

# Second Half 2022 Financial Update

9 March 2023



# Highlights - Progressing in all target markets

## Commercial Aerospace

### Airbus qualification and industrial trials

- Machine qualification testing completed and submitted to Airbus for evaluation
- Awaiting official approval from Airbus
- Transitioned into industrial manufacturing trials to demonstrate serial production capabilities
- Continuing to evaluate several Airbus A350 components for transition to production with multiple Airbus tier-one suppliers

## Defense

### Qualification with US DoD prime contractors and production order

- Continued development of a large structural part for General Atomics for delivery in late first half 2022
- Added to an undisclosed US DoD prime contractor's approved supplier list, material specification in-place;
- Receipt of initial production order expected in first half 2023

## Industrial / New Opportunities

### Hittech demonstrator part and first production order

- Demonstrator part approved by Hittech/ASML
- Serial production awarded for ASML carrier trays in Q4'22, production of the first 15 articles underway
- Engaged with Kongsberg Defense & Aerospace to demonstrate RPD®'s applicability to part repair, a multi-billion dollar industry



# 2H 2022 and Preliminary FY 2022 Profit & Loss

Income Statement (USD millions)				
(unaudited)	2H'22	2H'21	2022	2021
Revenue	1.0	1.0	1.0	1.3
Other income	1.3	1.4	2.2	4.0
<b>Total revenues and other income</b>	<b>2.3</b>	<b>2.4</b>	<b>3.2</b>	<b>5.3</b>
Operating expenses	(11.1)	(10.9)	(22.0)	(22.0)
<b>EBITDA</b>	<b>(8.8)</b>	<b>(8.5)</b>	<b>(18.8)</b>	<b>(16.7)</b>
Depreciation, amortization, impairment	(1.4)	(1.9)	(2.6)	(3.4)
Net financials	(1.3)	3.0	12.0	4.0
<b>Profit/loss before tax</b>	<b>(11.5)</b>	<b>(7.4)</b>	<b>(9.4)</b>	<b>(16.1)</b>
Income tax expense	0.0	0.1	0.0	0.1
<b>Net profit/loss</b>	<b>(11.5)</b>	<b>(7.3)</b>	<b>(9.4)</b>	<b>(16.0)</b>

**Total revenue and other income was USD 2.3 million in 2H 2022 and USD 3.2 million for full year 2022**

- USD 1.0 million from sale of printed parts and development activities
- USD 1.3 million recognized for Innovation Norway and Skattefunn grants; full year grants were USD 2.2 million

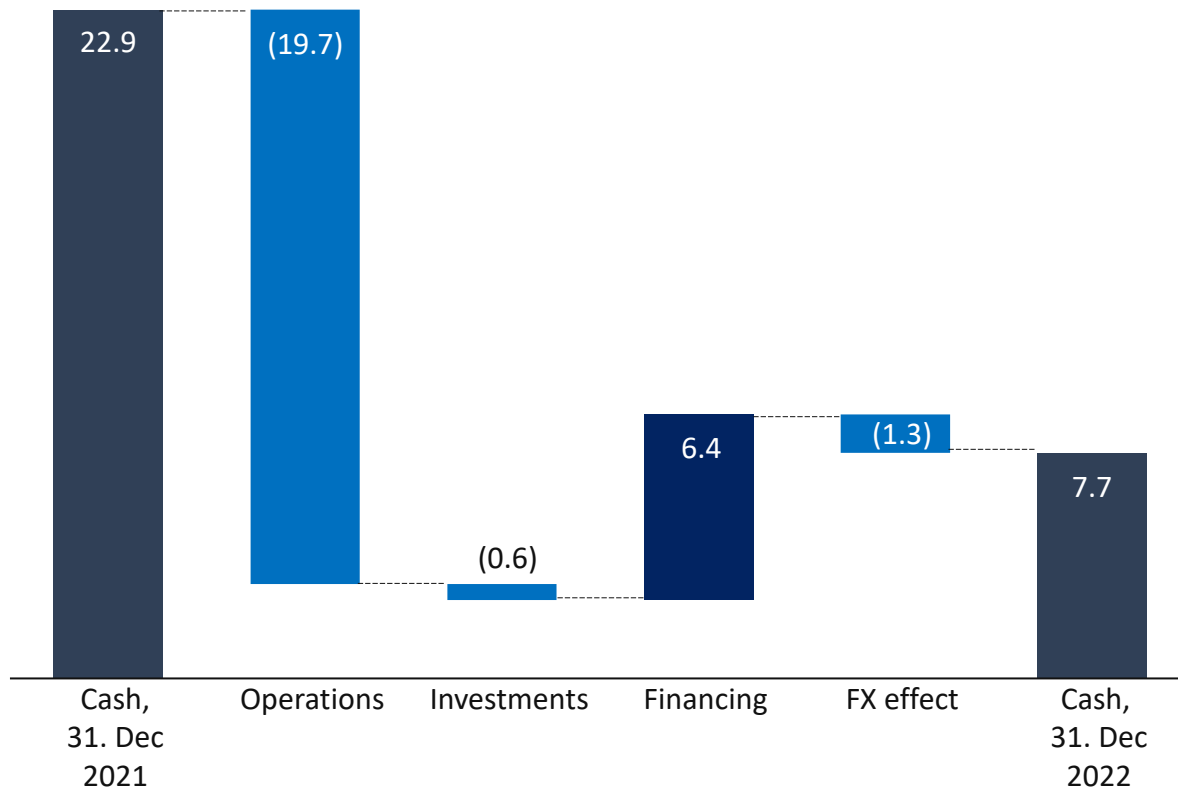
**EBITDA-loss was USD 8.8 million in 2H 2022**

