 |
| Rights | 2 083 333 | 2 083 333 |
| Software | 1 | 1 |
| **Total** | **14 717 610** | **15 526 687** |

| [in CHF] | Technology | Software | Rights | Goodwill | Total |
|---|---|---|---|---|---|
| **Acquisition and production costs** | | | | | |
| **Figures on 31.12.2017** | **14 292 862** | **4 456** | **2 250 000** | **89 803** | **16 640 844** |
| Accruals | 150 000 | | | | **150 000** |
| Accruals from in-house developments | | | | | |
| Acquisitions through corporate mergers | | | | | |
| Disposals | | | (166 667) | | **(166 667)** |
| **Figures on 31.12.2018** | **14 446 585** | **4 456** | **2 083 333** | **89 803** | **16 624 176** |
| Accruals | | | | | |
| Accruals from in-house development | | | | | |
| Acquisitions through corporate mergers | | | | | |
| Disposals | | | | | – |
| **Figures on 31.12.2019** | **14 446 585** | **4 456** | **2 083 333** | **89 803** | **16 624 176** |
| **Accumulated amortisation and impairment** | | | | | |
| **Figures on 31.12.2017** | **379 616** | **4 454** | **–** | **–** | **384 070** |
| Amortisation expenses | 719 274 | – | | | 719 274 |
| Disposals | | | | | |
| Impairment | | | | | |
| Others | | | | | |
| **Figures on 31.12.2018** | **1 093 035** | **4 454** | **–** | **–** | **1 097 490** |
| Amortisation expenses | 719 274 | – | – | – | 719 274 |
| Disposals | | | | | |
| Impairment | | | | 89 803 | 89 803 |
| Others | | | | | |
| **Figures on 31.12.2019** | **1 812 309** | **4 454** | **–** | **89 803** | **1 906 567** |
| **Carrying amount on 31.12.2019** | **12 634 275** | **1** | **2 083 333** | **–** | **14 717 610** |

Forward-looking statements, which have been used to assess the intangible assets, are based on current estimates and assumptions according to the latest knowledge. These forward-looking statements are subject to risks, estimates, assumptions, uncertainties and other factors, which may or may not occur, and ensure that the actual circumstances may deviate considerably from the implied forecasts or miss them and the values of the intangible assets would then have to be corrected.

With regard to the valuation of intangible assets based on forecasts and estimates of future turnover, a number of factors have a major influence on the valuation; however, the Group is unable to influence some factors.

### Annual impairment test on 31 December 2019

There were no signs of the need to impair any carrying amounts on 31 December 2019, which is why no detailed impairment test was performed.

## 5.2 Property, plant and equipment

The carrying amounts for property, plant and equipment on the reporting date can be found in the following table:

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| IT equipment and furniture | 177 984 | 145 288 |
| Production machines | 1 911 605 | 1 596 279 |
| Tenant improvements | 100 950 | 64 840 |
| Usage rights for property | 2 392 344 | |
| Advance payments for machines | 573 444 | 575 908 |
| **Total** | **5 156 327** | **2 382 316** |

