



Welcome to the



RoodMicrotec

**Interim Report
1HY-2022**

**By Webcast
July 21, 2022**

Participants



Martin Sallenhag
CEO

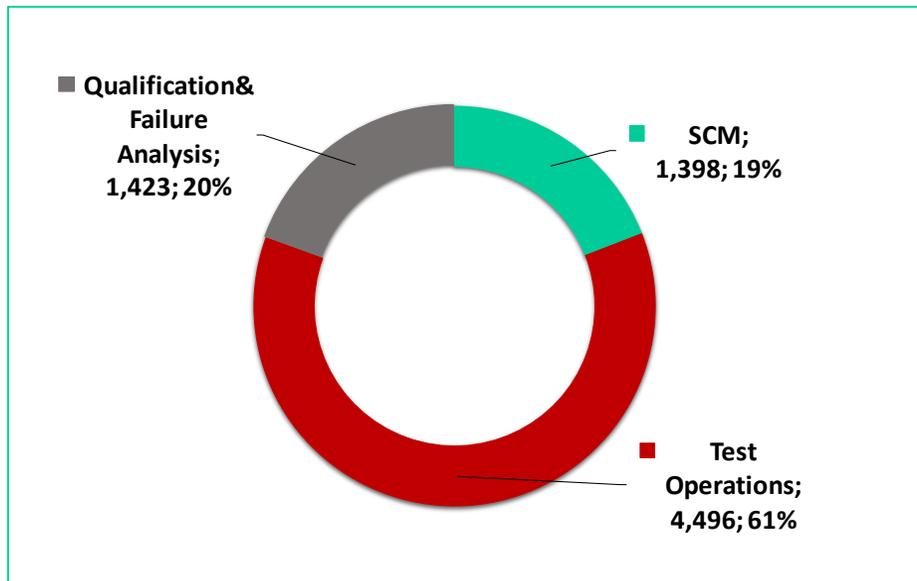


Arvid Ladega
CFO

**Corporate &
operational
update**



1HY-2022 - Performance indicators



Distribution of total income HY1 2022 by Operational Units (EUR x1,000)

- The order book increased considerable compared to December 31, 2021, which is encouraging and indicates that a big part of the forecasted increase of total income in 2022 over last year is now covered with orders.
- The global shortage of semiconductor supplies and logistic challenges may still have an impact on our abilities to deliver according to our plan for the full-year 2022, but we are monitoring it closely to be able to act if necessary

Focus on the fast growing sectors & trends

Long-term semiconductor industry's aggregate annual growth could average from 6 – 8% a year up to 2030.

Source: <https://www.mckinsey.com/industries/semiconductors/our-insights/the-semiconductor-decade-a-trillion-dollar-industry>

Short-term market forecast for 2022 looks bright.

