NORSK TITANIUM

April 2024

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®)

Reduced Labor, Capital and Energy

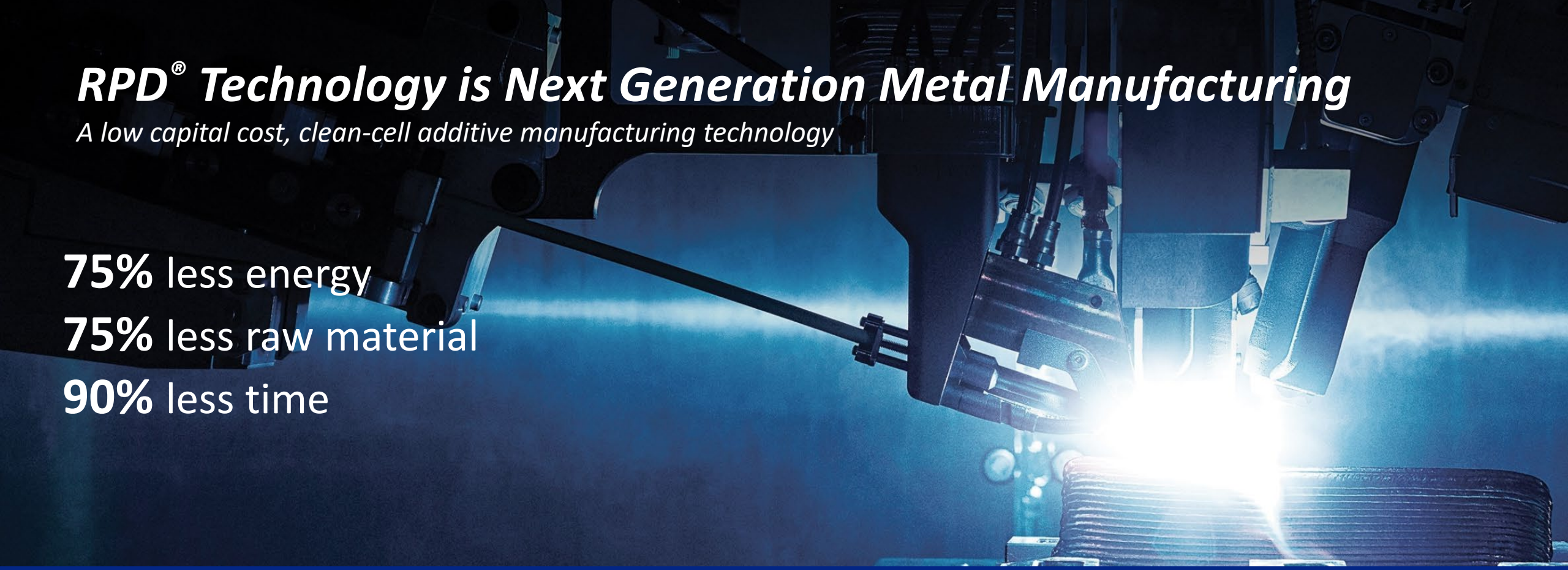
Norsk Titanium Highlights

Disruptive 3D Printing Technology	▪ **Rapid Plasma Deposition® (RPD®) Technology: Additive Manufacturing of Parts** ▪ **40% cheaper, 75% less energy and raw materials, takes 90% less time than legacy** ▪ **A sustainable manufacturing solution**
Focused on large scale manufacturing using RPD® Technology	▪ **Only additive manufacturer in production with Boeing, Airbus, and defense OEMs** ▪ **RPD® directly replaces titanium parts on current commercial aircrafts** ▪ **Industrial customers using Norsk Titanium's publicly released specifications**
Strong Collateral Value with Clear Path to Profitability	▪ **35 RPD® machines with 700 tons of annual print capacity** ▪ **Capacity can generate $300M of annual revenues** ▪ **RPD® process and software protected by a total of 191 patents**
Strong Sponsorship	▪ **More than $300 million invested in equity** ▪ **$125 million Production Facility provided by New York State** (leased for $1 per year) ▪ **Strong shareholder support Scatec Innovation AS and Aljomaih Group**