| [in CHF] | IT/furniture | Machines | Improvements | Advanced payments | Usage rights | Total |
|---|---|---|---|---|---|---|
| **Acquisition and production costs** | | | | | | |
| **Figures on 31.12.2017** | **144 789** | **1 286 159** | **33 975** | **240 828** | **–** | **1 705 751** |
| Accruals | 72 195 | 352 070 | 38 340 | 575 908 | – | 1 038 513 |
| Transfers | | 240 828 | | (240 828) | | – |
| Disposals | | | | | | |
| **Figures on 31.12.2018** | **216 985** | **1 879 057** | **72 315** | **575 908** | **–** | **2 744 265** |
| Accruals | 108 124 | 1 310 934 | 33 384 | 12 766 | 2 834 047 | 4 299 255 |
| Transfers | | | 15 230 | (15 230) | | – |
| Disposals | (1 838) | (430) | | | | (2 268) |
| **Figures on 31.12.2019** | **323 271** | **3 189 561** | **120 929** | **573 444** | **2 834 047** | **7 041 252** |
| **Accumulated amortisation and impairment** | | | | | | |
| **Figures on 31.12.2017** | **42 484** | **148 438** | **755** | **–** | **–** | **191 677** |
| Amortisation expenses | 32 317 | 131 325 | 6 720 | | | 170 272 |
| Disposals | (3 105) | 3 105 | | | | – |
| Impairment | | | | | | |
| **Figures on 31.12.2018** | **71 696** | **282 778** | **7 475** | **–** | **–** | **361 950** |
| Amortisation expenses | 73 973 | 995 177 | 12 504 | | 441 703 | 1 479 089 |
| Disposals | (383) | | | | | (383) |
| Impairment | | | | | | |
| Transfers | | | | | | |
| **Figures on 31.12.2019** | **145 286** | **1 277 955** | **19 979** | **–** | **441 703** | **1 884 924** |
| **Carrying amount on 31.12.2019** | **177 984** | **1 911 605** | **100 950** | **573 444** | **2 392 344** | **5 156 327** |

## 5.3 Loan liabilities

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Convertible loan | 933 923 | |
| Loans from third parties | 334 764 | 357 905 |
| **Total** | **1 268 687** | **357 905** |

The Company has taken out a new loan with a right of conversion. The Company is paying 4 % interest on the loan and this allows the lender to convert the entire loan at an issue price of CHF 12.50 per share at any time up to the end of the term.

## 5.4 Subscribed capital

| [in CHF] | |
|---|---|
| Subscribed capital on 31.12.2018 | 1 078 670.00 |
| Capital increases during the year under review | 93 710.00 |
| 11 723 800 fully paid for registered shares on 31.12.2019 | 1 172 380.00 |

| | Number of shares | Subscribed capital CHF |
|---|---|---|
| **Figures on 31.12.2017** | **9 107 858** | **910 785.80** |
| Changes in the previous year | 1 678 842 | 167 884.20 |
| **Figures on 31.12.2018** | **10 786 700** | **1 078 670.00** |
| Changes during the year under review | 937 100 | 93 710.00 |
| **Figures on 31.12.2019** | **11 723 800** | **1 172 380.00** |

The shares have a par value of CHF 0.10, each with one voting right, and are entitled to dividend payments.

| | Number of shares | Subscribed capital CHF |
|---|---|---|
| Authorised capital (Article 3d) | 3 494 450 | 349 445.00 |
| **Total** | **3 494 450** | **349 445.00** |
| | | |
| Contingent capital (employee shares Art. 3c) | 2 615 952 | 261 595.20 |

## 5.5 Deferred income

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Deferrals for the financial statement [1] | 30 813 | 37 265 |
| Deferrals for auditing [1] | 45 000 | 30 000 |
| Deferrals for other advice [1] | – | – |
| Deferrals for work not yet performed [2] | – | – |
| Deferrals for outstanding tax payments [4] | 87 310 | 73 490 |
| Deferrals for outstanding invoices [3] | 1 955 742 | 2 643 220 |
| Other current accruals and deferrals [4] | 220 520 | 222 182 |
| **Total** | **2 339 254** | **3 006 157** |

| [in CHF] | [1] Advisory services | [2] Outstanding work | [3] Outstanding invoices | [4] Others | Total deferred income |
|---|---|---|---|---|---|
| **Figures on 31.12.2017** | **52 191** | **216 000** | | **97 456** | **365 646** |
| Estimate of additional provision | 67 265 | | 2 643 220 | 272 392 | **2 982 877** |
| Usage | (52 191) | (216 000) | | (74 176) | **(342 367)** |
| Reversals | | | | | |
| Effects from currency differences | | | | | |
| **Figures on 31.12.2018** | **67 265** | **–** | **2 643 220** | **295 672** | **3 006 157** |
| Estimate of additional provision | 75 813 | | 1 965 689 | 184 586 | |
| Usage | (58 993) | | (2 674 522) | (172 427) | |
| Reversals | (8 272) | | | | |
| Effects from currency differences | | | | | |
| **Figures on 31.12.2019** | **75 813** | **–** | **1 955 742** | **307 830** | **2 339 254** |

## 5.6 Cash and cash equivalents

For the purposes of the consolidated cash flow statement, cash and cash equivalents involve cash balances and credit in bank accounts.