- Operating expenses includes fixed and variable operating expenses, employee payroll expenses
- Net loss of USD 9.4 million in 2022 was helped with a strong unrealized foreign exchange gain during the first half 2022



# 2022 Full Year Cash Flow

## Cash Flow (USD millions)



### Cash used for operating activities was USD 19.7 million

- Operating expenses focused on qualification and testing with customers to integrate parts into serial production
- Average monthly cash burn rate of USD 1.7 million in 2022

### Cash used for investments was USD 0.6 million

- Limited investment activities with ample production capacity in place to meet long-term revenue targets

### Cash generated from financing activities was USD 6.4 million

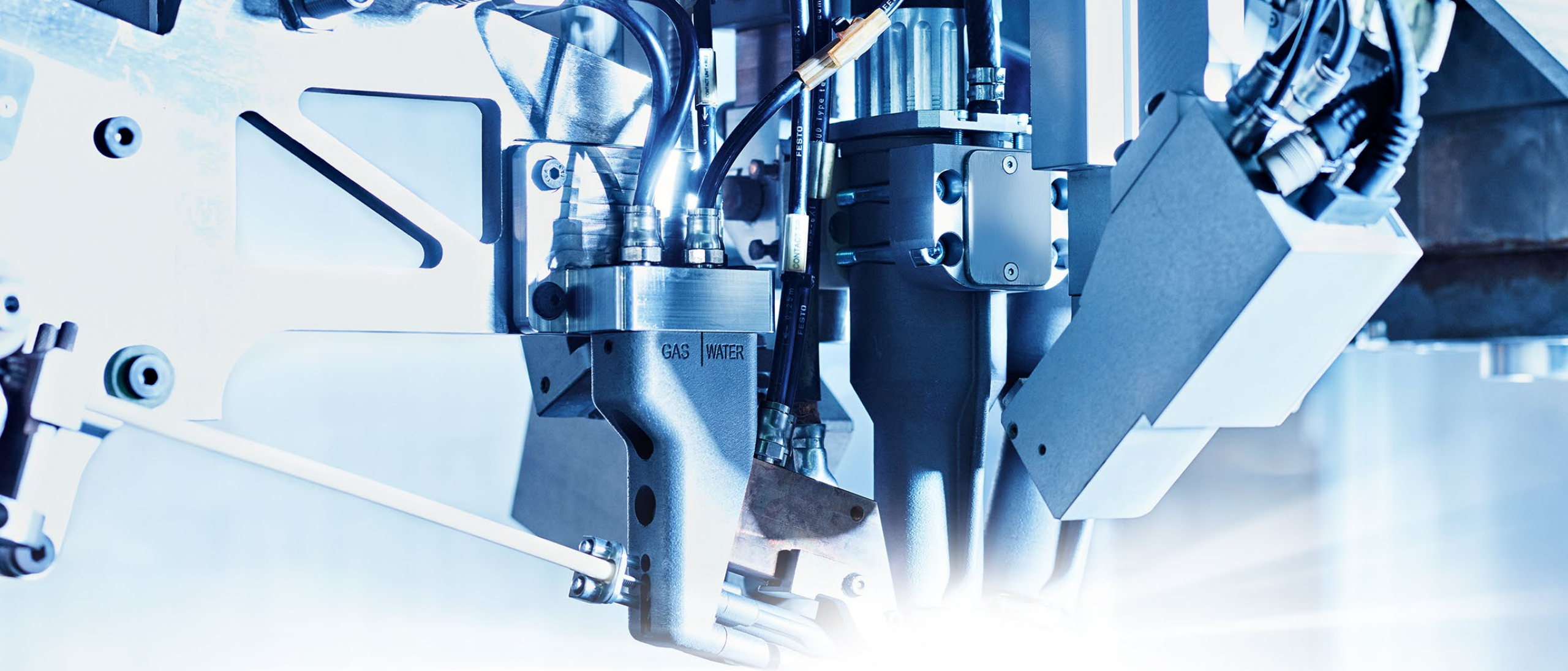
- Net financing activities of USD 7.0 million net of costs, reflecting capital raised in November
- USD 0.6 million reflects payment of principle portion of lease liabilities and interest paid

