

DALAGE

paragon_®

TIM REPORT

GROUP

"paragon's revenues increased to EUR 122.0m"

"Cooperation and supply agreement with Clarios closed"

"Debt reduced to EUR 49.0m"



paragon in a Nutshell

>17%

of 840 employees in R&D

85%

Single-Source

Automotive Tier1-Independent from type of drive!

Market Leader

>300 Products in

>220 Vehicle Types

Every

7th

vehicle is equipped with paragon technology

Globally

>150m

Air Quality
Sensors

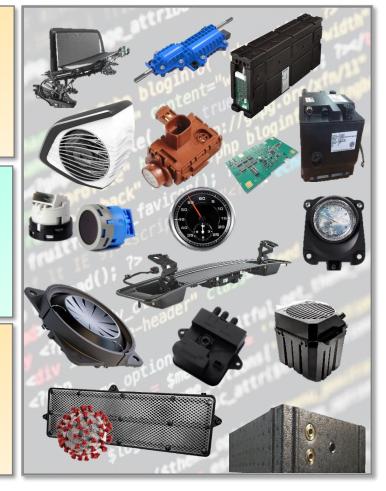
>35yrs Experience founded 1988 >30

OEMs served

25
Countries
with customers

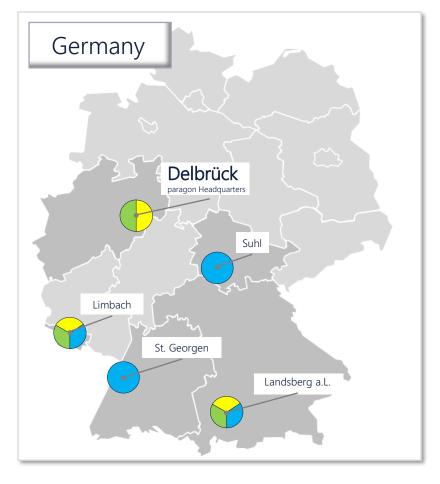
>10% CAGR

(2016-2022)



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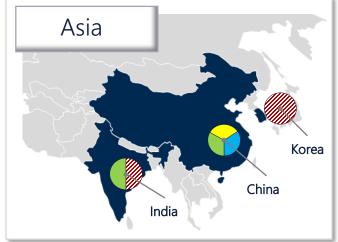
Global Footprint





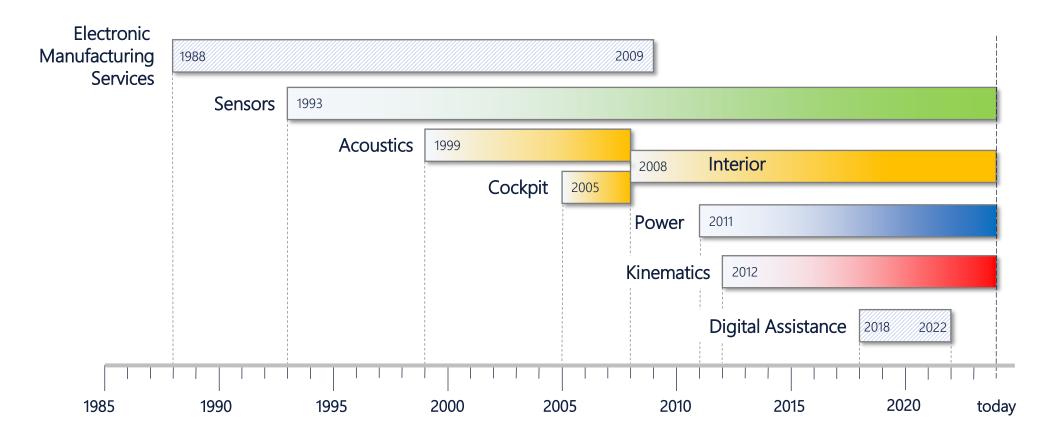








History of paragon



Since more than 35 Years, paragon has build-up an Automotive Tier 1 with Propriety Products

PACAGON®

Product Portfolio Today - Overview





Sensors 26%*)



Interior 33%^{*)}



Kinematics 36%*)