Source: public available information from various analyst firms combined

Warning: the next downturn is coming according to Future Horizons analysts

World-wide economy and general situation uncertain

Trends

>>> Mobility

EV, automated / autonomous driving (ADAS), Radar, lidar, camera

>>> Connectivity / wireless

Industry 4.0, IoT, e-medical, fitness tracker

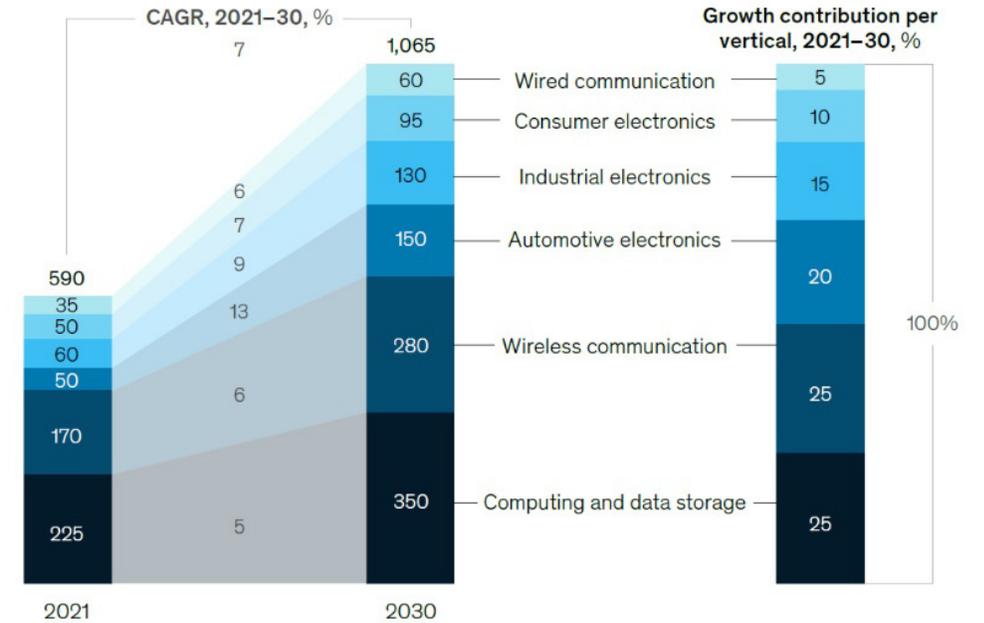
>>> Energy

power generation, energy saving

>>> Data storage

digitalization

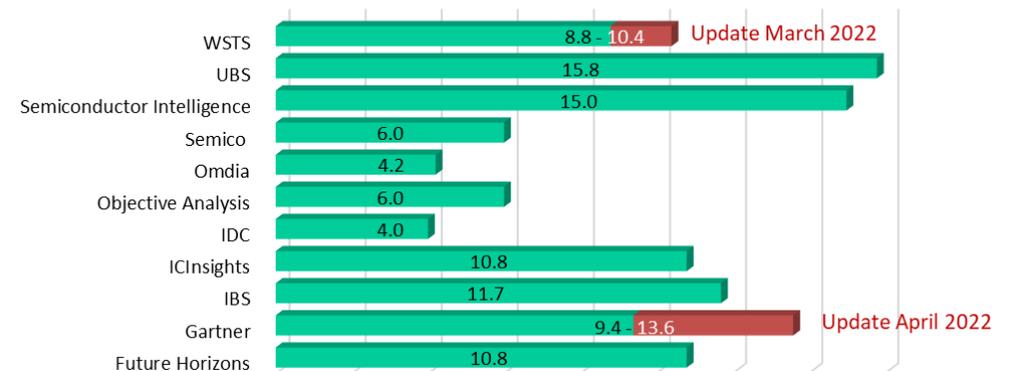
Global semiconductor market value by vertical, indicative, \$ billion



Note: Figures are approximate.