Ending cash balance of USD 7.7 million

Engaged SEB and Carnegie as financial advisors to raise additional capital for longer-term funding







# Advancing to serial production

Investor Presentation | March 2023





# ***Innovating the future of metal manufacturing***

*Rapid Plasma Deposition® - Additive manufacturing technology replacing legacy structural forgings*



## **Forging then**

Labor intensive



## **Forging now**

Capital and energy intensive



## **The future of Forging**

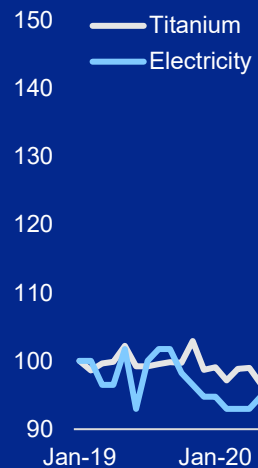
**Rapid Plasma Deposition® (RPD®)**

# *The world has fundamentally transformed*

*Global events have triggered a paradigm shift in the way industries want to manufacture goods*

## Commodities and energy inflation

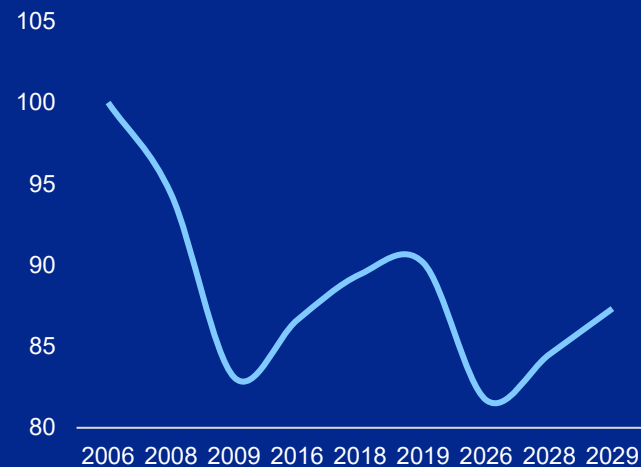
Price development (2019 = 100)



***Manufacturing of metals is the largest consumer of energy, and forging of titanium is one of the most inefficient***

## Increasing US manufacturing jobs

Employment development (2006 = 100)



***Advanced manufacturing systems powering a resurgence in manufacturing in local economies***

Source: Bureau of Labor Statistics, *The Titanium Economy*

## The Perfect Storm

- Increasing energy and commodity prices are stunting growth
- Persistent inflation and labor shortages are wreaking havoc with supply chains
- Manufacturers transitioning from legacy production to advanced, localized manufacturing that sustainably secures supply
- Large incumbents not employing advanced manufacturing systems may not survive this transformation