Power 5%^{*)}

In-Cabin Wellbeing

CO₂-Reduction

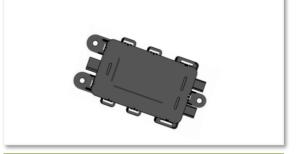


Product Portfolio Today - Sensors









Air Quality Sensor

Automatic control of the vehicle recirculation flap

Reduction of dangerous emissions inside the cabin

Advanced technology for detection of toxic gases and unpleasant smell

High-sophisticated SW-algorithms for detection of special traffic situations

Over 150 million pcs. produced

DUSTDETECT

Measurement of particulate matter outside and in-cabin

Exterior and interior installation

Laser sensor with optical particle counting

Size discrimination PM1, PM2.5 and PM10

DUSTPROTECT

High-voltage plasma filter cleans air inside vehicle's cabin by filtering particles and viruses

Much better than state of the art filtration systems

Saving space, energy, waste and costs in comparison to HEPA

Constant efficiency over lifetime

Air Quality Improver

Fresh air effect by artificial ionization

Enhancing of well-being of vehicle passengers

Fine dusts, gases and smells are bound by negative ions

Reduction of germs and bacteria in vehicle interior through physical air treatment

World market leader for In-Cabin Air-Quality



Product Portfolio Today - Interior









Loudspeakers

Broad product spectrum incl. sound systems and signal processing

Tweeters, midranges, woofers, subwoofers, headrest and ultimate speakers

Special solutions like exciters, air motion transformers, high-temperature exhaust speakers, external speakers for e-vehicles

Small to high volumes, entry to award-winning high-end levels

White label branding possible (e.g. B&O, Bespoke Audio, ETON)

Microphones

Multiple use cases such as voice assistance, vehicle noise control, handsfree and in-car communication, road and wind noise cancellation, external microphones for autonomous driving

Clever combination of acoustical mechanics and adaptive electronic filter

Very low wind sensitivity by active and passive elements

Analogue and digital interfaces

Cutting edge tech and efficient
manufacturing
In-Cabin Wellbeing

Instruments

Market leader with very well-known chronometers, analogue clocks, compasses and control applications

The choice for premium and luxury cars

Many more analogue and hybrid instruments for any use case

Own design team to meet any customer requirement

Inhouse stepper motor and plastic parts development and mass production

Wireless Charging

High efficiency wireless charger based on Qi-standard

Patented active cooling system

Self diagnostic

Member of Wireless Power Consortium (WPC) since 2013



Product Portfolio Today - Kinematics









Spoilers

Electro-mechanical systems for high variety of vehicles

Application in sportscars, hatch, station cars, SUVs, e-vehicles and trucks

High innovation and realization competence

Range extension for e-vehicle by reduction of air resistance

Actuators

Drive systems for active spoilers and seat adjustment

Integrated electronics and sensors for advanced vehicle architecture

Multi-stage gear reduction with powerful DC-motors

Fast operation of heavy loads

Folding Tables

Special folding system to minimize space

Various electronic interfaces (wireless charging, USB-C, displays and keyboards

Lightweight through use of magnesium and aluminum

Resists head impact

Meets various crash requirements

Special Kinematics

Tailor-made solutions with costeffective development

Electrical lowering mechanism of hood ornament

Anti-theft and pedestrian crash protection

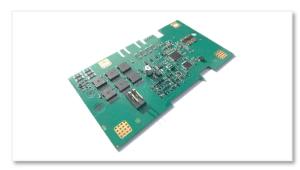
Wind deflectors for convertible cars and motorcycles

Easy operation with 3D-movement

High-sophisticated Kinematics for Exterior and Interior

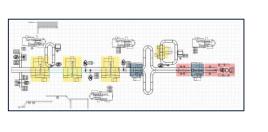


Product Portfolio Today - Power









Battery Management Systems

Huge background with ECU projects

Predictive algorithms

Intelligent balancing

SW-based safety concept incl. topedge SOC/SOH-calculation

New quiescent current concept (deep-sleep and transport modes for extended shelf life)