2022 Semiconductor Market Forecasts

Growth in %



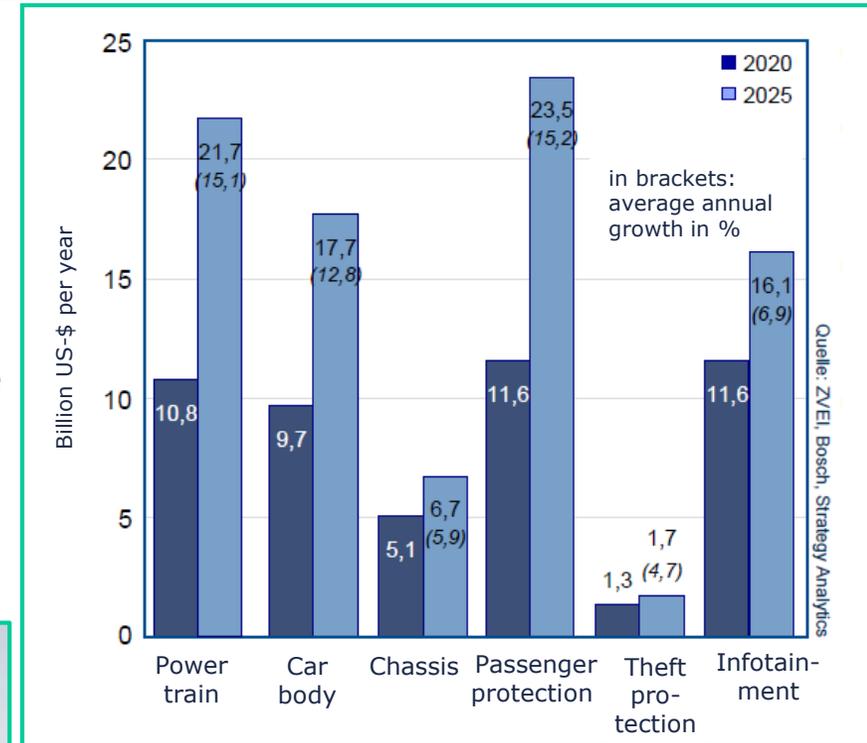
Market outlook – automotive electronics

Demand on automotive semiconductors will grow 11.8% per year until

2025 Source: Worldwide demand on Automotive semiconductors according ZVEI microelectronic trend analysis till 2025 (published June 2021) - <https://www.zvei.org> (Next update June 2022)

- Growth of 4.6% in number of vehicles in the next five years
- Push for electric vehicles and autonomous driving, in parallel decrease of combustion engines (CO2-emission free)
- Increasing demand of electronic devices within the vehicles – in 2021 about 650 Euro semiconductor value per car, growth expectation in the next years to about 1,500 Euro

- Safety / Security
- Advancement of navigation, infotainment, and connectivity systems
- Electrification, 5G networking, autonomous driving cars.

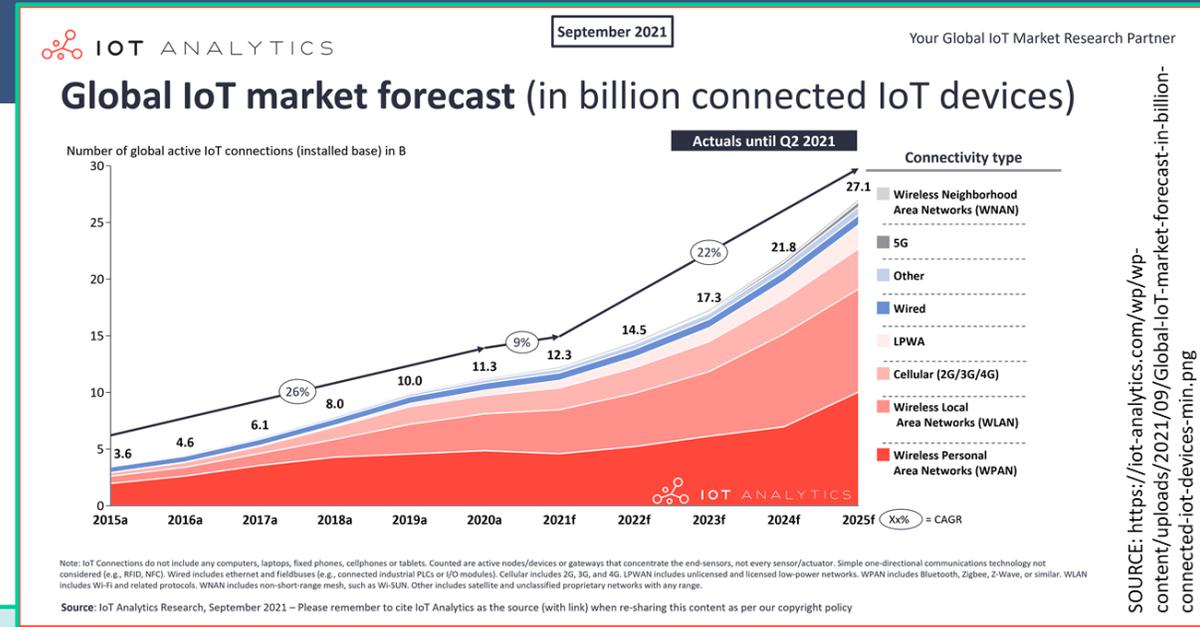


Market outlook – industrial

Industrial / IoT electronics: CAGR 26.4% for 2022 – 2029 expected market value USD 2,465 billion in 2029