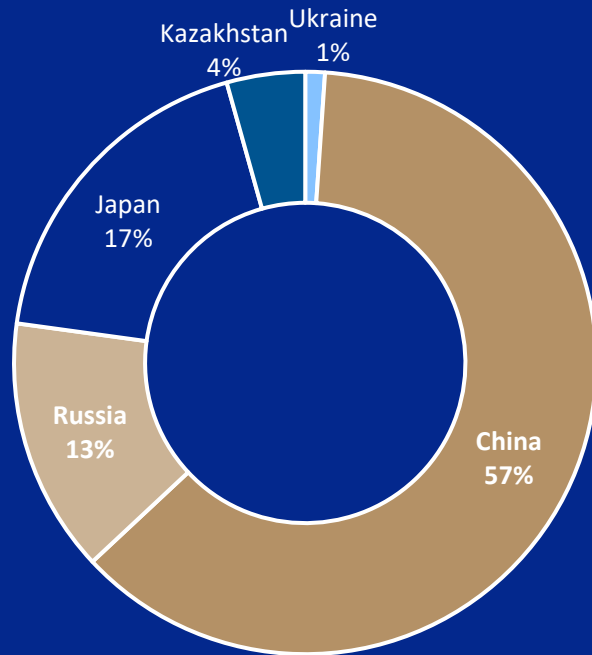
***The world needs a sustainable solution - RPD® is the answer***



# Majority of titanium supplied from Russia & China

*Titanium is classified as a vital commodity for U.S. and European economic and national security interests*

## Global Titanium Sponge Suppliers



**70% of the world's titanium raw material comes from China and Russia**

## The titanium advantage

Titanium is a lightweight, yet strong, non-corrosive metal used extensively in aerospace and advanced military applications

## Titanium demand

Demand for titanium is growing as its applications are so unique with demand outstripping supply

## A strategic asset

Russia's weaponization of energy prompted fears among NATO nations that China and Russia could also freeze titanium exports, which would put aerospace and defense companies in a bind

***"...I think that the folks who are responsible for things like the Defense Production Act know that they need to figure out what to do about titanium." -U.S. congressional staffer***