Business Overview

RPD® 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

Ingot converted to wire

Ingots cast into titanium blocks

Wire melted into near-net-shapes

Ingots forged to gross shapes with expensive dies

Shapes machined to parts

Norsk Titanium: Norway & United States

	Eggemoen, Norway	Plattsburgh, New York, U.S.	
	Headquarters & Technology Center	**Plattsburgh Production Center (PPC)**	**Plattsburgh Defense & Qualification Center (PDQC)**
Facilities			
Select Highlights	■ Established in 2011 ■ Focused on research and development ■ Features a full-scale metallurgy lab	■ State-of-the-art production facility custom-built for the RPD® process ■ Fully redundant support systems for world-class operating uptime	■ Established in 2017 following agreement between Norsk Titanium and State of New York ■ State-of-the-art production and training facility for metal 3D printing
FTEs	**64 employees**	**52 employees**	
Capacity	■ **3 RPD® Machines** ■ **Annual Capacity:** 60 Metric tons / year ■ **Facility Size:** 25,000 sq. ft.	■ **22 RPD® Machines** ■ **Annual Capacity:** 440 Metric tons/year ■ **Facility Size:** 80,000 sq. ft.	■ **10 RPD® Machines** ■ **Annual Capacity:** 200 Metric tons / year ■ **Facility Size:** 67,000 sq. ft.

April 2024 - commercial update
Major wins across all market areas

Commercial Aerospace

- Signed landmark Master Supply Agreement with **Airbus**
- **Airbus** wave 2 parts transitioning into serial production and beginning to generate revenue in Q2
- Signed agreement with Boeing to supply serial production parts directly

Defense

- Qualifications and production orders with US DoD prime contractors
- **Northrop Grumman** material qualification complete and in place

Industrial / New Opportunities

- Secured long-term production orders for **ASML** carrier trays with **Hittech**
- New parts in development for transitioning into production this year

Entering new phase of serial production and scaling of revenue

Focus shifting from qualification and development to scaling of recurring revenue as more parts are transitioned into serial production