Source: <https://www.fortunebusinessinsights.com/press-release/internet-of-things-iot-market-9155>, March 2022

- Growing market for machines
- Significant growth of electronic devices within the systems driven by Industry 4.0, AI, robots, etc.
- Sensor technology
- Safety
- For all kinds of applications, e.g.
 - At home
 - In cars
 - In agriculture
 - In medical fields
 - ... and elsewhere



SOURCE: <https://iot-analytics.com/wp-content/uploads/2021/09/Global-IoT-market-forecast-in-billion-connected-iot-devices-min.png>

Today, IoT has many use cases in Agriculture

Source: <https://www.expresscomputer.in/guest-blogs/smart-farming-how-iot-driven-precision-agriculture-helps-feed-the-globe/68180/>

The Smart Agriculture market is expected to reach \$18.45 Billion in 2022, at a CAGR of 13.8% - Business Intelligence

- DRONES**
Health assessment, irrigation, crop monitoring, crop spraying, planting, and soil and field analysis
- Precision Farming**
With IoT, all data from different sensors is accessible to the agriculturist on their mobile phones
- Soil Management**
Analyze soil status, temperature and humidity
- Livestock Management**
Monitor livestock productivity and health
- Water Management with Automated Irrigation**

1HY-2022 highlights – commercial & operational

Development in the different departments

-  Despite the difficult world-wide logistics and supply situation, the loading in the Test Operations department increased as we continue to see a strong increase in demand for tested parts from many of our customers.
-  In the Qualification & Failure Analysis department the actual start of some of the qualification projects has been delayed due to availability of production parts. The situation is expected to improve in the second half of 2022.
-  Delivery delays due to availability of material for packaging services is seen in the SCM department. The situation is constantly monitored by the SCM team to be able to deliver to our customers according their demands.

Publicly funded projects

-  The APPLAUSE project is on-going and will be finalized during Q4-2022

Turn-key project for a Swiss customer

-  This project, which includes design of an ASIC through a design house partner, packaging of the device in Asia, qualification and test development in-house, is progressing well. Volume production will start early 2023.

Mixed signal automotive ASIC for a premium vehicle

EnSilica chassis control ASIC for premium automotive brand enters mass production

29th June 2022

2.5 million mixed-signal ASICs to be produced in 1st year

OXFORD, United Kingdom – [EnSilica](#) (LON: ENSI), a leading chip maker of mixed signal ASICs (Application Specific Integrated Circuits), has announced the development of a custom chassis-control ASIC, which has entered mass production, and will appear in vehicles later this year.

The device will first be used in a recently launched flagship model from the premium OEM and is anticipated to be then rolled out to additional vehicles in its range. Depending on the model, up to 24 of the chassis-control devices will be used per vehicle.

2.5 million ASIC devices will ship to the luxury carmaker during the next 12 months, with an anticipated production life of seven years.

About the ASIC

The complex mixed-signal ASIC uses a BCD process with high-voltage transistors, and combines extensive monitoring and fault detection circuits (for example open and short pins, over and under voltage detection and frequency monitoring) with duplicate redundancy on key functions.

The part is qualified to AEC-Q100 grade 0, EnSilica's in-house functional safety team developed the ASIC to meet the requirement defined in ISO 26262 to the most demanding Automotive Safety Integrity Level (ASIL-D).

Development of the ASIC began in mid 2018 and was signed off for production earlier this year. Design was undertaken by EnSilica, in close collaboration with leading independent semiconductor testing and qualification firm, [RoodMicrotec N.V.](#)

EnSilica selected RoodMicrotec N.V. to support it in the qualification and testing of this mixed signal automotive ASIC. RoodMicrotec N.V. will undertake final testing of the ASIC in its in Nördlingen, Germany facility.

