

TIMELINE

9:00	Supercycle 2.0	Armin Papperger
10:10	Coffee break	
10:30	Financials of the supercycle	Helmut Merch
11:00	Q & A	
12:00	Lunch	
13:00	Plant tour	

WIFI Capital-Market-Day-Vienna
PW CMD2022!

Supercycle 2.0 – Rheinmetall's responsibility in a changing world

Armin Papperger, CEO
November 2022

Taking Rheinmetall to the next level

AGENDA

STRATEGY RECAP **01**

GROWTH FACTORS **02**

03 INORGANIC GROWTH

04 MID-TERM GUIDANCE

05 INNOVATIONS

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Strategy Recap

Our strategic vision is becoming a reality



TRANSFORMATION

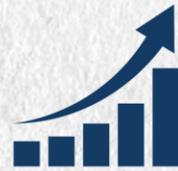


DIVISIONAL STRUCTURE WELL IMPLEMENTED

- Reporting structures simplified
- Cost savings realized



GROWTH



ACCELERATED GROWTH IN ALL END MARKETS

- Special defence cycle
- Volume recovery of mobility markets
- Successful market entry



PORTFOLIO



ACTIVE PORTFOLIO MANAGEMENT

- First milestone for Pistons achieved
- Focused M&A
- Monitoring ongoing



TECHNOLOGY



TECHNOLOGY FOCUS DEFINED

- Automation
- Sensors & Connectivity
- New mobility



SUSTAINABILITY



ESG INTEGRAL PART OF THE CORPORATE STRATEGY

- Commitment
- Action
- Deliverance

Strategy Recap: **Sustainability**

Solid ratings confirm our chosen path and we are determined to improve further

Targets

- Integration of sustainability in our strategy and actions
- Carbon neutrality aspired until 2035
- No development, production and distribution of controversial weapons

Measures

- Sustainability organizationally established*
- Continuous improvement of sustainability data
- Remuneration policy includes sustainability criteria**

Ratings

MSCI ESG AA
only 24% of 33 companies
score AA or better

ISS ESG C
only 15% of 65 companies
in A&D score C or better

S&P Global 34
Industrial conglomerates;
Industry average 29

Sustainalytics 28.3
Peer group A&D Ø 37.9;
Industry rank 10/94

Refinitiv 80/100
Industry rank 6/114

* On supervisory board and corporate level
** On board and management levels

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**The world as we know it is changing dramatically –
with implications for virtually every aspect of our business**

World economy is being restructured

A new world (dis)order is emerging

The battle for resources intensifies.

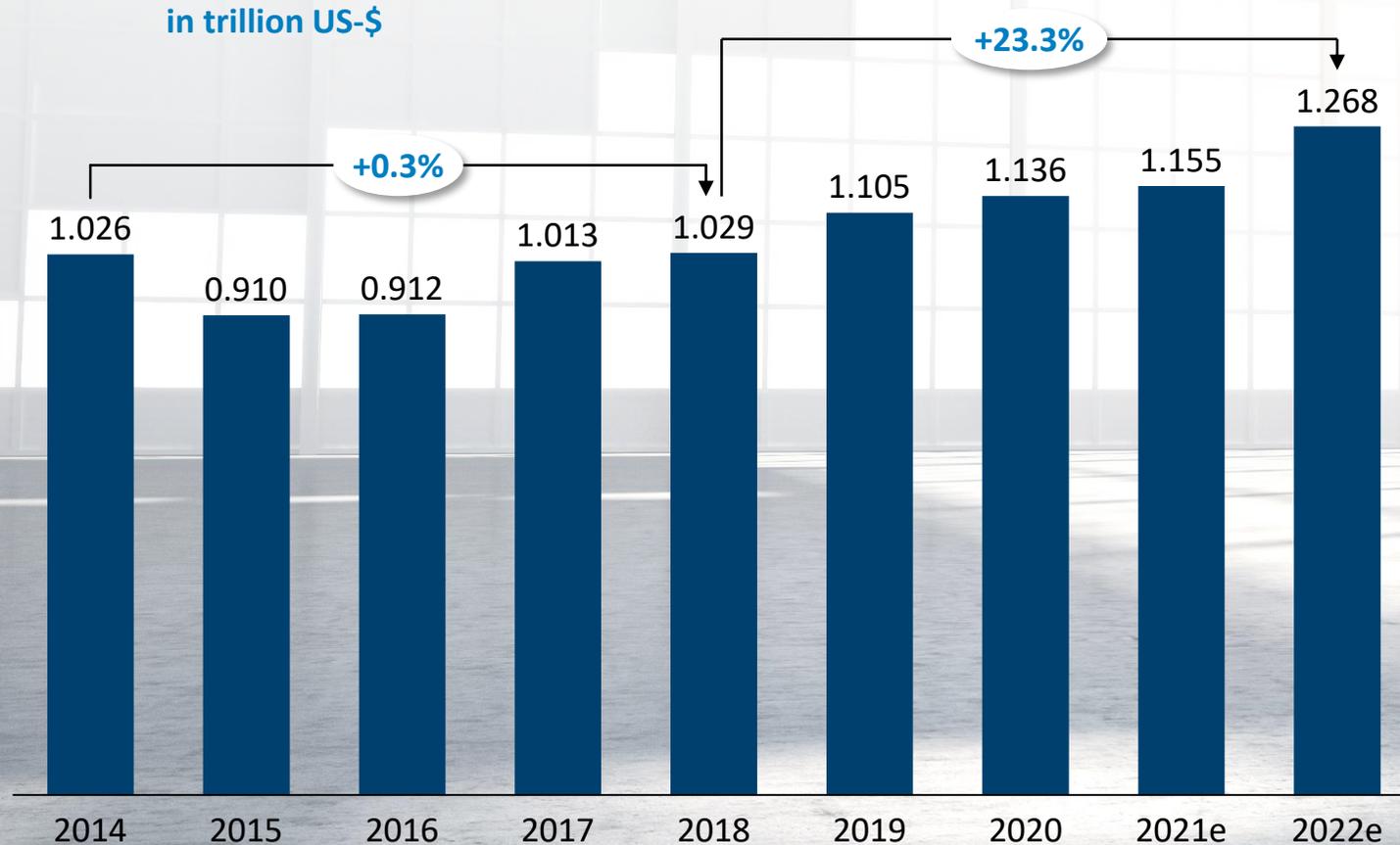
New forms of energy production.