Source: Newsweek - <https://www.newsweek.com/battle-ukraines-titanium-1777106>





# ***RPD<sup>®</sup> technology is next generation metal manufacturing***

*A low capital cost, clean-cell additive manufacturing technology*

**75% less energy**

**75% less raw material**

**90% less time**



Existing titanium  
value chain



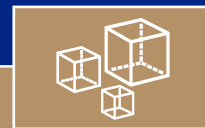
Ore reduced  
to porous sponges



Sponges  
melted to ingots



Ingots converted  
to wire



Ingots cast into  
titanium blocks



Wire melted into  
near-net-shapes



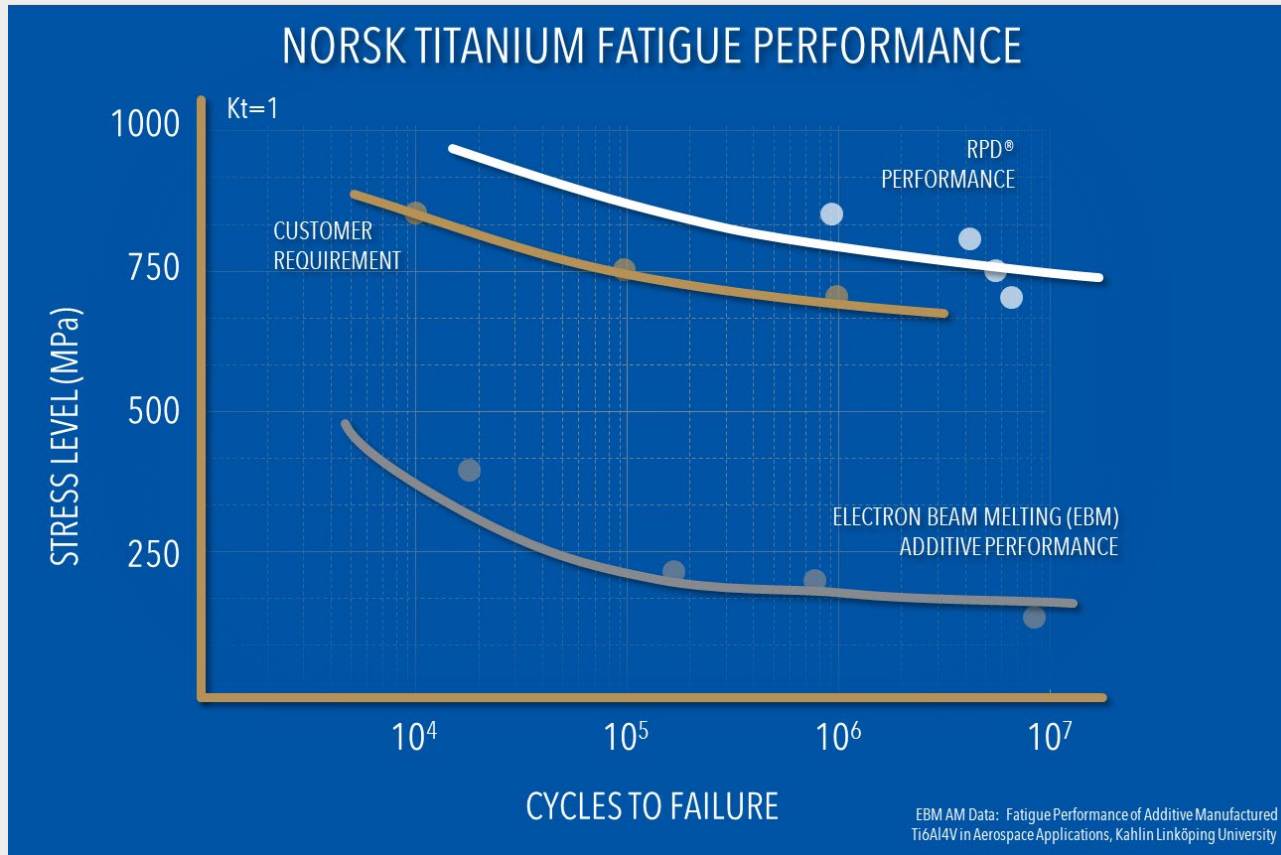
Ingots forged  
to gross shapes



Shapes  
machined to parts

# Superior RPD<sup>®</sup> material performance

With 15 years of process maturity, RPD<sup>®</sup> material is a direct replacement for parts in the existing supply chain



## Automated and consistent material quality

### RPD<sup>®</sup> technology - A wide moat:

- Developed in a niche sector, with published material standards no other additive process can match, creates a formidable barrier to entry

### Direct Parts Replacement:

- Proving equivalent to forged quality material, RPD<sup>®</sup> is a direct replacement for titanium parts as they exist in the supply chain today, across many sectors

### Fast, Clean, and Efficient:

- Employing state-of-the-art data automation, RPD<sup>®</sup> machines can print up to 10 kg per hour while delivering consistent material properties across Norsk's production platform







# ***RPD<sup>®</sup> is at the apex of modern production technology***



**35 machines**  
700 tons capacity



**Material specification**  
Qualified



**US & Norway**  
locations



**Parts supplier**  
Direct replacement



**170+ patents**  
granted



**100+**  
employees



**FAA-approved:**  
RPD<sup>®</sup> only additive manufacturing process that is certified for structural titanium components for commercial aerospace














US Production Facilities  
R&D facilities in Norway





# At inflection point for exponential growth

Multiple overlapping revenue growth curves driving the success of RPD<sup>®</sup> technology

Target markets		Commercial Aerospace	\$13 bn market	High complexity	High Volume	In production	
		Industrials	\$5 bn market	Low complexity	High Volume	In production	 [●] Largest Consumer electronics OEM (evaluated potential application)
		Defense	\$5 bn market	High complexity	Low Volume	In transition	[●] Large US DoD prime 
Adjacent markets		Repair & Aftermarket	\$72 bn market	High complexity	Low Volume	In production	 KONGSBERG
		Engines	\$5 bn market	High complexity	High Volume	In development	 