Traction Batteries

Lightweight concepts

Use of Flow-Shape-Design technology

Embedded battery safety

"Lord of the cells" battery management

Flow-Shape-Design

Expanded foam as case for battery systems and modules

Substitution of conventional metal housing

Less weight/space/costs

Absorption of shocks/vibration/temperature

Licenses available

Consulting

Technology transfer in regards of Flow-Shape-Design

Projecting and realization of production lines

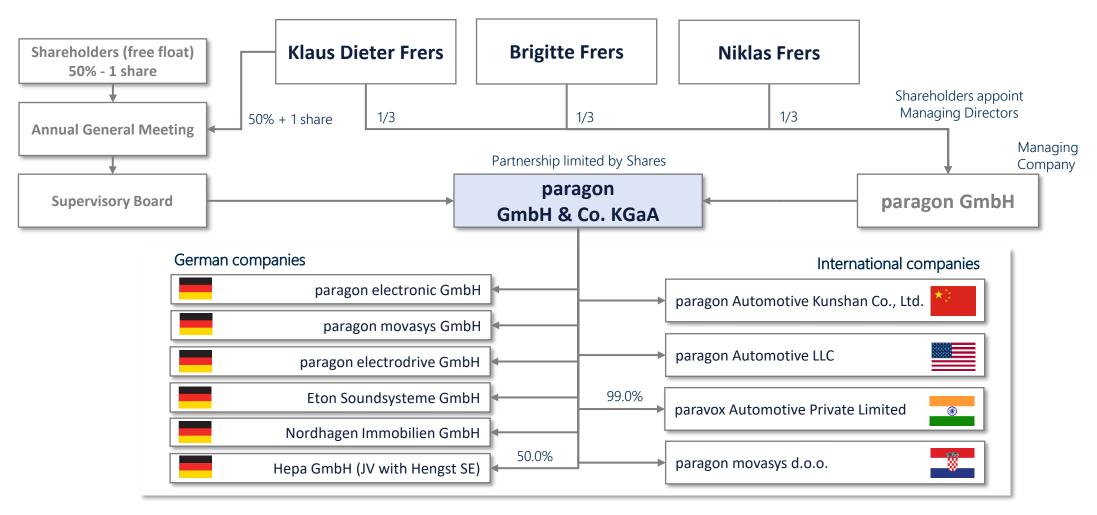
In-house production of test equipment

Turn-key projects

Game-Changing Battery Technologies

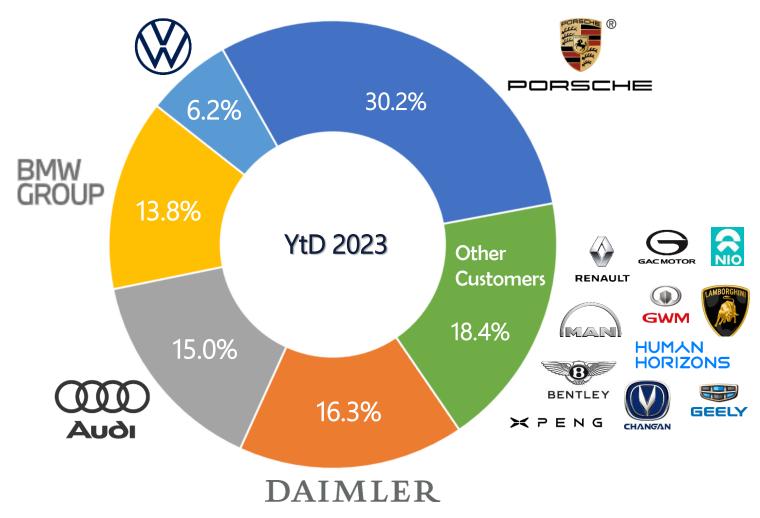


Corporate Organization ensures Stability





paragon's Premium Automotive Customers YTD 2023





Sustainability is Company Goal

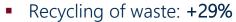
- History:
- 2018-2022: Non-financial report according to DNK
- 2022/2023: Non-financial report according to GRI (draft)
- 2024ff.: Integrated report according to CSRD



Delbrück - Headquarters



- All of our locations are certified according to the **Environmental Management System DIN EN ISO 14001**
- Achievements from January 2021 to December 2022:



- Usage of energy for heating per m²: ./. 10%
- Fuel consumption of company cars: ./. 21%
- Direct CO₂-emissions from energy consumption
 - all plants globally: ./.97%
 - all plants in Germany: ./. 100%