Growth factors: **NATO Alliance**

NATO spending has accelerated

NATO total expenditures

in trillion US-\$



New members to join NATO



Recently announced defence budget increases



previous value

(1.41 %)

(2.10 %)

(2.02 %)

target value

2 %

3 %

2.5 %



previous value

(2.19 %)

(1.33 %)

(1.40 %)

target value

3 %

2 %

2 %

Growth factors: Home Markets

Home markets offer further potentials for growth

OUR HOME MARKETS



Germany

- Largest customer
- Commitment to 2% goal and €100bn special fund
- 100% Equipment level and modernization

Potentials

- Ammunition
- Trucks
- 8x8 and 6x6
- Puma 2nd Lot
- Digitization



Australia

- Established „home market“
- Land 400 program as demand driver

Potentials

- Land 400 Phase 3
- Land 125 soldier systems
- €400m order potential for Navy projects and ammunition



UK

- JV with BAE serves „home market“
- MIV and Challenger LEP program

Potentials

- Boxer 3rd lot
- Ammunition framework contract
- Services for vehicle fleet



Hungary

- Established „home market“ with modern production facility
- Modernization to NATO standards

Potentials

- Loitering Ammunition
- Digitalisation and soldier systems
- RDX and Ammo plant

Growth factors: **Germany**

Financing of growth is secured to achieve 2%



Olaf Scholz

German Federal Chancellor

“Our [German] army must become the foundation of conventional defence in Europe, the best-equipped force in Europe!”

“[...] we will be spending a lot more money on defence.”

Germany has committed to:

Special Fund

100€bn

+ **=**

Defence Budget

50€bn

German defence spending

>2 %*

of GDP

Growth factors: **Developing markets**

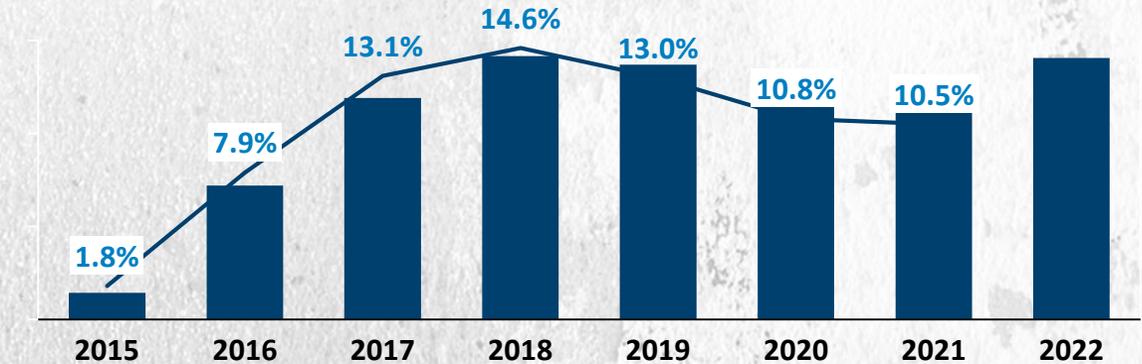
Australia intends to invest around €175bn for the next decade

Total Australian Defence Investment*

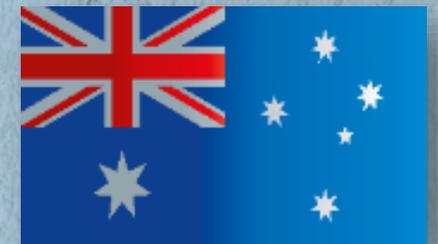


Rheinmetall Defence Australia sales

(% of total RHM sales)



- Australia represents ~10% of our defence sales
- MilVehCoE serves as industrial platform for our truck and Boxer Land projects
- Industrial profile strengthened with JVs and well established local supply chain



Growth factors: **Developing markets**

Continuing the success story in Australia

LAND



121 Phase 3b

€1.2bn

~2.500 HX81*
2016-2020**

400 Phase II

€2.1bn

225 Boxer CRV
2020-2026**

121 Phase 5b

€430m

1.000 HX 81*
2019-2024**



400 Phase III

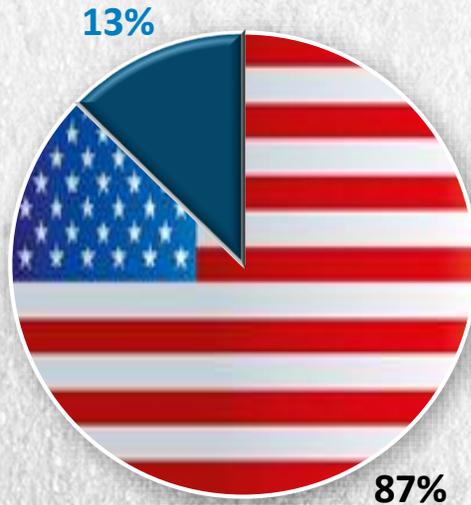
~€4bn

450 Lynx
2024-2031

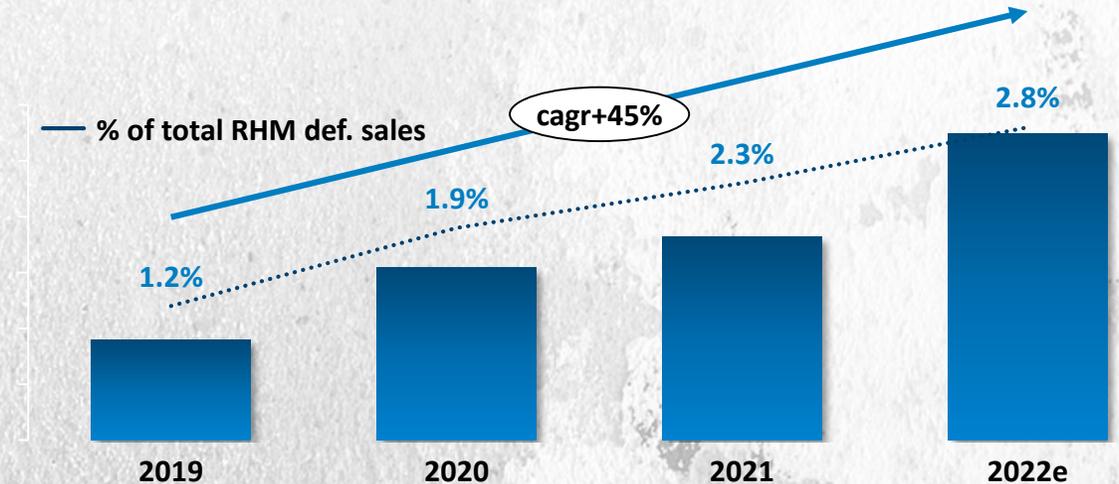
Growth factors: **Creating additional markets**

Become a significant business activity in the world's largest defense market

NATO Military Spending Split 2021*



Rheinmetall Defence US sales



- Increasing our footprint in the single biggest defense market
- Americanization – all American Business with American Rheinmetall Vehicles (ARV)** and partners
- Position Rheinmetall with the US Army
- Participation in lighthouse projects OMFV and CTT

Growth factors: **Creating additional markets** **\$50bn tender value pursued with a new market approach**

Next Generation Vehicle Platforms

Lynx – Optionally Manned Fighting Vehicle



- Americanization of Lynx next-gen platform
- Strong all American team
- Next contract decision in 2023
- SOP earliest 2027/28