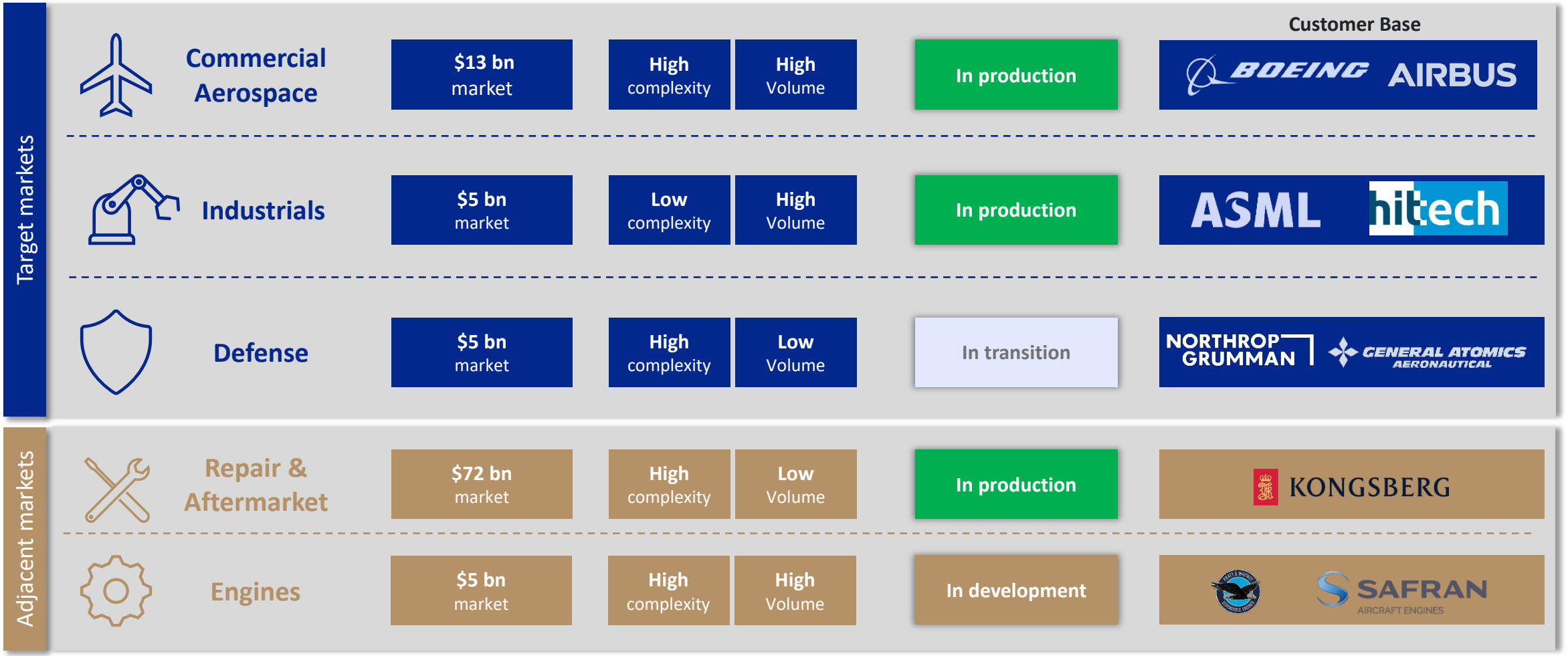
- The **Airbus** Master Supply Agreement opens for transition of Wave 2 parts in Q2
- Also transitioning more parts into serial production for **Northrop Grumman** and **ASML**
- Currently **21 parts** in serial production with annual recurring revenue of approximately USD 6 million
- See **~6x increase in no. of parts** in serial production and **>10x increase in ARR** during 2024

	YE 2022	H1'23	YE 2023	H1'24e	YE 2024e	Description
Parts in serial production	7	8	11	~30	>60	Parts in serial production for tier-1 suppliers to leading OEMs in target markets
Annual recurring revenue of parts in serial production	$1m	$2.5	$4m	~$10	$50	Estimated total annual revenue opportunity for parts in serial production

Addressable Markets

At Inflection Point for Exponential Growth

Multiple overlapping revenue growth curves driving the success of RPD® technology



Source: Consultant and management estimates

Customer Engagements

Signed Master Supply Agreement in April

AIRBUS

RPD® is a direct replacement for titanium parts on current Airbus programs

- Norsk Titanium machine and process qualified to produce significant structural components
- Master Supply Agreement signed enabling recurring production buys
- Future development efforts underway
- Airbus releasing parts for serial production in waves
  - Wave 1 parts in production
  - Wave 2 parts commencing production in Q2
  - Expect follow-on parts in development this year

"The demonstration of [RPD®] serial production maturity is a door opener for larger and more spectacular components..."

Airbus Aerostructures

> 500	75	125,000
Addressable parts across Airbus platforms*	A350 and A320 built monthly*	Part opportunity per year*

USD 1.0 billion annual addressable opportunity*

*Norsk Titanium estimates

RPD® Parts Flying on Boeing Planes Since 2017

7 RPD® printed parts on every Boeing 787 Dreamliner:

Norsk Titanium sells parts to Boeing through tier-1 suppliers

- Received a direct purchase order for parts in serial production from Boeing
- Engaged with Boeing on funded development engagements
- Re-engage with Boeing supply chain to transition additional B787 parts to serial production