St. Georgen



Limbach-Kirkel



Landsberg



Landsberg



Kunshan



Oroslavie



German locations



PLANET



Q3/2023: Financial Highlights at a Glance





Asset Deal with Clarios

- Closing on September 30, 2023
- Agreement includes sale of different production lines and transfer of a group of engineers and workers to Clarios
- paragon will remain manufacturer of battery management systems for Clarios
- Clarios licenses paragon's Flow-Shape-Design-Technology (FSD) for non-traction batteries
- paragon keeps the industrial property rights for FSD in regards of traction batteries







P&L Development paragon – First nine Months

Income Statement in MEUR	9m/2022	9m/2023
Revenues	118,6	122,0
Other own work capitalized	4,5	1,7
Change of finished goods	2,4	0,6
Other operating income	2,6	9,7
Total operating performance	128,1	134,0
Costs of materials	-67,4	-68,4
Personnel expenses	-31,4	-34,0
Other operating expenses	-20,8	-15,3
EBITDA	8,5	16,3
Depreciation & amortization	-9,7	-10,8
EBIT	-1,2	5,5
EBITDA paragon semvox	3,5	7,5
Group EBITDA	12,0	23,8

- P&L according to IFRS 5 (top line does not include revenues of paragon semvox GmbH)
- Revenues increased to EUR 122.0m in first nine months
- Reduction of own work capitalized due to higher reimbursements of development costs from customers
- Other operating income includes profit impact of asset deal with Clarios
- EBITDA:

Continued operations: EUR 16.3m (+90% vs. 9m/22)

paragon semvox: EUR 7.5mGroup level: EUR 23.8m

- □ Depreciation & amortization include
 - EUR 0.6m PPA paragon movasys
 - EUR 4.5m IAS 38 amortization



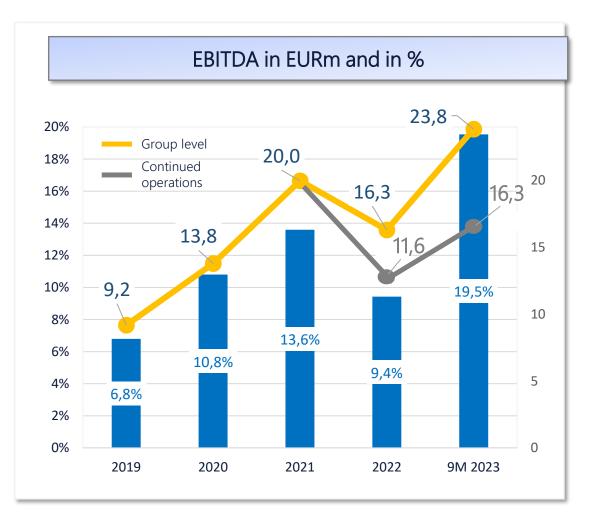
P&L Development paragon – Q3/2023

Income Statement in MEUR	Q3/2022	Q3/2023
Revenues	37,9	35,4
Other own work capitalized	1,4	1,4
Change of finished goods	-0,4	1,9
Other operating income	0,8	6,9
Total operating performance	39,7	45,6
Costs of materials	-20,9	-21,5
Personnel expenses	-10,2	-11,2
Other operating expenses	-6,5	-4,7
EBITDA	2,1	8,2
Depreciation & amortization	-3,4	-3,9
EBIT	-1,3	4,3
EBITDA paragon semvox	1,0	
Group EBITDA	2,9	8,2

- P&L according to IFRS 5 (top line does not include revenues of paragon semvox GmbH)
- Revenues slightly decreased due to extended plant vacations at car manufacturer and the scheduled discontinuation of a sensor product in summer 2023
- Other operating income includes profit impact of asset deal with Clarios
- **EBITDA**:
 - ☐ Continued operations: EUR 8.2m (+288% vs. Q3/22)
- ☐ Depreciation & amortization include
 - EUR 0.2m PPA paragon movasys
 - EUR 1.7m IAS 38 amortization



P&L Development paragon – First nine Months



EBITDA first nine months 2023:

Continued operations: EUR 16.3m (+90% vs. 9m/22)

paragon semvox: EUR 7.5mGroup level: EUR 23.8m

■ EBITDA full year 2022:

Continued operations: EUR 11.6m
 paragon semvox: EUR 4.7m
 Group level: EUR 16.3m

9m 2023: Achieved EBITDA of continued operations amounts to 100% of FY 2022 EBITDA



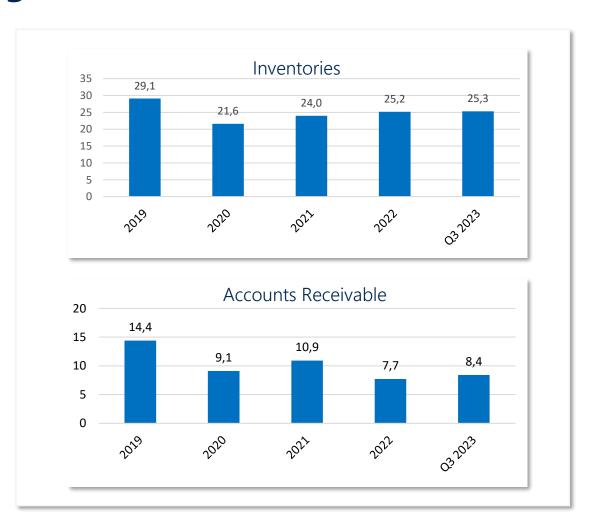
Focus on Working Capital Management

Inventories

- Slight increase to EUR 25.3m compared to December 2022 due to seasonality
- Further inventory management activities ongoing

_ Accounts Receivable

→ EUR 0.7m or + 9.1% compared to December 2022 due to outstanding onetime payments from customers and increase of receivables in China with longer payment terms

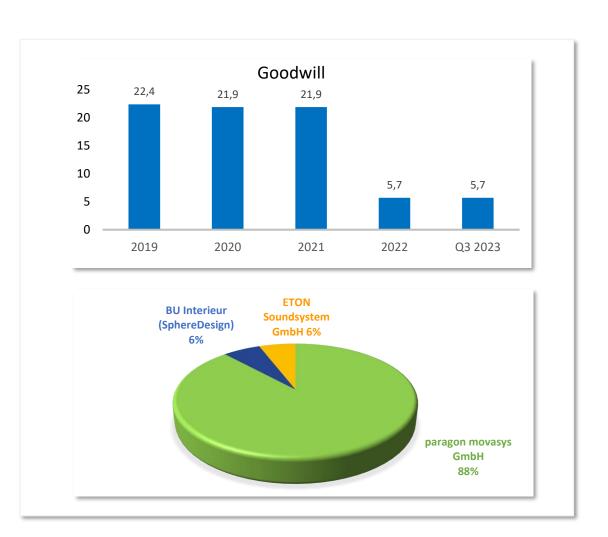




Goodwill reduced

Inventories

- Goodwill amounts to EUR 5.7m.
- ☐ Goodwill related to paragon semvox GmbH (EUR 16.1m) (73.5%) sold to CARIAD SE
- Reduction of Goodwill by appr. ¾ (EUR 16.1m)
- EUR 5.1m relates to paragon movasys GmbH (largest BU)
- EUR 0.3m each are attributable to SphereDesign GmbH and ETON Soundsysteme GmbH

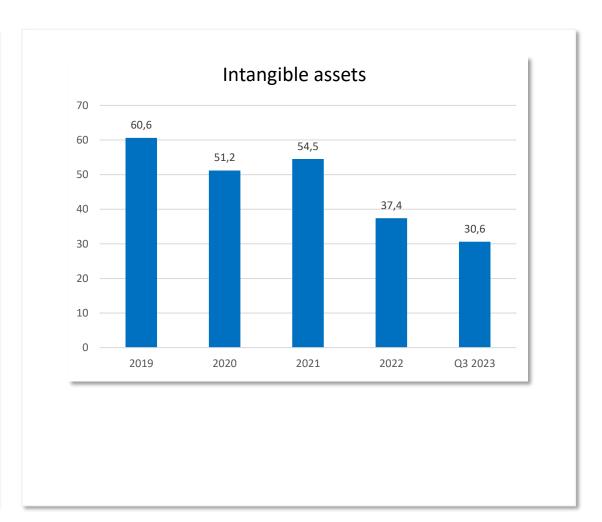




Intangible Assets further decreased

_ Intangible assets

- 2022: Decrease of EUR 13.7m due to sale of paragon semvox to CARIAD
- 2023: Decrease of EUR 6.8m in last nine months due to planned amortization as well as the asset deal with Clarios
- ☐ Thereof EUR 3.1m intangible assets acquired in business acquisitions, which are amortized on a scheduled basis
- Thereof EUR 18.8m IAS 38 projects, which are amortized on a scheduled basis