HX3-Common Tactical Truck



- Americanized HX3
- GM Defense signature partner to ARV
- Next contract decision in 2023
- SOP expected earliest in 2025

Next Generation Munitions



Indirect Fire



Next Gen Munitions

Next Generation Mission Systems



Mission Systems



Digitized Battlefield



Air Defense

Growth factors: **Developing Home markets** **Modernization of Southern Europe**

Italy



- 10 year budget with up to €8bn for the renovation of the armored vehicle fleet
 - MBT: Replacement of the Ariete
 - IFV: Replacement of the Dardo
 - Other vehicles
- €2.3bn will be already available in 2023

Greece



- IFV Marder already participated in Greece Independence Parade
 - total of 40 vehicles to replace current BMP fleet
- First Lynx test successfully passed in Q3
- Leopard upgrades currently in definition process
- Total volume of up to €3.5bn

Growth factors: **Electricification**

Declining ICE volumes and accelerated growth for alternative powertrains

IHS LV production forecast*

In million units



Note: EV includes BEVs, BEVs with Rex & Fuel Cell Vehicles

Source: IHS, Status 11/2022

Growth factors: **Electrification**

Civil business portfolio well prepared to address market potentials

Electrification

- Drive market penetration
- Well equipped Electrification Portfolio
- 1,100 Mio EUR booked Business in 2020/21
- **H2 technology**

- Last man standing, ICE will stick around
- Higher value per engine
- EURO 7 triggers innovation with stricter emission requirements

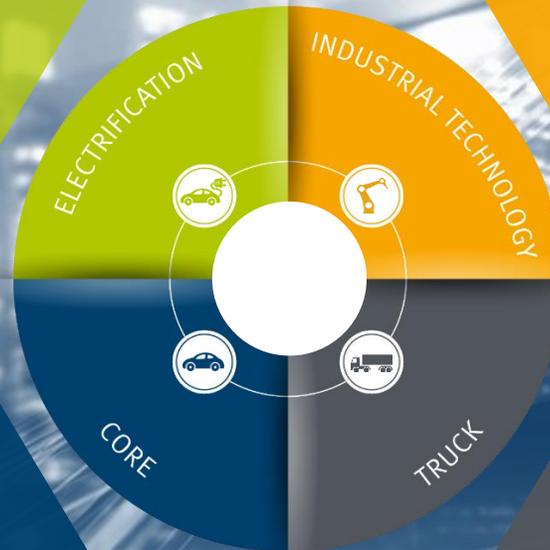
Core ICE

Industrial Technology

- Digital solutions for mobility and industry applications
- Technology leader in DC-link capacitors
- Outstanding USPs regarding size, range and lifetime

- Number of ICE will grow in the future
- Market leader for EGR systems
- Ready for EURO 7 and CO2 reduction
- **H2 technology**

Truck



Growth factors: **Diversification**

Accessing new markets with market leaders

- JV with technology leader in DC link capacitors
- Market-ready products in the mobility, industry and defense sectors
- JV with leading provider of innovative biometric products in Germany
- Solutions for mobility and industrial applications
- Cooperation with leading supplier of heating systems for residential construction
- Business opportunities as new systems need to meet lower CO2 standards



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Market dynamics: Lessons learned from war in Ukraine

Acquisition of EXPAL positions Rheinmetall perfectly for high growth scenario

NATO requires a minimum of 30 days of ammo inventory

- Almost no NATO partner currently in compliance
- Current industry capacities require 10 years to replenish for example German stocks

Ukraine war puts restocking at risk

- NATO support for Ukraine is further depleting inventories
- Ukraine consumes 6-10k rounds per day, Russia even 20k

Industry capacities overwhelmed

- Demand expected to surge
- Capacities not prepared for high intensity conflict
- Capacity upscale slow and expensive
- Smartest move is to load available idle capacities

Target overview: About EXPAL Systems S.A.

EXPAL is a high-caliber investment opportunity with a superior value proposition

EXPAL Systems S.A.

- A global defense and security company offering high-end technology solutions for the Armed Forces' current and future needs since 1872
- Headquarter in Avenida Partenon 16 Madrid, Spain
- Financial Data for FY 2023e (Fiscal year ends 31.08.)
 - ~€400m sales volume
 - ~30% EBITDA Margin
 - 789 Employees as per 31.08.2022
- 7 sites in Europe and the US that supply to more than 60 countries
- State-of-the-art production network with cost efficient operations
- EXPAL cooperates with the main defense companies and NATO Armed Forces



Target overview: EXPAL product portfolio

Full offering of mission-critical products to expand our business



Artillery

41%*

Field Artillery

- 105mm
- 155mm

Naval Artillery

- 40mmL/70
- 76mm
- 127mm



Mortar & Grenades

17%*

Mortar Ammunition and Weapon systems

- 60mm
- 81mm
- 120mm



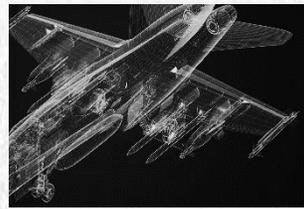
Med Cal

12%*

Airforce and Naval Ammunition

HE Ammunition

- 20mm
- 25mm
- 30mm

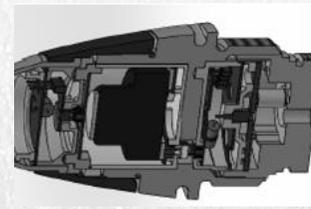


Air Armament

5%*

Airbombs and Missiles

- Air bombs
- Cat 70 Missiles
- Fin Tails



Fuzes and missile propulsion

6%*

Artillery Fuzes

Mortar Fuzes Med Cal

Rocket motors



Mortar Systems

6%*

- Eimos
- 81mm Onboard Mörser System
- System Integration



Combat Eng. DEMIL et al

13%*

C-IED and EOD Application

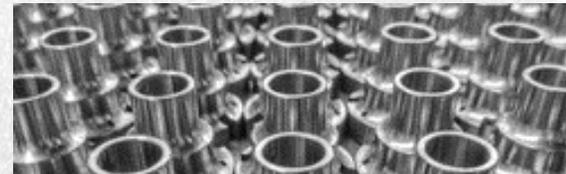
- Spain
- US

EXPAL Key investment Highlight

A unique opportunity offering a superior value proposition

Commercial Fit

Portfolio Fit



Sustainable Sales Growth

Sustainable Profitability

Scalable Mass Production

Horizontal Diversification

Continuous market growth in key portfolio area

- Continuously growing Market segments, e.g. 155mm driven by global defence trends

Lean cost structure

- Low and Competitive Cost Base
- Value Chain for production almost completely in House