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Cash and cash equivalents and cash banks | 4 196 751 | 2 407 922 |
| Cash holdings (cash in hand) | 812 | 1 321 |
| **Total** | **4 197 563** | **2 409 243** |

## 6. Other information

### 6.1 Pension provisions (benefits for employees after the end of their working relationship)

In the case of defined benefit pension plans, the costs for providing the benefits are determined using the projected unit credit method; an actuarial assessment is performed on each reporting date (most recently on 31 December 2019). Revaluations consisting of actuarial profits and losses, changes arising from the use of the asset ceiling and the yield from the plan assets (excluding interest on the net liability) are directly recognised under Other results and are therefore directly part of the consolidated balance sheet. The revaluations recognised under Other results form part of the retained earnings and are no longer reclassified in the consolidated profit and loss statement. Past service costs are recognised as expenditure if the change to the plan occurs.

The net interest is calculated by multiplying the discount rate by the net liability (pension obligation minus plan assets) or the net asset, which is calculated if the plan assets exceed the pension obligation, at the start of the financial year. The defined benefit costs contain the following elements:

- Service costs (including current service costs, past service costs and profits or losses from the change or reduction to the plan)
- Net interest expenditure or earnings on the net liability or the net asset
- Revaluation of the net liability or the net asset

The Group reports the first two elements in the consolidated profit and loss statement under Administrative expenses (Personnel expenses).

The defined benefit obligation recognised on the consolidated balance sheet represents the current shortfall in the Group's defined benefit pension plans.

Payments for contribution-related pension schemes are recognised as expenditure if the employees have performed the work that entitles them to the contributions.

#### 6.1.1 Legal framework and responsibilities

Employee pension schemes (in Switzerland) must be handled by a pension company that is separate from the employer. Swiss law, which prescribes minimum benefits, applies, as personnel subject to these rules are only employed in Switzerland at the moment.

Occupational benefit schemes for employees in Switzerland to protect against the economic consequences of old age, invalidity and death are provided by "Swiss Life Sammelstiftung 2. Säule". The highest body at this pension institution consists of an equal number of employee and employer representatives.

In line with IAS 19 (IFRS), the pension plan must be classified as "defined benefit". The insurance scheme is defined in the rules of the collective pension foundation, in the affiliation contract and in the pension plan related to this affiliation.

The employer and employee contributions are generally defined as a percentage of the pensionable salary. The old-age pension is calculated from the retirement assets existing at the time when the pension is taken and they are multiplied by the conversion factors set in the rules. The employee has the opportunity of drawing the old-age benefits as a lump sum. The invalidity and spouse pensions are defined as a percentage of the pensionable salary.

The assets are invested by "Swiss Life Sammelstiftung 2. Säule" jointly for all the follow up contracts with the same investment profile. The assets are invested at the Swiss Life additional collective pension foundation as part of the reinsures contract with Swiss Life AG (full value insurance policy).

### 6.1.2 Risks for the employer

The foundations can change their funding system (contributions and future benefits) at any time. If any shortfall exists in the sense of pension law (Art. 44 BVV2) and if other measures are not effective, the foundation may impose consolidation contributions.

### 6.1.3 Special events

Exentis Group AG switched from the Bâloise collective foundation to the Swiss Life collective foundations (plan amendment) during the current reporting period. There are now three plans (two for managers and one for the other employees) valid from 1 January 2020. As a result, the benefits (reduction in the risk contributions and increase in the conversion rates) have changed.

### 6.1.4 Assumptions and methods for the sensitivity analysis

Sensitivity analyses were performed on the most important assumptions used to calculate the liabilities. The discount factor and the assumption of the development of salaries were increased or reduced by set percentage points. Mortality sensitivity was calculated by reducing or increasing mortality by a flat-rate factor, so that life expectancy for most age categories was increased or reduced by about one year.