Director's Dealing

- _ September 29, 2023: Klaus Dieter Frers (Managing Director of paragon GmbH) bought back 1,355,000 paragon-shares from ElectricBrands AG for the same price (€ 4.53 per share), ElectricBrands AG acquired the package from him in November 2022 (Total purchase price: € 6,138,150)
- _ Klaus Dieter Frers, again, now has 50%+1 total voting rights (before: 20.06%)
- _ The German Federal Financial Supervisory Authority (BaFin) has exempted him from the obligations to publish a mandatory offer *)

*) Pursuant to section 35 (1) sentence 1 WpÜG and pursuant to Section 35 (2) Sentence 1 in conjunction with Section 14 (2) sentence 1 WpÜG and Section 37 (1) Var. 4 of the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz, WpÜG)



Actual Debt Structure as of September 30, 2023

Long term loans for two own buildings: EUR 6.9m (2 German banks)

_ Long term loans for machines: EUR 0.8m (2 German banks)

_ Bond 2017-2027: EUR 45.2m

_ Usage of overdraft credit facilities and accrued interests: EUR 4.1m (3 German banks and 1 Chinese bank)

Total debt ./. cash: *) EUR 49.0m

*) According to the definition in Section 3 bond term WKN A2GSB8 (loans plus bonds less cash and cash equivalents divided by EBITDA)



EUR-Bond: Buy-back Program

Nominal-Volume: EUR 20.2m

_ Background: Actual terms and conditions modified in the course of prolongation

Usage of EUR 25.0m out of the proceeds from semvox-sale ./. EUR 4.8m already repurchased

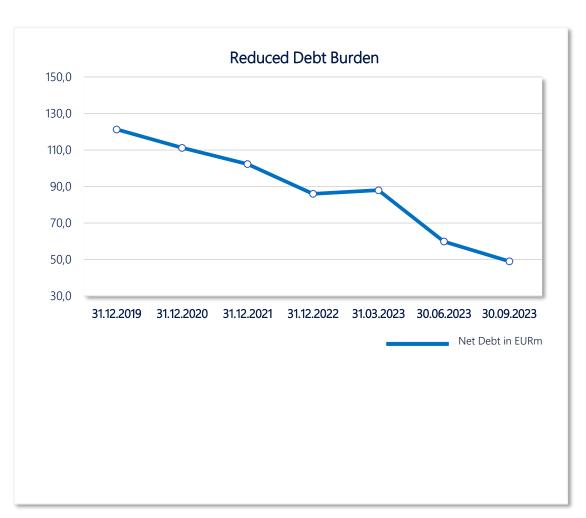
_ Activities: Program to buy back bonds from the market until July 5, 2025

- ☐ In compliance with the Market Abuse Regulation (MAR)
- Less than 25% of the average daily trading volume are allowed to buy from the market to avoid market manipulation
- ☐ In the first week of the program paragon bought a nominal volume of 28,000 EUR



Successfull Strategy to Reduce Debt Burden

- Net debt reduced from EUR 121.3m end of 2019 by nearly 60% to EUR 49.0m end of Q3/2023
- This is a reduction of EUR 72.3m in the last three years and nine months
 Average monthly reduction in the last 45 months was EUR 1.6m
- paragon considers a range of EUR 50m to 60m as appropriate for the current set up of the group





Improved Net Leverage Ratio will reduce Interest Costs

- 1 Net Leverage Ratio" improved from 13.2 to 1.7 in the last 45 months due to reduced debt level and improved profitability
- Bond terms define "Net Debt" as bank loans plus bonds plus accrued interests minus cash