Sufficient (and additional) production capacities

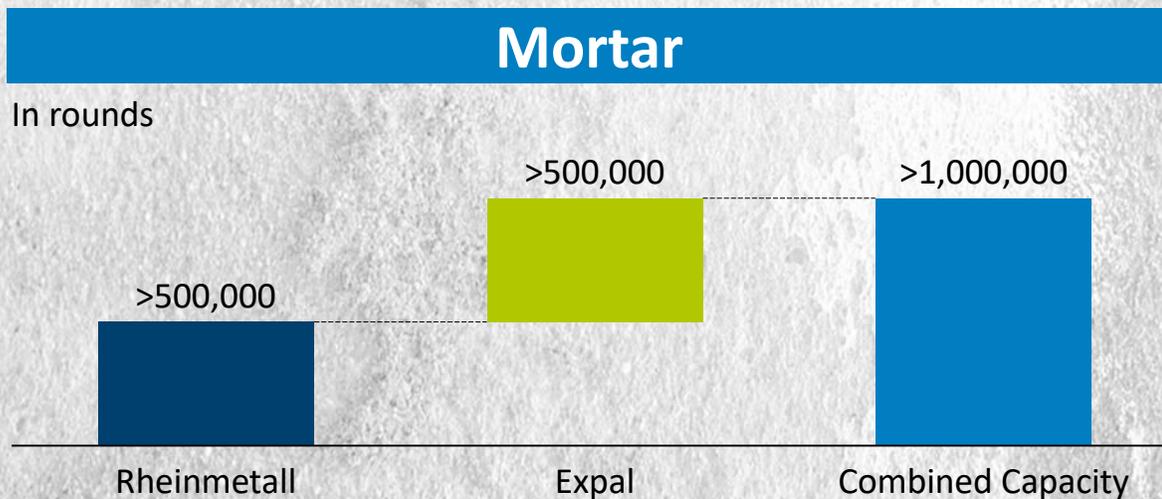
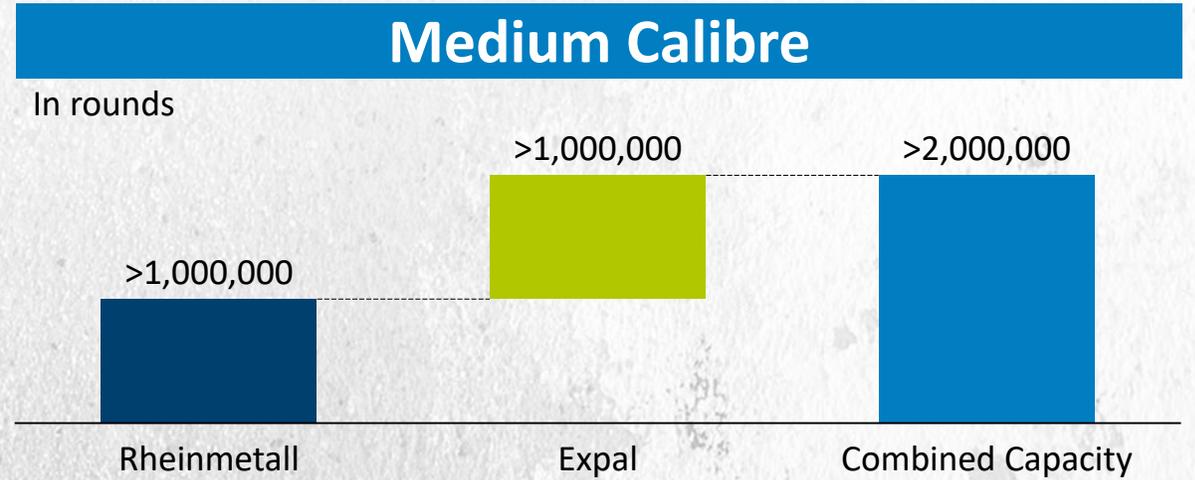
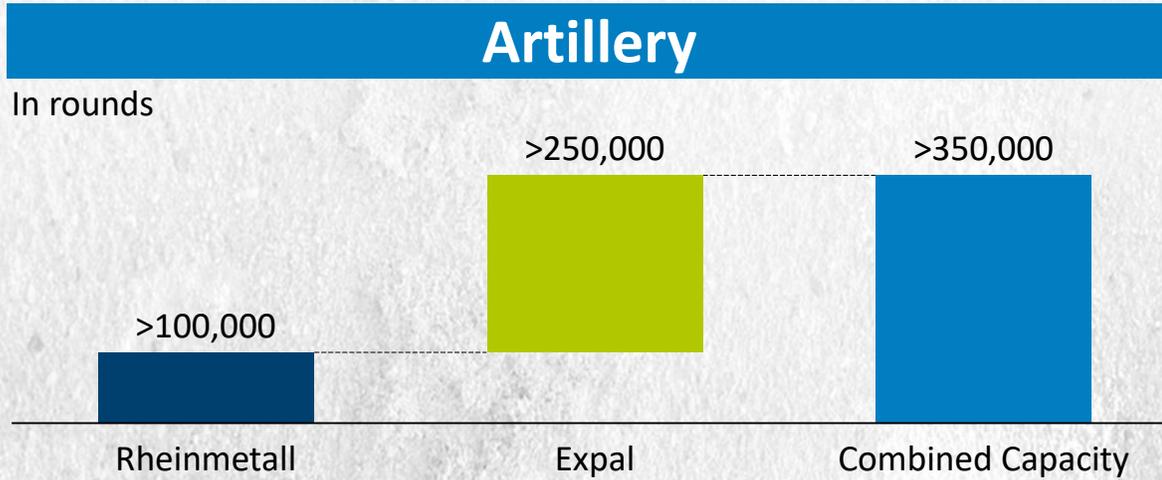
- Significant Capacities (in EU) and Capacity reserves
- Ability to quickly ramp up production

Extension of product groups to the RHM portfolio

- Naval
- Artillery
- Fuzes
- Nitrocellulose and pre-cursor

EXPAL Key investment Highlight

Excess capacities allow for flexible adjustment to demand expansion



- Fully vertically integrated business model
- High efficiency operations
- NATO quality standards
- Significant existing excess capacity with minimal capex requirements

EXPAL Key investment Highlight

Attractive financial profile with superior margins and cash conversion

Strong backlog to turbo charge organic growth

- Current backlog of ~€520m
- Strong acceleration sparked by increasing demand

Sales growth accelerates

- Company's total capacity offers scope for potential annual sales of €700 to €800 million

Attractive margins

- ~30% EBITDA margin
- Vertically integrated business with attractive cost structures and high operational flexibility

Leading cash conversion

- Efficient operations
- Low maintenance capex

Acquisition Summary

Strategic move to strengthen our core business

Transaction

- Rheinmetall acquires **100%** of privately owned **EXPAL Systems SA**, a Madrid headquartered producer of ammunition and defence solutions from Maxamcorp Holding SL
- **Enterprise value** is around **€1.2bn**

Rationale

- **Readily** available state-of-the-art capacities
- **Extension** of our product portfolio
- **Supplementary** regional markets
- **Innovative** technologies
- **Backward integration** into high-tech components