Ian Lankshear, Chief Executive Officer of EnSilica plc, commented:

“Our design team were able to deliver the first silicon samples in less than 12 months, given the complexity of this mixed signal chip and the added overhead of complying to the ISO 26262 at ASIL-D, this was real achievement. Both RoodMicrotec and EnSilica’s teams worked well together to take this through AEC-Q100 qualification, test program development and then preparing it for automotive quality production sign-off.”

Martin Sallenbag, Chief Executive Officer of RoodMicrotec, added:

“It has been exciting to support EnSilica in bringing this project to production over the last few years. We are now looking forward to supporting production of this device in our Nördlingen facility. It again shows the demand for our unique combined capabilities, in depth experience and excellent track record in bringing automotive products to the market for our valued customers.”

1HY-2022 highlights – commercial & operational

Personnel

-  The number of full-time employees (FTE) in the Company at the end of the period slightly increased to 92.
-  The average number of full-time employees during the period was 91 compared to 86 in the first half of 2021.
-  No development expenditures capitalized in the first half-year of 2022 (HY1 2021: EUR 93,000).

Services according the technology roadmap

-  High frequency test solutions are being developed for our demanding customers based on this technology and their demand for production test.
-  The first projects to qualify high power electronics according AQG324 have been started in the Qualification & Failure Analysis department. This has been added to handle high power devices aimed for battery management and control.

The COVID-19 pandemic situation

-  COVID-19 is still influencing the way business is done around the globe as many face-to-face meetings have been changed to virtual meetings.
-  We have however started to meet with our valued customers face-to-face again to further build the relationships.
-  Both operational locations have been fully operational through the whole pandemic.
-  We have delivered all projects on time and to the right location, which was greatly appreciated by all our customers.