> 1 000
Addressable parts across Boeing platforms*

75
B787 and B737 built monthly*

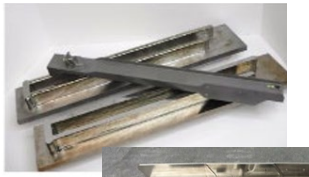
250 000
Part opportunity per year*

$1.5 billion annual addressable opportunity*

*Norsk Titanium estimates

RPD® Qualification for US DoD Applications

Prime contractors applying multiple approaches for transition to RPD®



NORTHROP GRUMMAN

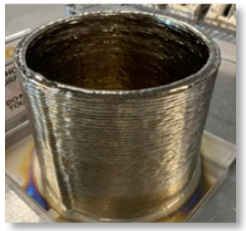
Norsk Titanium is positioning as a secure source of specialty metals for national security needs – Expected to account for ~20% of 2026 revenues

- Prime defense contractors are looking for alternatives to traditional supply chains, as casting & forging lead-times have become unresponsive
  1. **Northrop Grumman:** Specification established, flight-critical parts delivered
  2. **General Atomics:** Full-scale article testing ongoing; Part demonstration and part specific qualification
  3. Undisclosed space application development underway
  4. **Bechtel** nickel-based superalloy development underway
- Casting & forging suppliers are also evaluating RPD® as a complement to their product lines
- Significant US-Norwegian reciprocal defense spending underway

GENERAL ATOMICS AERONAUTICAL

BECHTEL BPMI

BATTELLE



Space Application

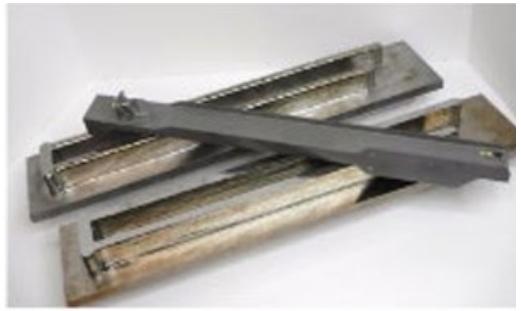
RPD® Active Applications in Defense

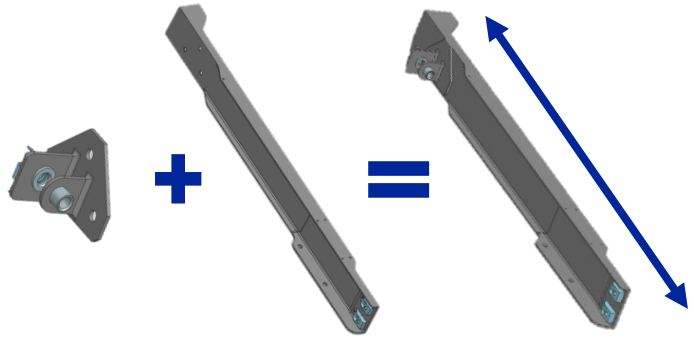
Northrop Grumman implementation of RPD® parts on critical subsystem

NORTHROP GRUMMAN

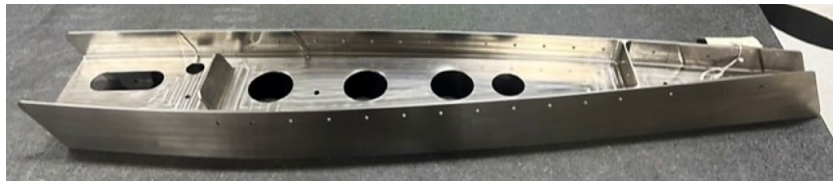
Northrop Grumman and Norsk Titanium have developed a deep collaboration to implement RPD® parts in critical defense systems

- RPD® parts are approved to replace mission-critical aircraft components
- Adoption by Northrop Grumman will result in an estimated 20-35% cost savings for parts in mission-critical systems
- Labor savings are also realized through part unification on multiple components
- An RPD® developed structural wing-tip rib to be integrated as structural component and manufactured to fly on a Northrop Grumman air vehicle