Financial evaluation

- **~10x** EV/EBITDA FY 2023
- Financing structure to be finalized depending on the prevailing market conditions
- **EPS accretive** in first full year of consolidation

Timeline

- Signing on November 13th 2022
- Closing expected post regulatory approvals until **summer 2023**

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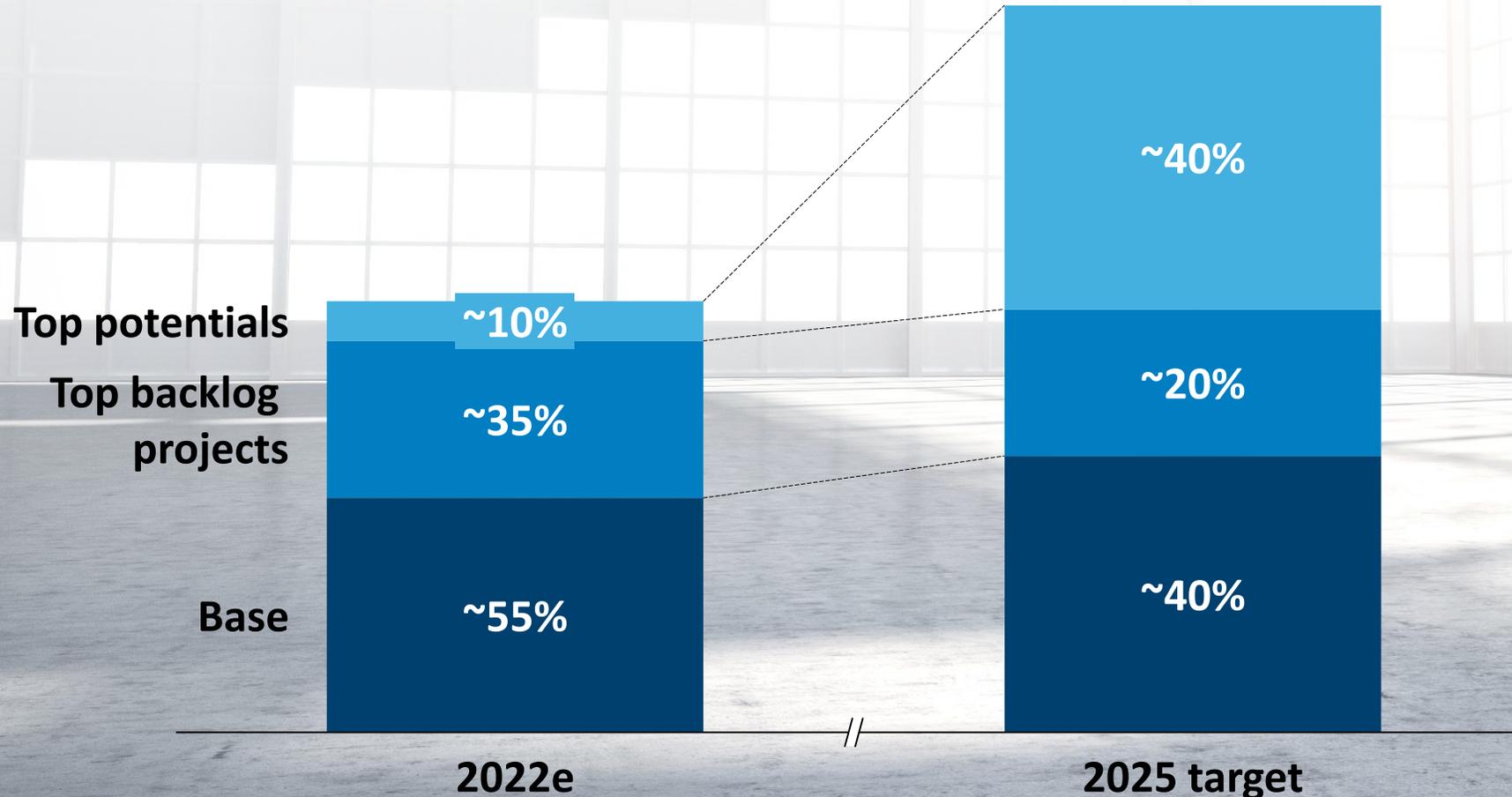
04 MID-TERM GUIDANCE

05 INNOVATIONS

Mid-term guidance: The supercycle 2.0 is happening

Sales contribution

share of total sales estimates in %



Top potentials

- Ammunition Germany
- Trucks Germany
- Puma
- Lynx Phase III
- “Schwerer Waffentraeger”
- Soldier Systems
- Characal
- Air defense projects

Top backlog projects

- Land 400 Phase II
- Land 121
- Trucks Germany
- Puma
- Boxer MIV
- Challenger
- Lynx Hungary
- Ammo Framework Hungary

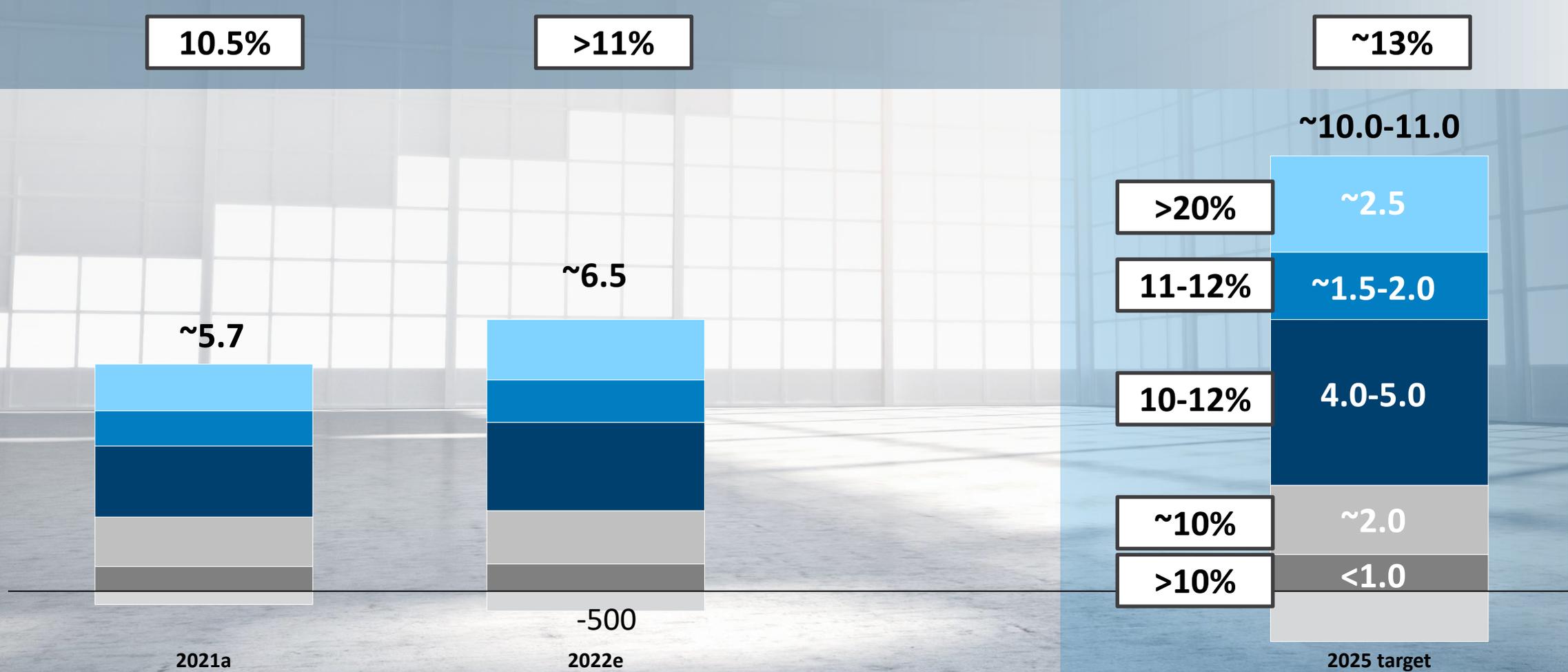
Mid-term guidance: Double digit growth over the next 5 years