Source: Consultant and management estimates

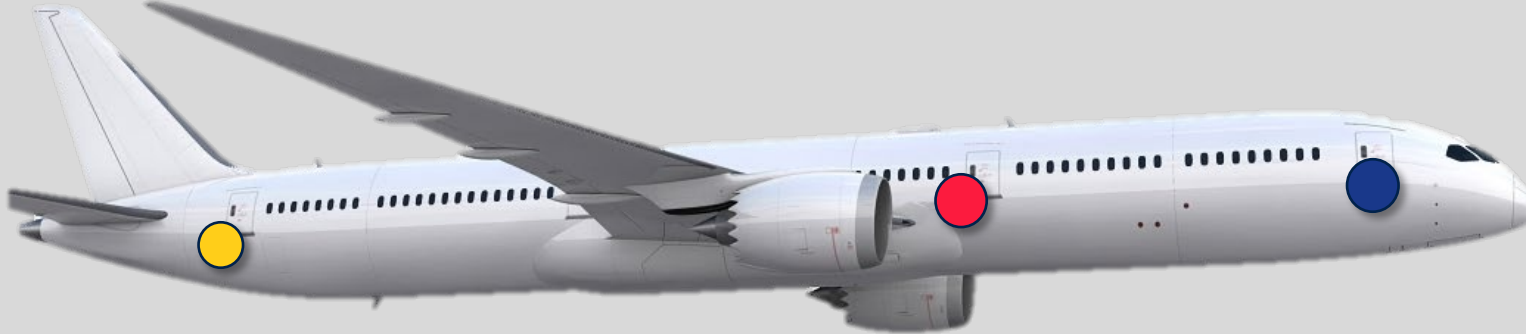




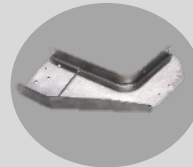
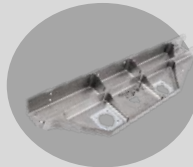
# RPD<sup>®</sup> parts flying on Boeing planes since 2017



7 RPD<sup>®</sup> printed parts on every Boeing 787 Dreamliner:



- Manufacturing specification completed
- Boeing's regulatory issues slowed part transition rate
- Senior leadership re-engaged to solve titanium forging issues with RPD<sup>®</sup>
- Exploring alternate applications to increase adoption rates