Interest rate of bond depends on net leverage ratio; rate <2.5 will lead to an interest rate of 7.5% from Jan 5, 2024, on

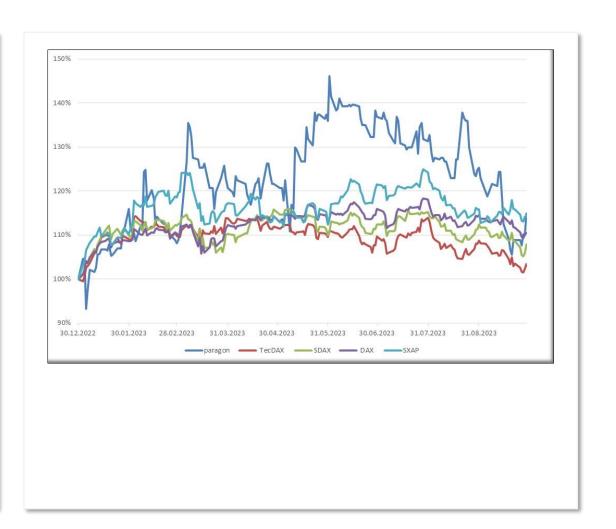




Share Performance

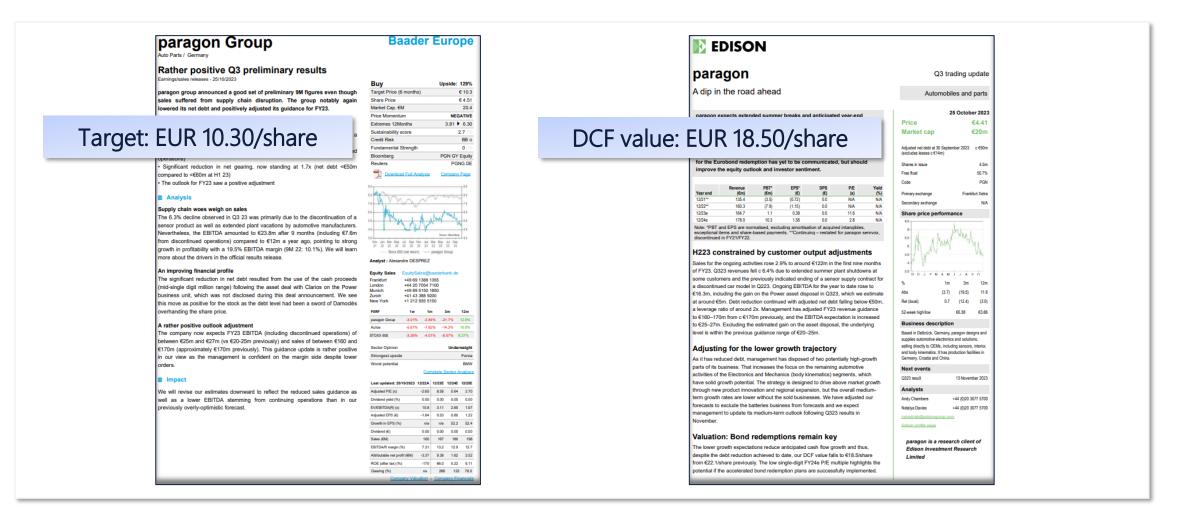
– Highlights:

- Closing price December 31, 2022: 4.31 EUR
- ☐ Closing price March 31, 2023: 5.20 EUR
- ☐ Peak (June 1, 2023): 6.30 EUR
- Closing price June 30, 2023: 5.90 EUR
- ☐ Closing price September 30, 2023: 4.95 EUR
- ☐ Market capitalization (Sept. 30): EUR 22.4m
- +14.8% in the first nine months 2023





Actual Research Reports show High Upside Potential





Forecast for 2023 adjusted

Revenues 2023e

Orig.: approx. EUR 170m

New: EUR 160 to 170m

Noticeable increase in demand expected in Q2/Q3 2024

EBITDA 2023e

Orig.: EUR 20 to 25m

New: EUR 25 to 27m

(at group level)



paragon's Way to Growth: Where are we going?