Unification of Two Brackets for PA-DED Design



ASML Uses RPD® for a Critical Production Element

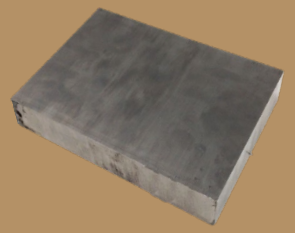
Transitioning all forged block procurement to RPD® in a response to massive demand growth

ASML

Less CNC Machinery Required and Reduced Part Cost

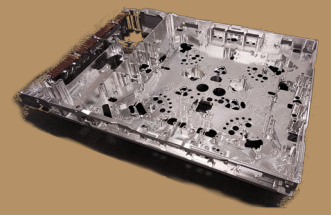
Legacy Block

220 kg Forged Block



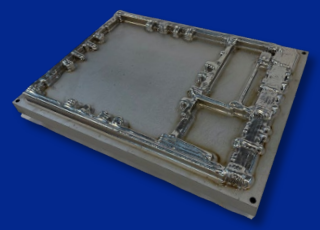
***15 000 kg** additional machining required per year*

< 10kg Finished



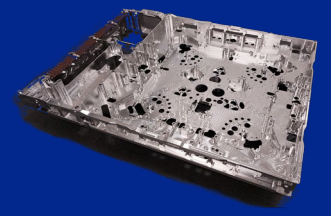
Norsk Titanium

80 kg RPD® Print



***Saves 2 CNC machines,** or $10 million capital investment*

< 10kg Finished



CNC: Computer numerical control machine

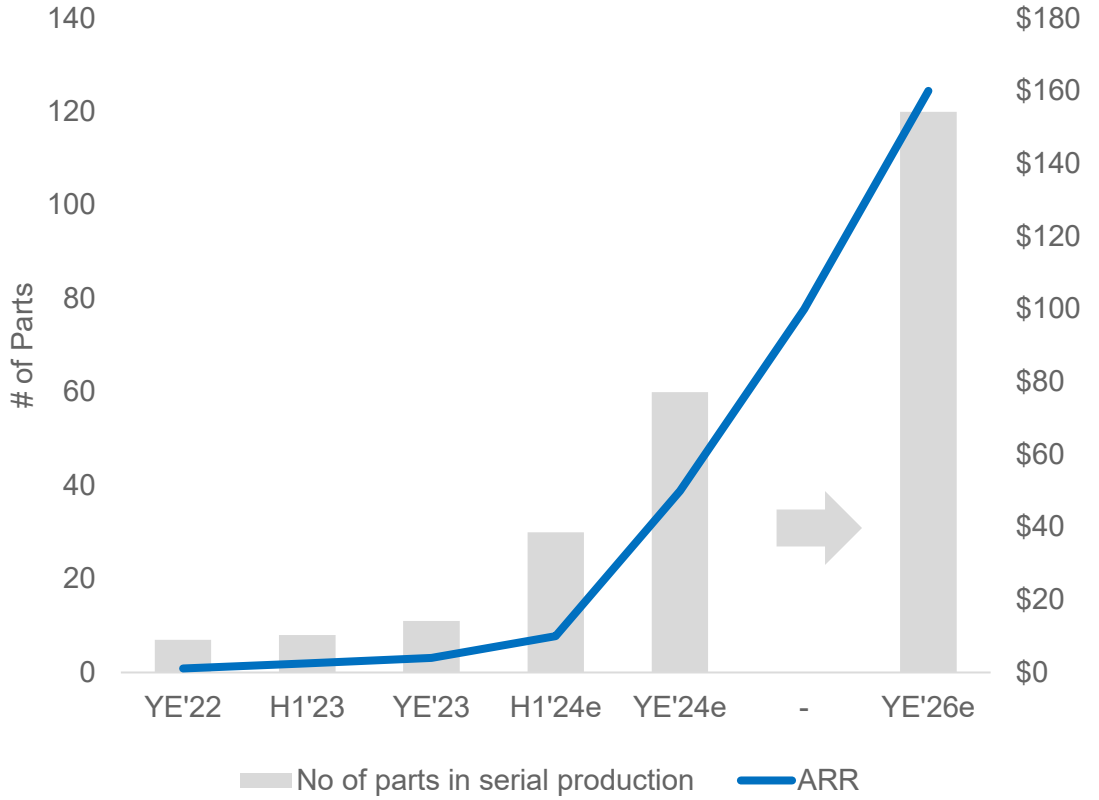
- In 2023 transitioned in the first carrier tray into production and supplied to Hittech for installation on ASML's assemblies
- Received follow-on order for the carrier trays
- Engaged with Hittech and ASML to transition a similar carrier tray on ASML's other products
- Significant percentage of short-term revenue driven by ASML demand