### 6.1.5 Asset-liability matching

Swiss Life Sammelstiftung 2. Säule has concluded a contract to reinsure the death and invalidity risks of those actively insured with Swiss Life AG. The companies connected to Swiss Life Sammelstiftung 2. Säule and the persons jointly bear the investment risks. The Swiss Life additional collective foundation has concluded a full value insurance policy with Swiss Life AG to cover the insurance and investment risks.

### 6.1.6 Funding arrangements

Contributions in percentage rates of the pensionable salary are collected from employees and the employer to fund the benefits.

#### Statutory provisions

An employee pension scheme must be handled by a pension institution that is separate from the employer. The law prescribes minimum benefits.

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| **Deriving the financial situation on the balance sheet** | | |
| Cash value of the liability on 31.12. | 3 915 863 | 1 193 228 |
| Fair value of the asset on 31.12. | 2 512 432 | 826 036 |
| Liability/(credit) on 31.12. | 1 403 431 | 367 192 |
| Adjustments (asset ceiling) | – | – |
| **Pension provision (net) on 31.12.** | **1 403 431** | **367 192** |

| [in CHF] | 2019 | 2018 |
|---|---|---|
| **Components in the pension expenses** | | |
| Current service costs, reduced by contributions from employees and administrative costs | 202 746 | 121 718 |
| Past service costs | 142 180 | – |
| Interest expenses on pension liabilities | 18 437 | 6 644 |
| Interest on plan assets | -15 125 | -4 894 |
| Administrative expenses | 597 | 417 |
| **Expenses recognised in the profit and loss statement** | **348 835** | **123 885** |
| | | |
| Revaluation of pension plans (actuarial gains/losses on obligation) | 850 793 | 122 418 |
| Profits from plan assets (without interest) | 37 732 | -27 438 |
| **Expenses (earnings) recognised under Other results** | **888 525** | **94 980** |
| **Changes to pension obligation** | | |
| Pension obligation on 1.1. | 1 193 228 | 834 674 |
| Interest expenses on pension obligation | 18 437 | 6 644 |
| Current service costs | 202 746 | 121 718 |
| Contributions by employees | 134 080 | 54 596 |
| Past service costs | 142 180 | |
| Contributions paid in and benefits paid out (net) | 1 373 802 | 52 761 |
| Administrative expenses | 597 | 417 |
| Actuarial profits/(losses) | 850 793 | 122 418 |
| **Pension obligation on 31.12.** | **3 915 863** | **1 193 228** |
| **Changed to the plan assets** | | |
| Plan assets on 1.1. | 826 036 | 604 451 |
| Interest earnings on plan assets | 15 125 | 4 894 |
| Contributions by the employer | 201 121 | 81 896 |
| Contributions by the employees | 134 080 | 54 596 |
| Contributions paid in and benefits paid out | 1 373 802 | 52 761 |
| Profits on plan assets (without interest) | -37 732 | 27 438 |
| **Plan assets on 31.12.** | **2 512 432** | **826 036** |

| [in CHF] | 2019 | 2018 |
|---|---|---|
| **Actuarial assumptions** | | |
| Discount interest rate on 1.1. | 0.90 % | 0.70 % |
| Discount interest rate on 31.12. | 0.30 % | 0.90 % |
| Expected wage increase rate | 1.50 % | 1.50 % |
| Expected future pension increases | 0.00 % | 0.00 % |
| Average life expectancy at age 65 – men (number of years) | 22.26 | 22.26 |
| Average life expectancy at age 65 – women (number of years) | 24.32 | 24.32 |

The average weighted term of the defined benefit obligation on 31 December 2019 was 22.2 years (2018: 19.9 years).

| [in CHF] | -0.50 %/-1 Year | 2019 | +0.50 %/+1 Year |
|---|---|---|---|
| **Sensitivity analysis: cash value of the obligations** | | | |
| Change in life expectancy | 3 857 615 | | 3 974 482 |
| Change in future wage increases | 3 817 532 | 3 915 863 | 4 023 594 |
| Change in the discount interest rate | 4 392 223 | | 3 521 313 |

| [in CHF] | |
|---|---|
| **Sensitivity analysis: expectation of future service costs** | |
| Current estimate of service costs for 2020 | 392 451 |
| Expected service cost in 2020 with a 0.50 % change in the discount interest rate | 332 566 |
| Expected service cost in 2020 with a 0.25 % change in expected interest earnings | 403 933 |