**> 1 000**  
addressable parts  
across Boeing  
platforms

**75**  
B787 and B737  
built monthly

**250 000**  
part opportunity  
per year

**USD 1.5 billion annual addressable opportunity**

Norsk Titanium sells parts to Boeing through tier-1 suppliers



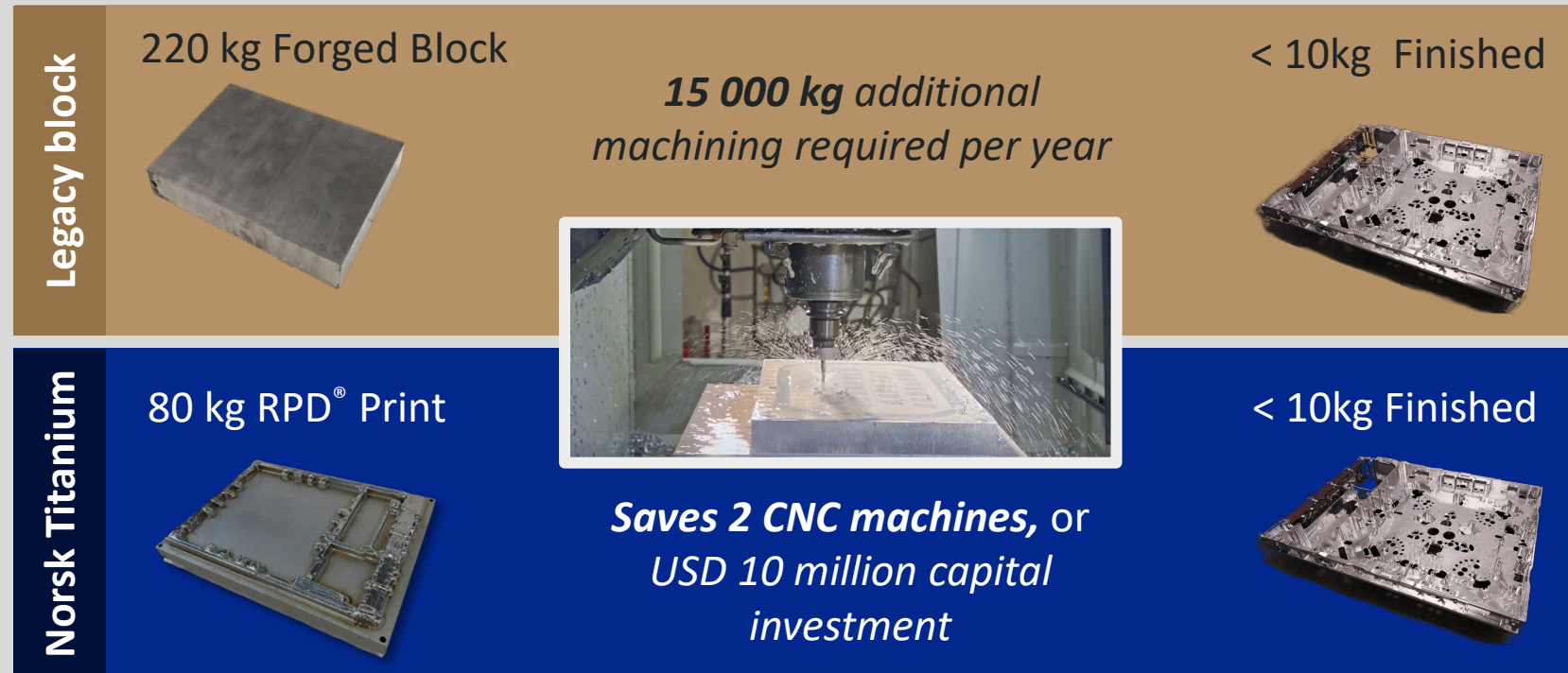


# ASML uses RPD<sup>®</sup> for a critical production element

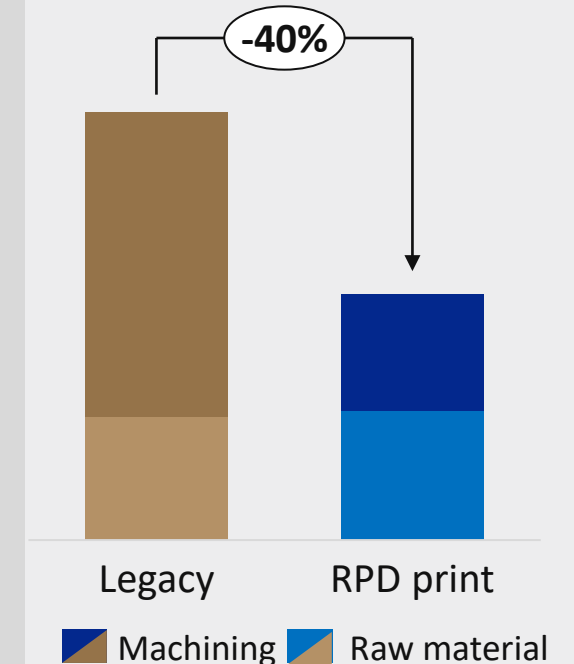
Transitioning all forged block procurement to RPD<sup>®</sup> in a response to massive demand growth

**ASML**

## Less CNC machinery required



## Less cost





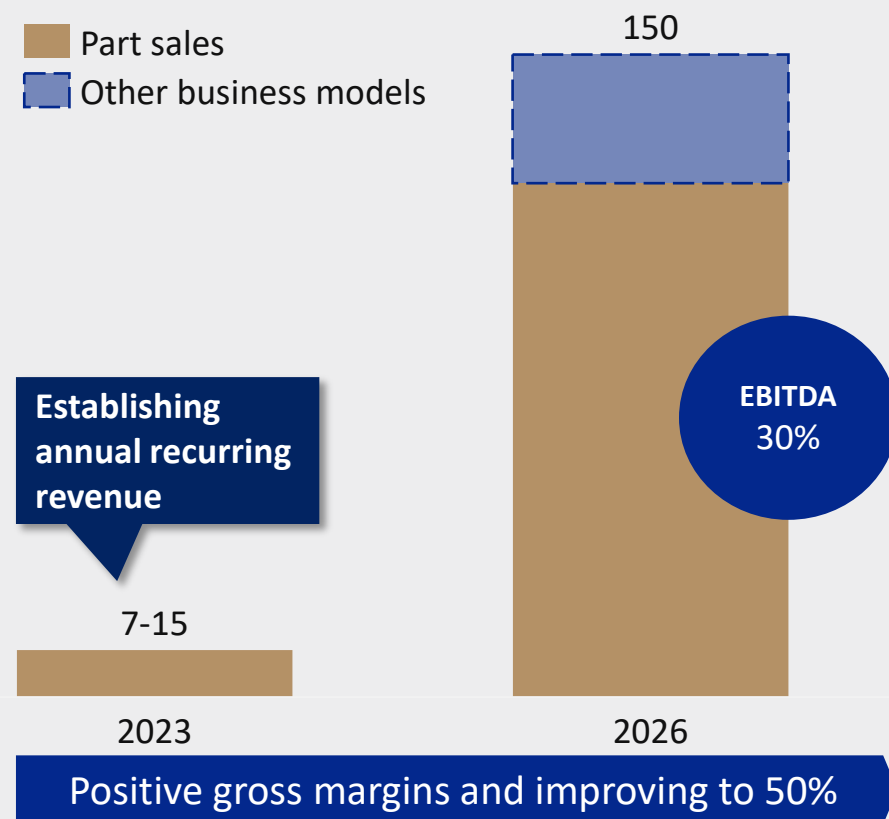
# Global titanium challenges can accelerate RPD<sup>®</sup> adoption