Financial Update

Reaching the revenue inflection point

- Revenue of USD 2.2 million in 2023 (1.0)
- 2024 revenue target of USD 15 million
- ARR forming revenue baseline for the following year
- ARR development towards USD 50 million in 2024 represents a stepping stone towards the 2026 revenue target of USD 150 million – of which USD 120 million from parts in serial production

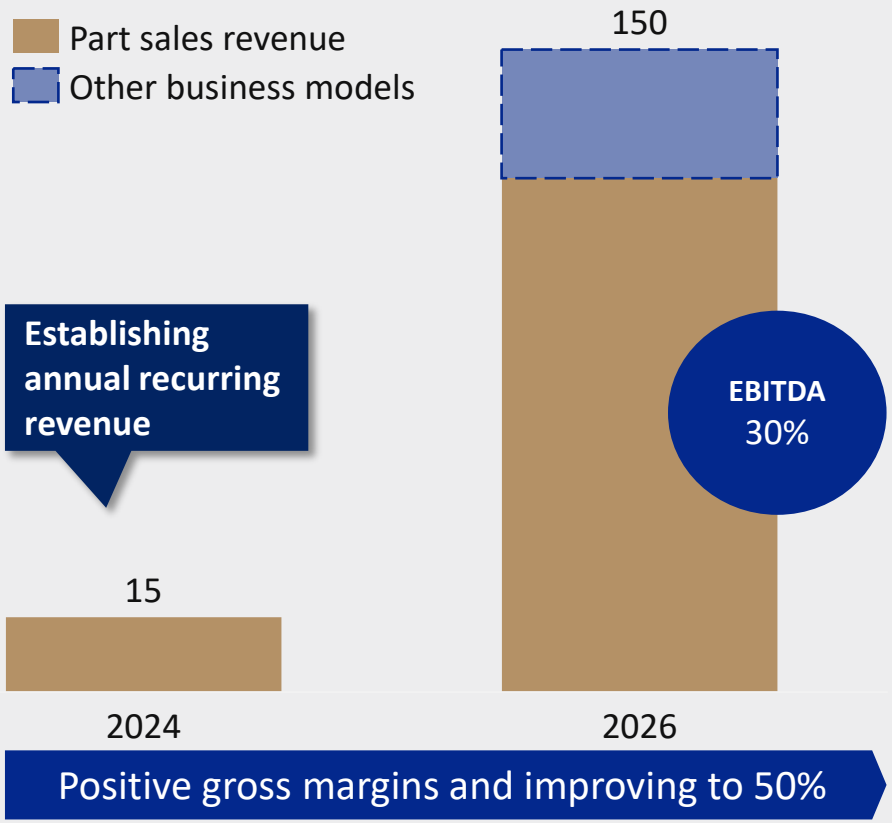
No. of serial parts in production and ARR from parts ($m)