## 6.2 Further information about financial instruments

### 6.2.1 Capital risk management

The Group manages its capital with the aim of ensuring that all the Group companies can operate as a going concern and also maximise the earnings of its shareholders by optimising the relationship between equity and outside capital.

The Group's capital structure consists of net debts and the Group's equity. This consists of the equivalent value of issued shares, the capital reserves and the balance carried forward.

The Group is not subject to any capital requirements imposed from outside.

The net debt ratio on the balance sheet reporting date can be summarised as follows:

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Debts (without deferred tax liabilities) | (8 686 197) | (4 598 461) |
| Cash and cash equivalents | 4 197 563 | 2 409 243 |
| Net debts | (4 488 634) | (2 189 218) |
| Equity | 22 134 778 | 25 783 048 |
| Ratio of net debt to equity | 20.3 % | 8.5 % |

### 6.2.2 Liquidity risk management

Ultimately, the responsibility for liquidity risk management lies with the Board of Directors, which has established an appropriate concept to manage the current, medium-term and long-term funding and liquidity requirements.

#### Funding risk (liquidity risk)

The Company is currently still in the development and set-up phase, which is why the operational cash flows together with the cash flow from investment activities are creating an outflow of cash. The Board of Directors has therefore drawn up and introduced funding to safeguard the ongoing development work. The ability to continue the Company depends on whether it generates the funds required to finance the development costs needed in future and the purchase costs of the production units and whether the development and licence partners can and will meet their obligations. As significant third-party orders are being implemented and ongoing discussions with potential investors are developing in a positive manner, the Board of Directors believes that there is no major threat to the Company's ongoing existence.

### 6.2.3 Market risks

#### Currency risks

Changes to exchange rates can lead to value losses in financial instruments and negative changes in future cash flows from planned transactions. Because of the current focus of the Group's business on Switzerland, the main currency risks exist in the exchange rate between CHF and EUR. The effect of any change in the exchange rate of +/- 10 % is estimated to be approx. +/- CHF 100,000 based on the transactions planned so far and the financial instruments that are available.

#### Interest rate risks

Interest rate risks exist because of potential changes in the market interest rate and can create a change in the fair value for financial instruments with a fixed interest rate and interest payment fluctuations for financial instruments with a variable interest rate. The following table shows that there is no major interest rate risk for the Company at the moment.

### 6.2.4 Default risks

A default risk is the risk of financial losses if a customer or the contractual party to a financial instrument does not meet its contractual obligations. A default risk exists principally in connection with accounts receivable or turnover revenue that has not yet been invoiced. A default risk is mainly influenced by the customer's individual features. The Board of Directors considers the potential involved in future business relations and the underlying business idea (e.g. turnover opportunities if customers purchase production systems).

Because it is establishing new business opportunities, the Group bears a higher default risk and therefore permanently monitors its major customer relations. No securities are demanded for accounts receivable, but production systems are only delivered if full payment is believed to be highly probable.

The following table shows the contractual residual terms of the Group's non-derivative financial liabilities. The table is based on non-discounted cash flows from financial liabilities on the earliest date when the Group could be obliged to make a payment.

