

# Norsk Titanium - Innovating the future of metal manufacturing

Norsk Titanium AS and its subsidiaries (collectively "Norsk Titanium" or "the Group") provide cost-efficient 3D printing of metal alloys through its proprietary Rapid Plasma Deposition® (RPD®) technology. We are positioned to disrupt metal manufacturing by delivering value-added parts cheaper, faster and in a more environmentally friendly way to the large addressable market for metal alloys.

Norsk Titanium is focused on high end applications for which the adoption of 3D printed Titanium parts will add substantial value compared to existing materials and production methods. High complexity markets such as commercial aerospace and defense allow Norsk Titanium to deliver a strong value proposition and strategically positions us for expansion into other markets. Having established a leading position within the commercial aerospace market, Norsk Titanium is progressing with multiple customers in other attractive markets including defense and industrial. Extension to new industries is achieved in three stages:

- **Technology adoption** through qualification programs and establishing material specifications,
- **Design facilitation** by enabling customers to rapidly design and test parts, and
- **Customized mass manufacturing** utilizing Norsk Titanium's 700 MT of global additive manufacturing capacity.

Norsk Titanium has an annual capacity of 700 MT between its US and Norwegian facilities that can be deployed to meet customer demand; twice the capacity needed to meet its USD 150 million revenue target in 2026. With no further investments needed in machinery and technology to meet the mid-term business plan, our resources are directed towards qualifications and testing to ensure customers can utilize RPD® material commercially as a direct replacement for their existing raw material supply chain.



## Q1 2022 Trading update

19 May, 2022



## CEO Update

We continue to execute on our 2022 business plan with significant progress in our key focus areas in the first quarter. Commercial air traffic continued to rebound during the quarter, pointing towards a sustained recovery. We expect our ongoing commercial aircraft part deliveries to recover in-line with industry forecasts. In addition, our Airbus qualification program continues as planned and our capacity is fully capable of meeting Airbus demand for 2022 and beyond.

Similarly, we are full steam ahead on US Department of Defense (US DoD) qualifications. Full scale testing of the material with General Atomics and another US DoD prime contractor yielded positive results in the first quarter. With our recent Directorate of Defense Trade Controls (DDTC) registration we have the necessary infrastructure in place to support production for use in defense programs. We expect to begin production for US DoD contractors this year. In the industrial market, testing with Hittech continues on schedule in the first quarter and we expect to be in recurring production before the end of the year.

## Highlights from the first quarter 2022

Maintaining 100% on-time deliveries for commercial production programs while completing qualification and testing programs for Commercial Aerospace, Defense and Industrial customers remained Norsk Titanium's top priorities in the first quarter. We made significant progress towards our 2022 goals to achieve our revenue targets:

1. **Commercial Aerospace: Complete Airbus machine qualification and material qualification**
  - Test material produced for machine qualification. Testing to commence in second quarter
  - Production parts in development for customer qualification
2. **Defense: Qualification programs with US DoD prime contractors and first production order**
  - Completed full scale article testing with General Atomics and another US DoD prime contractor
  - DDTC registration completed to support US DoD production
3. **Industrial: Hittech industrialization part and first production order**
  - Hittech continues to evaluate full scale article performance
  - Ongoing development to optimize part of recurring production

In the first quarter, Norsk Titanium generated revenue from parts of USD 0.03 million. Collection of USD 2.0 million of the Innovation Norway grant contributed to a decreased monthly net cash burn rate to USD 1.3 million in the quarter, on track with our target burn rate for the period. With an ending cash balance of USD 19.1 million, we expect to fund operations to the end of 2022 and raise capital before year end to fund our future growth ambitions.

Key financials* (USDm)	Q1'22	H2'21	Q3'21
Revenue	0.03	1.01	0.01
Average monthly cash burn rate**	1.31	1.94	2.16
Ending cash balance	19.11	22.93	28.20

\*Unaudited

\*\*Alternative Performance Measure (APM): Net change in cash and cash equivalents excluding capital raised from debt and/or share increases adjusted for currency exchange rates

## First quarter 2022 Technical and operational update

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### Foundational Principles

*Repeatable, Scalable  
and Robust RPD®  
Process Measured  
Through a Robust Data  
Management Platform*

We further developed the capabilities of RPD Builder™ and robustness of the material quality printed by our RPD® machines. During the first quarter we improved the part design interface and functionality to support the optimization of the Hittech part. We also updated the Merke IV® machine drivers to support the RPD Builder™ enhancements.

We engage in continuous improvement processes to increase material robustness and enhance the RPD Builder™ feature library. Key projects during the first quarter focused on material qualifications, improved functionality, and user friendliness in our parts programming.

The RPD® technology and platform is now protected by a total of 165 patents, of which 17 new patents were added to the portfolio in the quarter with a further 47 patent applications pending. Our patent strategy seeks to protect key aspects of our technology and safeguard our leading position in the additive manufacturing segment.

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### Operational Principles

*Excellence Through an  
Organization that  
Improves Velocity of  
Business Processes for  
Customers*

During the first quarter Norsk Titanium continued its perfect on-time delivery of serial production parts to Spirit Aerosystems and GKN Aerospace. Serial production quantities continue to be depressed due to low-rate production of the Boeing 787 program. 30 parts were delivered during the first quarter. We completed and delivered 8 trailblazer parts under an ongoing qualification program for a US DoD prime contractor. These parts represent the full test articles that are candidates for serial production.

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### Market Penetration Vision

*Competitive Parts  
Production in  
Commercial Aerospace  
and Diversified Structural  
Titanium Market*

We continue to work with the major commercial aerospace OEMs to transition RPD® material onto their platforms. Airbus qualification efforts continue as planned. Machine qualification material has been produced and is being prepared for testing. The first two industrial trial parts are in development and will be complete in time for machine qualification. Boeing has adopted RPD® for parts on the 787 program and continues to explore additional applications of RPD® in their programs. We expect to transition additional parts after they complete their evaluation.

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### Expanded go-to-market strategy

*RPD® Adaptability in  
New Markets through  
Diversified Superalloys  
and Strategic Markets*

Our expansion into the defense and industrial markets is on plan. We completed full scale article testing with two US DoD prime contractors with positive results. We continue to build out our infrastructure to support production of defense articles, including the completion of our DDTC registration. We expect to receive our first order for production parts in 2022.

Our industrial market entry partner, Hittech, continues to evaluate full scale article performance and we expect to receive a production order in 2022.

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