- _ First, paragon's focus was the **premium high-end car** market in Europe
- _ Its innovative products are finding applications in **higher-volume premium models** following advanced vehicle standards in regards of:
 - Air Quality
 - Energy efficiency
 - Increased demand for comfort or convenience
- Usage of paragon's products in more models and through more OEMs driving growth
- _ Same applies to **regional expansion**, e.g. the rapid growth of Chinese OEMs



... to understand paragon's road to the next level, it's good, first to understand paragon



paragon's Standard Method to generate new Products

_ Starting Questions:

- Which products from other industrial sectors (like building technology and consumer electronics) would make sense using them in a vehicle?
- Where are new legislations that need new products?
- Followed by analyzing established principles and technologies incl. patent screening
- We seek to transfer such technologies into the car by simplifying and making the product much more robust
- We develop own technologies and modifications to ensure the function in a vehicle
 - Examples: Air Ionizing, Particle Matter Sensor, Electrical Filter, High-Fidelity Loudspeakers...

Criteria:

- Scalable products (usage across different carlines and OEM-agnostic)
- High quantities (through standardization)
- High automation (labor expenses per product <10%)
- Fast occupation of new markets (pioneer profit)
- Establishing high market entry barriers for competitors

Goal:

Market Leadership



Strategy since 2011

- (1) To accelerate growth, paragon has the ambition to take over a larger portion of the automotive value chain
- (2) Since 2011, paragon build up the system business along the identified megatrends like...
 - Electro-Mobility → Business Unit Power
 - Energy saving by improving aero dynamics
 → Business Unit Kinematics
- (3) Since 2021, the megatrends are melting together:
 - Adaptive spoilers for range extension of electrical cars

- (1) In the past, paragon successfully has developed topics and sold after the growth phase:
 - 2021: Voltabox (High voltage Lithium-Ion batteries for industrial use)
 - 2022: semvox (Al for infotainment of vehicles)
 - 2023: Power (Non-traction batteries)
- (2) When selling, these activities were still cashflownegative but always...
 - Proceeds of sale > Book value
 - Sale effected in...
 - Debt reduction due to the proceeds
 - Book profits
 - Relief for P&L and cashflow



Core Achievements

Behind every finish line a new challenge is waiting – we are on it and very well prepared!

- ☐ Mastering **60+ technologies** in R&D and production
- Long lasting **OEM-relationships** as Tier 1-supplier
- All product groups **leading the market** in Europe or world-wide
- ☐ High level of **booked business**
- Well-filled product pipeline
- We know high complexity / high volume
- We manage **challenging demands** in regards of functionality, cyber-security, maximal availability and reliability



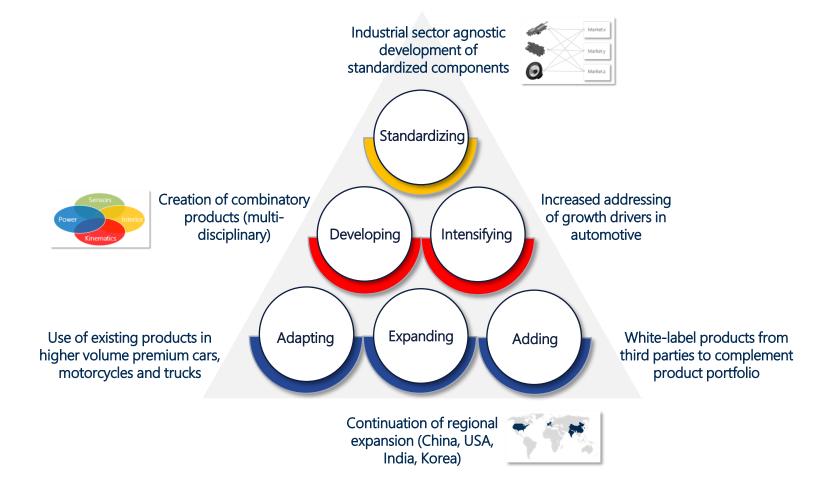
Megatrends are changing the world

- _ Megatrends are changing the world slowly, but fundamentally and in the long term
- paragon's product portfolio supports 8 of current 12 megatrends





Strategy for paragon's ongoing Growth





Thank you for your attention.

Please do not hesitate to directly contact Dr. Martin Esser or Klaus Frers in case of further questions.

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