| [in CHF] | Weighted average effective interest rate | Less than 1 month | 1-3 months | 3 months up to 1 year | 1-5 years | More than 5 years | Total | Carrying amount |
|---|---|---|---|---|---|---|---|---|
| **31.12.2018** | | | | | | | | |
| Non-interest-bearing | | – | 394 559 | 3 478 805 | | | 3 873 364 | 3 873 364 |
| Finance leasing | | | | | | | | |
| Variable interest-bearing instruments | | | | | | | | |
| Fixed interest-bearing instruments | 1.5 % | – | | | 357 905 | | 357 905 | 357 905 |
| **Total** | | **–** | **394 559** | **3 478 805** | **357 905** | | **4 231 269** | **4 231 269** |
| **31.12.2019** | | | | | | | | |
| Non-interest-bearing | | – | 482 327 | 793 868 | | | 1 276 195 | 1 276 195 |
| Finance leasing | | – | | | | | | |
| Variable interest-bearing instruments | | – | | | | | | |
| Fixed interest-bearing instruments | 3.7 % | – | | | 1 334 763 | | 1 334 763 | 1 334 763 |
| **Total** | | **–** | **482 327** | **793 868** | **1 334 763** | | **2 610 958** | **2 610 958** |

## 6.3 Categories of financial instruments

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| **Assets valued at their amortised purchase costs** | | |
| Cash and cash equivalents | 4 197 563 | 2 409 243 |
| Accounts receivables | 4 444 185 | 8 036 824 |
| Other receivables | 218 304 | 106 735 |
| Other financial assets | 77 880 | 11 004 |
| **Liabilities valued at their amortised purchased costs** | | |
| Accounts payable | 482 327 | 394 559 |
| Other payables | 793 868 | 472 648 |
| Loan liabilities | 1 268 687 | 357 905 |

The fair value of the financial instruments roughly matches their carrying amount. There were no value adjustments or overdue payments on financial receivables.

## 6.4 Business transactions with related companies and persons

Account balances and business transactions between the Company and its subsidiaries, which are related companies, were eliminated during the consolidation process and are not explained in these notes. Details of business transactions between the Group and other related companies and persons are specified below.

Related companies pre-financed expenses to fund the Company's activities on the reporting date and they have accrued to subsequent accounting years in this statement.

| | Sales of goods and services | | Purchase of goods and services | |
|---|---|---|---|---|
| [in CHF] | 2019 | 2018 | 2019 | 2018 |
| Consulting services by related persons | – | – | 1 022 866 | 1 135 071 |
| Contribution of goods by related persons | | | – | – |

The following balances were outstanding at the end of the reporting period:

| | Sales of goods and services | | Purchase of goods and services | |
|---|---|---|---|---|
| [in CHF] | 2019 | 2018 | 2019 | 2018 |
| Outstanding consultancy services by related persons | – | – | – | – |

### Loans to or from related companies and persons

| | Loans to related companies | | Loans from related companies | |
|---|---|---|---|---|
| [in CHF] | 31.12.2019 | 31.12.2018 | 31.12.2019 | 31.12.2018 |
| Shareholders | – | – | – | – |
| Members of the Board of Directors | – | – | – | – |
| **Total** | **–** | **–** | **–** | **–** |

## 6.5 Share-based remuneration

The employee share purchase plan is designed to create long-term incentives for managers, current and future employees to achieve long-term profits for shareholders. Shares are offered to the participants at their par value within the plan and are created by a contingent capital increase. The participant receives the right to the shares over a period of up to 3 years. The shares are managed in a blocked deposit account until they accrue and cannot be sold. The Board of Directors determines those who are entitled to receive the shares and the number of shares assigned.

| [in CHF] | 2019 | 2018 |
|---|---|---|
| Shares issued as part of the employee share purchase plan | 265 400 shares | 40 000 shares |
| Fair value at commitment to the employee share purchase plan (used to determine the personnel expenses, based on the share price paid by third parties with capital increases at the time of commitment) | CHF 6.00/share | CHF 5.40/share |
| Personnel expenses recognised from share-based remuneration | 1 179 973 | 149 185 |

| [in CHF] | 2019 | 2018 |
|---|---|---|
| **Number of all the issued shares without accrual at the start of the period** | **21 111** | **–** |
| Newly issued shares | 265 400 | 40 000 |
| Newly accrued shares | 146 033 | 18 889 |
| **Number of all the issued shares without accrual at the end of the period** | **140 478** | **21 111** |

## 6.6 Leases as a lessee

The Group rents office accommodation, factories and warehouse space. The term of the lease agreements is typically 5 years with the option of extending the leasing agreements after this time. The Group particularly took over new factory space in Stetten during the year under review.