In €bn, operating margin in %

10.5%

>11%

~13%



Mid-term guidance

2021

€5.7bn group sales
Group margin of 10.5%
FCF margin of 7.4%

- Leading tier 1 supplier to the OEM
- Innovative player in the European defence industry



2025

Around €10-11bn group sales
Group margin of ~13%
FCF margin of 4-6%

- Major player in the e-mobility and hydrogen markets
- Dominant technology and product leader in military vehicles

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05 INNOVATIONS

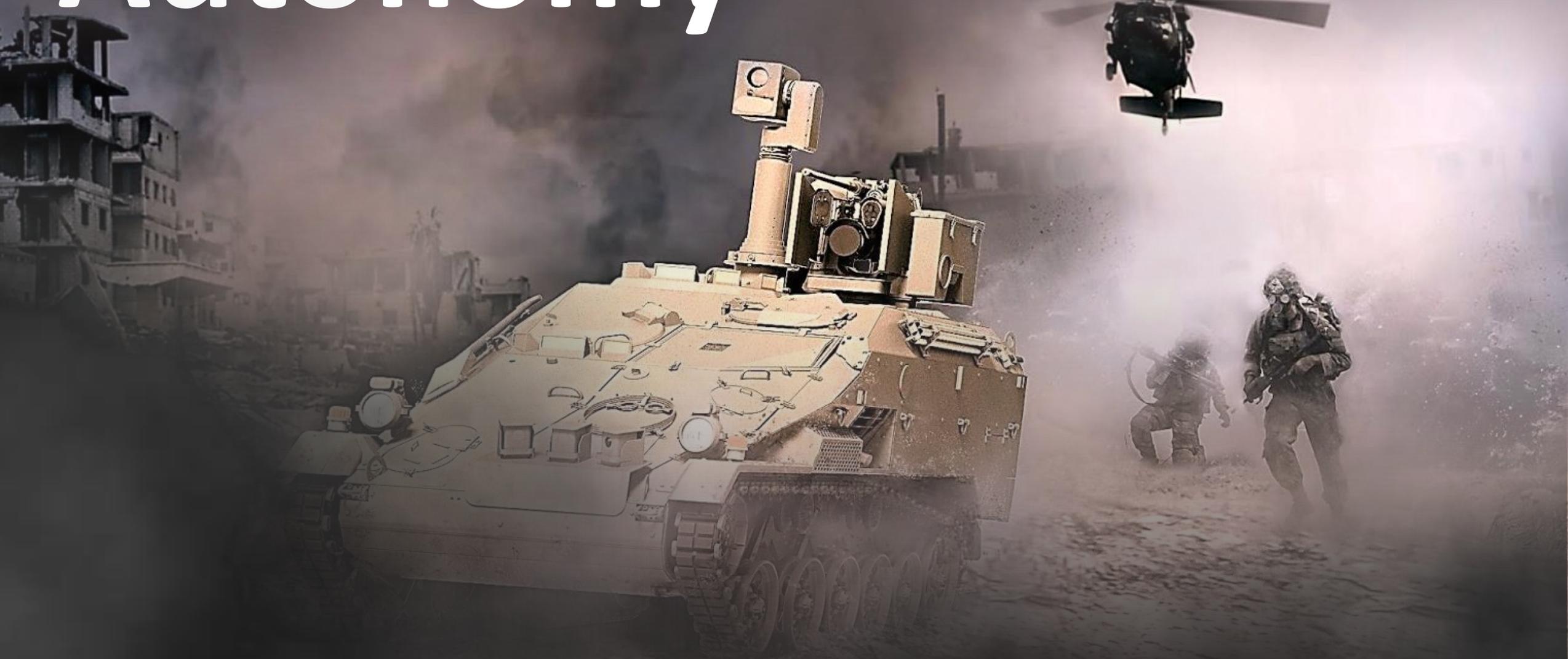


Innovations for the Supercycle – How Rheinmetall is shaping the future

Armin Papperger, CEO

November 2022

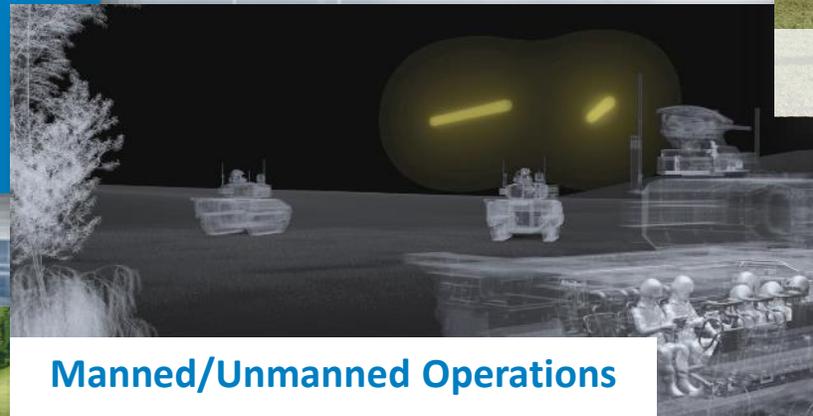
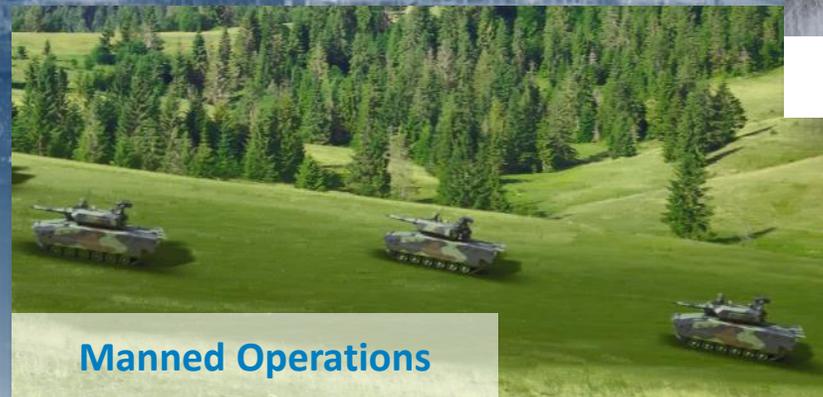
Autonomy



