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### Edged cutting chemical process - SMS group technology for batteries recycling

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#### Abstract

Primobius is a JV between SMS group GmbH (Germany) and Neometals Ltd (Austria). Our goal is to close the loop and make a circular economy for lithium-ion batteries a reality for the benefit of our planet and the generations to come. Our advanced two stage recycling solution integrates seamlessly into the circular economy, ensures ethically sourced materials and contributes to reducing waste and the world's reliance on our finite resources. Primobius provides the best possible recycling solution: Flexible and robust technology; environmentally responsible process; ethical sourced high purity products; safe process compliant with regulations; continuous improvement with regard to product yield, quality and efficiency.

<b>Flexible and robust technology</b>
In contrast to competitors multiple battery chemistries, formats and types can be processed.
<b>Environmentally friendly</b>
In contrast to incumbent pyromet. processes our technology generates less CO <sub>2</sub> and less transportation of hazardous wastes.
<b>Ethical sourced high purity products</b>
We produce high purity chemicals not intermediates intended for the ethical re-supply to the cathode producer supply chains.
<b>Safe process according to regulations</b>
High share of recycled materials to high purity chemicals meeting the current regulations with a safe process.
<b>Continuous improvement</b>
We continuously optimize our existing processes with regard to product yield, quality and efficiency

#### Biography

For the past 30 years active in entrepreneurial and executive roles in the metallurgical industry. I was raised and educated all my life in Germany. In 1980 I earned a master degree in metallurgical engineering with summa cum laude from Mercator Technical University, Germany. I worked for steel producer ThyssenKrupp for 22 years in operation, technology department and Management. In 1999 Ph.D. can, Technical University Freiberg, Germany Joined SMS group in 2001 as Executive Vice President of the business unit technical service. Chairman Board of Directors for several SMS group entities in oversea. Since the year 2014 i was named and appointed as professor at South Ural State University, Chelyabinsk Russia, and guest lecturer at the Moscow State Technical University. In 2017 I got a Doctoral Degree in Science from South Ural State University. From 2018 to 08/2021 assignment as President and CEO for SMS group North America. Since 09/2021 Chief Sales Officer for the Region India and Asia Pacific and Managing Director of SMS group AP, Singapore. Between 1994 and 2017, published 34 papers in metallurgy journals and SMS group news publications. Fluent in German, English, Italian. Basic level in French, Spanish, Russian and Indonesian language.

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