The following tables provides information about leases, in which the Group is the lessee:

| [in CHF] | 2019 |
|---|---|
| Usage rights | |
| Figures on 1 January | – |
| Amount amortised during the financial year | (441 703) |
| Additions to usage rights | 2 834 047 |
| Reductions in usage rights | – |
| **Figures on 31. December** | **2 392 344** |

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| **Amounts recognised in the profit and loss statement** | | |
| Interest expenses for leasing liabilities | (6 286) | |
| Earnings from sub-leasing usage rights, recognised under Other turnover revenue | 84 766 | |
| Expenses for leases involving a low-value asset | (6 482) | |
| Amortisation of usage rights | (441 703) | |
| Operating leases according to IAS 17 | | |
| Leasing expenditure (expenditure for space) | | (142 169) |
| Earnings from sub-leases, recognised under Other turnover revenue | | 7 333 |

| [in CHF] | 31.12.2019 | 31.12.2018 |
|---|---|---|
| **Due date analysis** | | |
| Current due leasing liabilities (12 months) | 435 417 | |
| Due between 1 and 5 years | 1 963 213 | |
| Due later than 5 years | – | |
| **Total rent liability** | **2 398 630** | |

### Extension options

Some property leases contain extension options, which the Group can exercise up to one year before the expiry of the non-terminable term of the contract. The extension options can only be exercised by the Group and not by the lessor. The Group assesses on the appropriate date whether exercising extension options is sufficiently assured and checks this, if any events occur or just before the time when the extension option is about to expire.

The Group estimates that future potential lease payments would lead to a leasing liability of CHF 2 800 000, if the extension options (involving 5 more years of use in each case) are exercised.

## 6.7 Employees

The average number of employees was 24. The following number of employees worked for the Company on the balance sheet reporting date.

| | 31.12.2019 | 31.12.2018 |
|---|---|---|
| Employees | 29 | 18 |
| External advisers/freelancers | 15 | 15 |

The advisers and freelancers called in by the Company from outside do not work primarily for the Company; the details provide the number of persons.

## 6.8 Events after the balance sheet reporting date

The following events occurred after the balance sheet reporting date and should be mentioned:

- The Group is currently involved in a structured process of gaining new investors so as to be able to fund and complete its future growth projects. In this connection, the Company is also working on options to provide improved availability of production units to accompany its ongoing growth process. The Board of Directors is confident that the ongoing discussions with investors can be successfully completed.

- The rapid spread of the COVID 19 virus in 2020 led to a considerable number of infections. The measures adopted by different governments to curb the virus have adversely affected business activities. The Group has adopted a number of measures to minimise the effects of the COVID 19 pandemic on our business activities, such as behaviour rules for the safety and health of our employees (physical distance within the company and, where possible, working from home). It is not yet possible to precisely assess the financial effects on the Exentis Group at this time. The Board of Directors is permanently assessing the situation and does not believe at this time that the virus poses a risk to ongoing business operations.

Stetten, 26 May 2020

Ralf P. Brammer
Chairman of the Board of Directors

David L. Deck
Member of the Board of Directors

# Auditor's Report to the Board of Directors on the consolidated financial statements of Exentis Group AG in Stetten AG

In accordance with your instructions, we have audited the accompanying consolidated financial statements of Exentis Group AG, which comprise the consolidated balance sheet as at 31 December 2019, the consolidated profit and loss statement, the consolidated statement of comprehensive income, the consolidated cash flow statement, the consolidated statement of equity changes and the notes for the year then ended.

## Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of these consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

## Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control system relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the existence and effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the consolidated financial statements for the year ended 31 December 2019 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

Zurich, 26 May 2020
BDO Ltd

**Christoph Tschumi**
Swiss Certified Accountant

**ppa. Sebastian Woschitz**
Swiss Certified Accountant

BDO Ltd, a limited company under Swiss law, incorporated in Zurich, forms part of the international BDO Network of independent member firms.

exentis group

Industrialized
Additive Manufacturing

# Annual Report 2019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