Tele-Operation Key Enabler for military Autonomy

Tele-operation will mature key technologies on the way to full system autonomy:

- Drive by wire/Control by wire technology
- System Safety Qualification
- Secure Communications
- Real time/Low-latency data transfer



**Tele-Operation
Man-in-the-loop**

**Tele-Assist
Autonomy with Man-in/
Man-on-the-loop**

- Military Vehicles
- Remote Weapon Systems on Unmanned Platforms
- Civil Vehicles

Digitization



ES digital ecosystem – Capability enabler for moving forces

Rheinmetall ES is **the leading system house** for connected land forces.

Providing solutions **for the digital battlefield.**

“We **sense** the battlefield”



“We **connect** the battlefield”



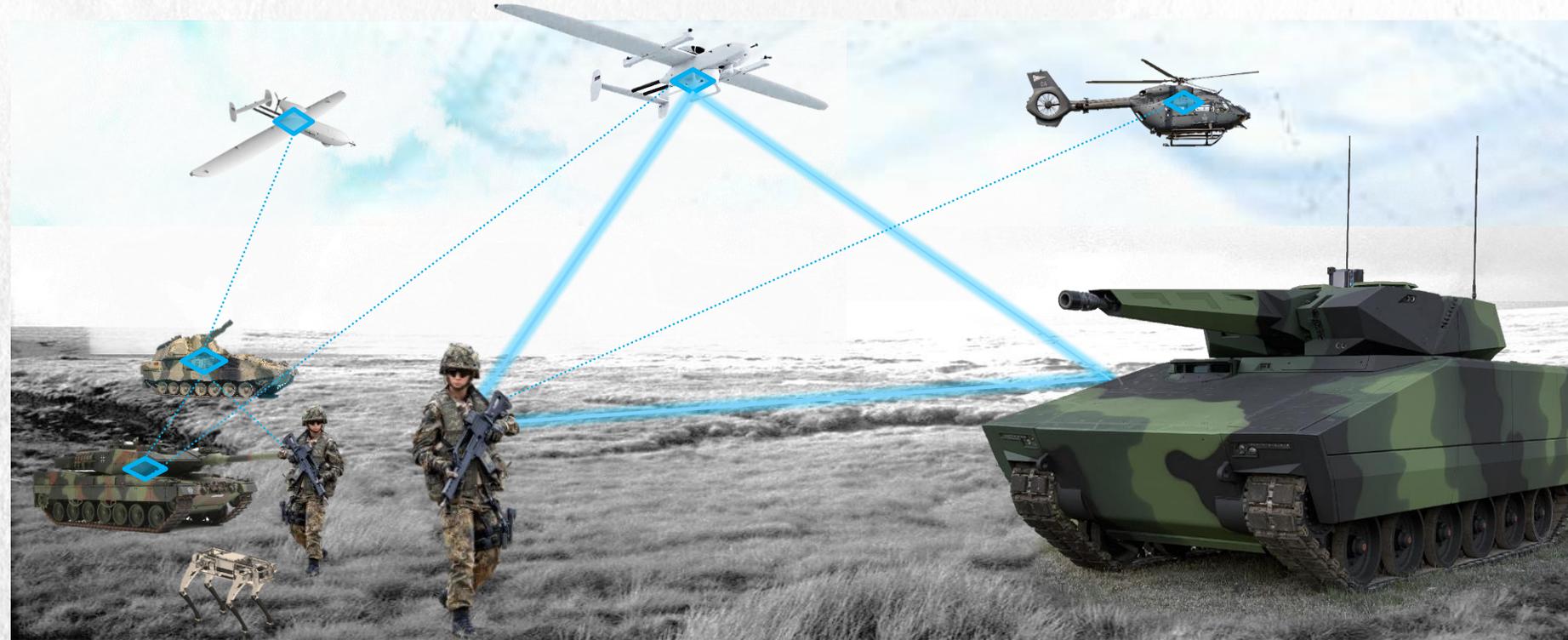
“We **automate** and **dominate** the battlefield”



Fully digitized task force – Customer Hungary

Rollout of the **digital ecosystem** in focus markets.

Realizing localization concept with Hungarian partners.



Roadmap 2 Digitalization



Electrification

Innovations for electric mobility

- **HV-contactor & pyrotechnic HV-switch:** B-sample to customers Q3/2022
- **DC link capacitor:** A-phase functional sample in Q1/2023
- **Electric air-conditioning compressor:** SOP by October 2023

Electrification

HITRON 8xE – Hybrid Combat Vehicle presented at Eurosatory 2022



HYBRID ELECTRIC DRIVE

Future oriented system design with growth potential

System architecture for 6x6 to 8x8

Common Core Technology for wheeled and tracked vehicles

FIRST SERIES HYBRID COMBAT VEHICLE

Funded development program to TRL6

Modular system design with inherent redundancy

Series readiness by 2025

BECOMING TECHNOLOGY LEADER

Key enabling technologies being integrated into product portfolio

Targeting specific 8x8 market opportunities during the super cycle

Innovation

A new tank for a market that can't wait



INCREASED LETHALITY

IMPRESSIVE MOBILITY

HIGHER PROTECTION

BETTER CONNECTION

NATO market

2025-2035

500-800+

NATO market

2035+

5.000-8.000

Innovation

HERO Loitering Munitions – a game changer in the battlefield



- Rheinmetall teamed up with UVision to offer the most advanced systems in this field
- Wide range of specifications from 0.5 to 10kg warhead and a range from 10 to 60km