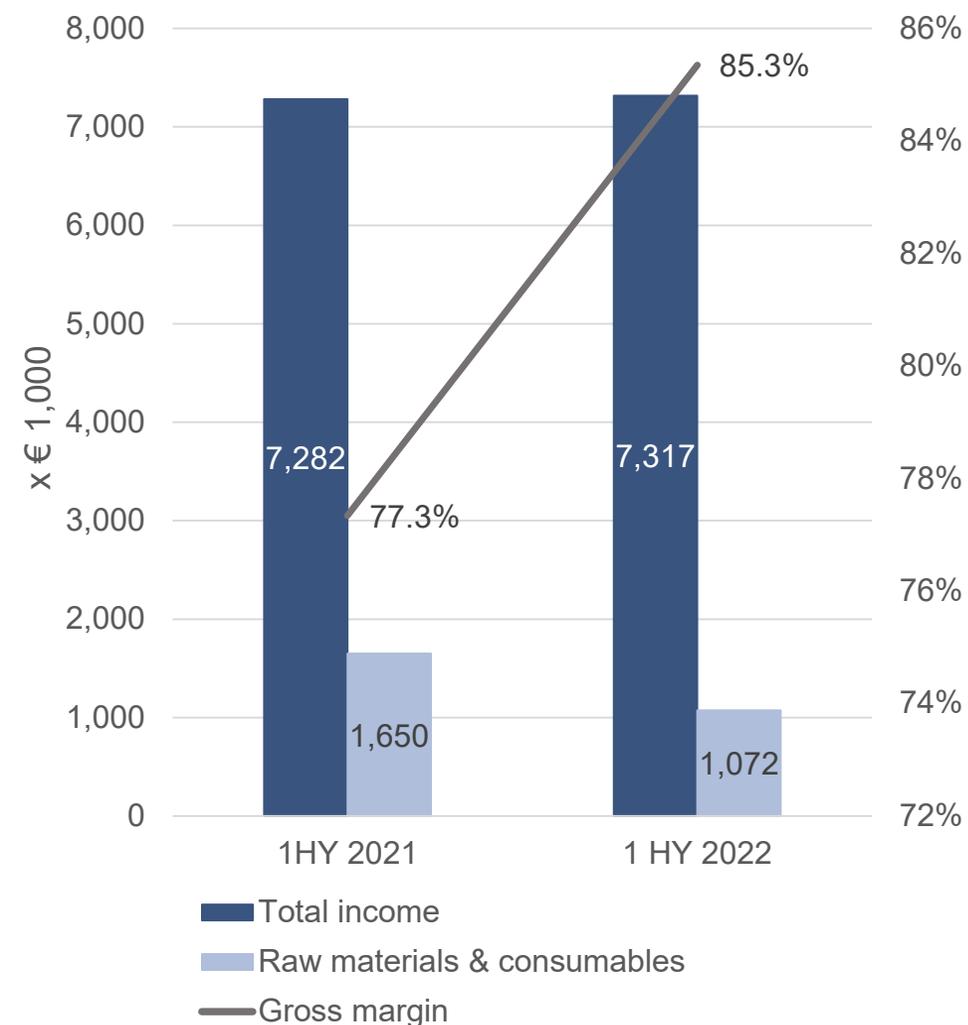


Financials & outlook



Consolidated statement of profit or loss & gross margin

(x EUR 1,000)	Six months ended June 30,	
	2022 (unaudited)	2021 (unaudited)
Net sales	7,281	7,076
Other income	36	206
Total income	7,317	7,282
Raw materials and consumables	-1,072	-1,650
Personnel expenses	-3,616	-3,163
Other expenses, other than depreciation and amortization	-1,189	-1,152
EBITDA	1,440	1,317
Depreciation and amortization	-716	-772
Result from operating activities (EBIT)	724	545
Financial expenses	-88	-87
Profit before taxes	636	458
Taxes	8	-21
Net profit	644	437