Global Titanium Challenges Can Accelerate RPD® Adoption

Qualifications completed with Airbus, Boeing and ASML - focus in 2024 on transitioning parts to serial production

Revenue Targets *($ in millions)*



- Rapidly expanding parts revenue from target markets
  - High complexity Commercial Aerospace parts as main growth driver
  - High volume parts from industrial second growth driver; short term volume driven by Hittech/ASML demand
  - Smaller volumes of larger parts from Defense industry
- Other non-recurring business models adds upside potential
  - RPD® machine sales, IP licenses, JVs, and other being evaluated
- Contribution margins from part sales set to increase from 30% in 2024 to 50% in 2026 with increased scale
- Targeting an EBITDA margin of 30% in 2026
- More than $400 million invested over the past 12 years

Establishing a Multi-year Backlog on Established Platforms

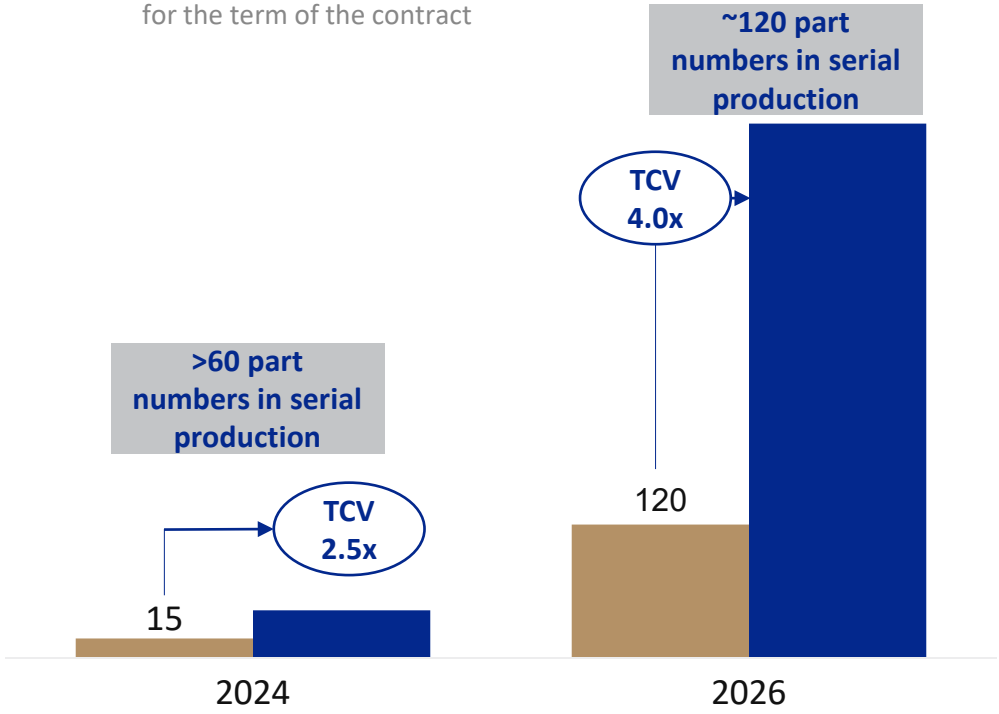
Each part adopted on a platform secures multiple years of contractual revenue

Recurring revenue dynamics *($ in millions)*

Part sales revenue

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	Annual parts produced	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	**120**
RPD® capacity utilization	**50%**

Norsk Titanium set for take off

USD 400m
invested*

~USD 110m
market cap

35 machines
700 tons capacity

Parts supplier
Direct replacement

USD 300m
revenue capacity

190+ patents
granted

US & Norway
locations

115+
employees

Material specification
Qualified

3 markets
presence

BOEING AIRBUS SPIRIT AEROSYSTEMS PREMIUM AEROTEC ASML hittech GENERAL ATOMICS AERONAUTICAL

* USD 275m equity plus USD 125m New York State grant