On land



In the air

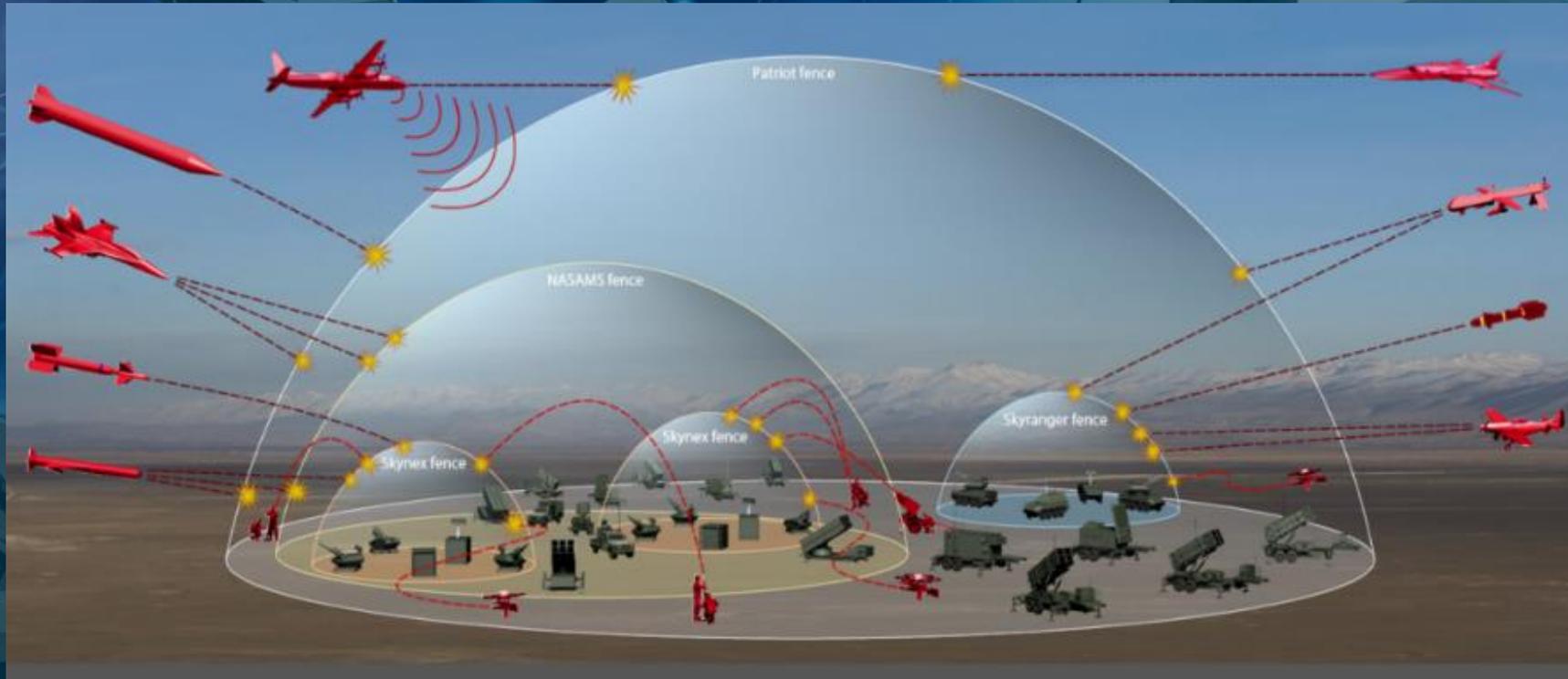


At sea



Renaissance of Air Defence

Strengthening SHORAD has proven to be crucial in the Ukraine conflict



European Sky Shield Initiative started to unite 15 nations

Rheinmetall commands an extensive suite of

Sensors

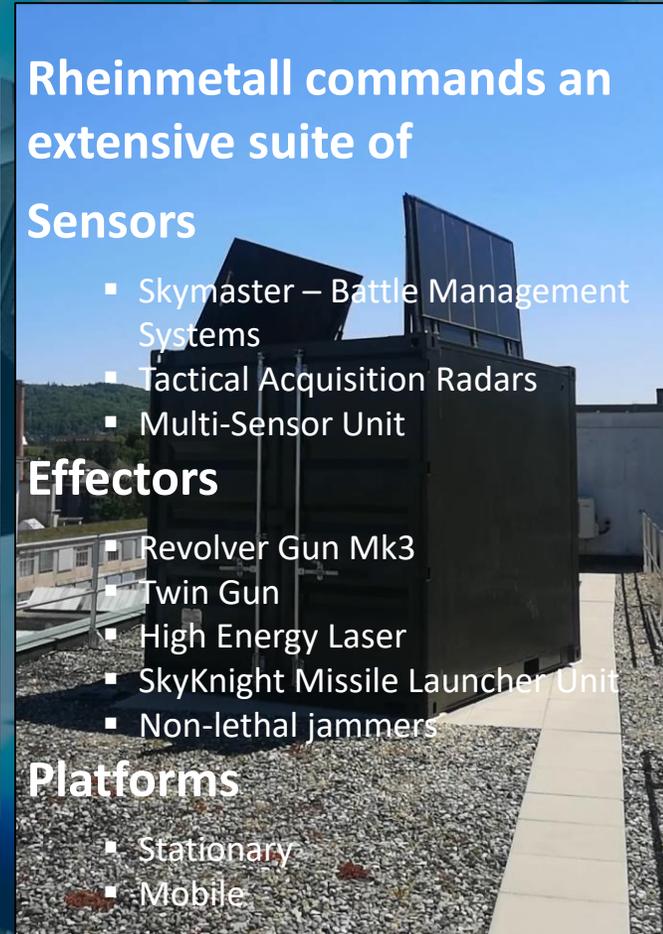
- Skymaster – Battle Management Systems
- Tactical Acquisition Radars
- Multi-Sensor Unit

Effectors

- Revolver Gun Mk3
- Twin Gun
- High Energy Laser
- SkyKnight Missile Launcher Unit
- Non-lethal jammers

Platforms

- Stationary
- Mobile



H2-Technologies

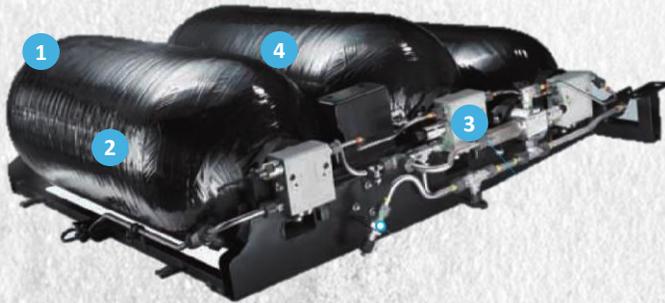
- 2022 Start of small series production for fuel cell system components.
- 2024 Sample of Type IV pressure tanks (LORICA) in customer trials
- 2025 Market launch of precious metal-free electrodes for alkaline electrolysis (E2NGEL)
- 2025 Market launch of Type IV pressure tanks (LORICA)

Lifetime-Sales
>€350m

Lifetime-Volume
~3 million units

H2 Technologies: Innovating the hydrogen pressure tank system

Project-Idee and USP



- 1 Multifilament-Winding**
- 2 Active cooling**
- 3 Innovative On-Tank Valve**
- 4 Linear Fire alarm system**

Applications



Train



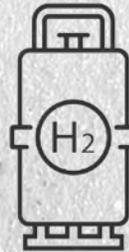
Naval



Generator



Car



Logistics



Truck / Bus



Military

Rheinmetall



EMT
Drones



Military
Vehicles



Military
field
camps

PASSION FOR **TECHNOLOGY.**