*With revenues confirmed from Airbus, Boeing and ASML, 2023 marks the inflection point to exponential growth*

## Revenue targets

USD million

- Part sales
- Other business models



- Rapidly expanding parts revenue from target markets
  - High complexity Commercial Aerospace parts as main growth driver
  - High volume parts from industrial second growth driver
  - Smaller volumes of larger parts from Defense industry
- Other non-recurring business models adds upside potential
  - RPD<sup>®</sup> machine sales, IP licenses, JVs, and other being evaluated
- Contribution margins from part sales increase from 30% in 2023 to 50% in 2026 with increased scale
- Targeting an EBITDA margin of 30% in 2026
- Additional USD 50 million needed to fund the company through expansion phase between 2023-2025
  - USD ~400 million invested over the past 12 years



# Establishing a multi-year backlog on established platforms

Each part adopted on a platform secures multiple years of contractual revenue

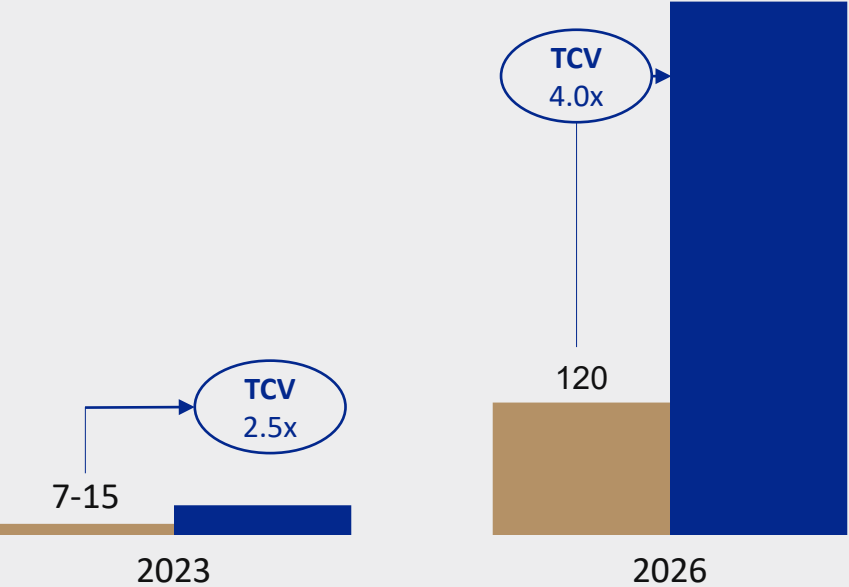
## Recurring revenue dynamics

USD million

Part sales

Total contract value (TCV)

Estimated lifetime value of recurring revenues for the term of the contract



## 2026 revenue backlog

Forecasted revenue and backlog build-up by 2026

Target markets		Parts per annum	Contract years	% Market penetration
	Commercial Aerospace	20.000	5	3.0%
	Industrials	15.000	2	0.5%
	Defense	3.000	5	5.0%
Total / average		38.000	4	< 3%

Unique parts in production	300
RPD capacity utilization	50%



# Norsk Titanium

## Set for take off



**USD 400m**  
invested\*



**~USD 180m**  
market cap



**35 machines**  
700 tons capacity



**Parts supplier**  
Direct replacement



**USD 300m**  
revenue capacity



**170+ patents**  
granted



**US & Norway**  
locations



**100+**  
employees



**Material specification**  
Qualified



**3 markets**  
presence



**AIRBUS**



**ASML**