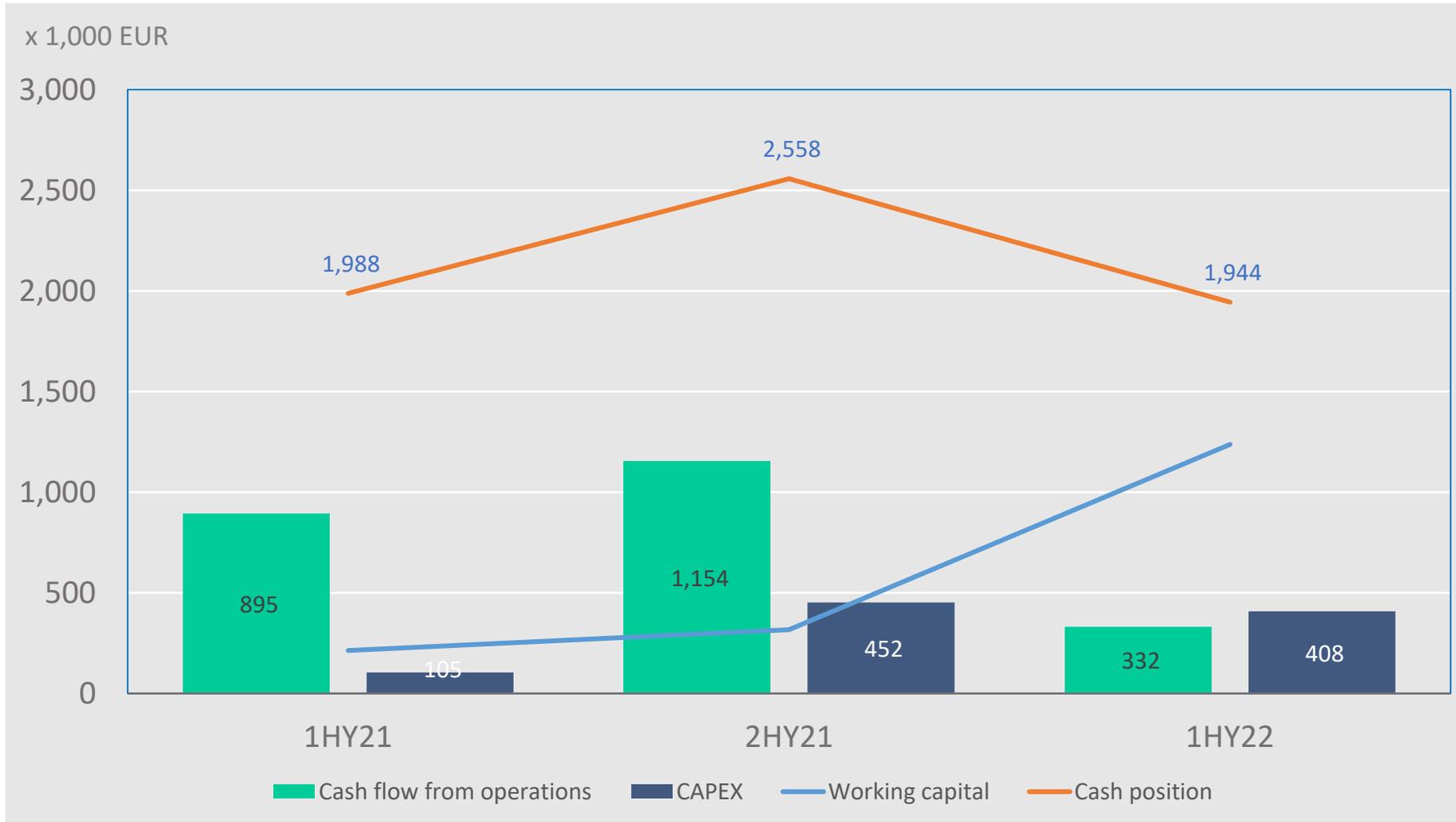


Statement of financial position

(x EUR 1,000)	June 30, 2022 (unaudited)	December 31, 2021	June 30, 2021 (unaudited)
Assets			
Property, plant and	5,577	5,688	5,769
Right-of-use assets	419	458	591
Intangible assets	2,088	2,149	2,274
Deferred tax balances	1,984	1,976	1,615
Non-current assets	10,068	10,271	10,249
Inventories	103	98	71
Contract assets	469	341	317
Trade and other receivables	2,172	1,727	2,054
Cash and cash equivalents	1,944	2,558	1,988
Current assets	4,688	4,724	3,296
Total assets	14,756	14,995	14,679

(x EUR 1,000)	June 30, 2022 (unaudited)	December 31, 2021	June 30, 2021 (unaudited)
Equity and liabilities			
Issued share capital	8,259	8,259	8,258
Share premium	20,725	20,725	20,743
Revaluation reserve	1,806	1,853	1,939
Other reserve	120	120	—
Retained earnings	-27,106	-27,868	-29,118
Equity, attributable to equity holders of the parent	3,804	3,089	1,822
Non-controlling interests	1,994	2,494	2,494
Total equity	5,798	5,583	4,316
Loans and borrowings	2,497	2,470	2,575
Lease liabilities	169	220	335
Defined benefit obligation	4,439	4,553	4,901
Provisions	60	78	63
Deferred tax liability	15	—	—
Non-current liabilities	7,199	7,321	7,874
Lease liabilities	253	242	261
Trade and other payables	1,446	1,824	2,228
Income tax payable	60	25	—
Current liabilities	1,759	2,091	2,489
Total equity and liabilities	14,756	14,995	14,679

Liquidity position



Outlook

RoodMicrotec expects the total income in 2022 to be in the range of EUR 15.0 million to EUR 15.6 million with a positive result before tax. The current situation in the world regarding lead-times for wafers and packaging as well as shipment delays may impact the ability to achieve the expected total income. The war in Ukraine could also have an impact on the business but in the short term we don't see any significant impacts.

RoodMicrotec is keeping a close eye on the situation and is doing everything possible to mitigate any impact.

Questions

**Thank you for
your
participation
and your
support!**

Stay healthy!



RoodMicrotec N.V.
Zutphenseweg 29 D1
7418 AH Deventer
The Netherlands

Phone: +31 (0)570-745623
Email: investor-relations@roodmicrotec.com
Web: www.roodmicrotec.com