BLOOH SOLUTION LTD.

EXPOSÉ

BLOOH SOLUTION LTD.

Advanced Scandium Alloy Technologies

www.blooh-solution.com

Scandium: A Revolutionary Element

Discovered in 1879, scandium has long been recognized for its exceptional properties—especially its ability to significantly strengthen aluminum alloys while dramatically reducing weight.

At BLOOH Solution Ltd., we have strategically integrated scandium into our innovation portfolio, building on our deep expertise in lithium technologies. Even in the early research phases of lithium-ion batteries, scandium's potential as a stabilizing material was evident.

Today, scandium enables us to deliver groundbreaking high-performance material solutions for aerospace, automotive, and marine industries.

About Us

BLOOH Solution Ltd. was founded with the vision of transforming the global energy landscape through innovative, sustainable technologies.

Our roots lie in the research and development of lithium technologies—particularly in the fields of energy storage and electromobility. With decades of experience and a strong focus on research, recycling, and resource efficiency, BLOOH Solution has become one of the leading companies in the field of sustainable energy systems.

Today, our portfolio includes solutions based on lithium, hydrogen, honeycomb structures, and—proudly—scandium. By strategically integrating these innovation fields, we are shaping the future of energy and advanced material technologies.

Thanks to our strong global presence and strategic partnerships, we are well-positioned for significant growth.

Our Products

High-Performance Alloys for Aerospace

Lightweight, high-strength alloys engineered for modern aerospace applications. This solution is specifically developed to meet the demands of today's aviation and space industries. The combination of low weight and high strength makes it the ideal choice for highly stressed structural components.

- **Application Areas**
  Aircraft frames, wings, landing gear, satellites, spacecraft.
- **Benefits**
  Up to 20% weight reduction, improved fuel efficiency, increased structural durability, excellent corrosion resistance.
- **Impact**
  Significantly reduces operating costs and emissions—making a valuable contribution to global sustainability goals.

Our Products

Structural Components for Electric Vehicles

High-performance lightweight components designed to enhance range and safety. This solution is engineered to boost the performance and efficiency of electric vehicles. By using scandium-aluminum alloys, vehicle components can be made significantly lighter while increasing structural robustness.

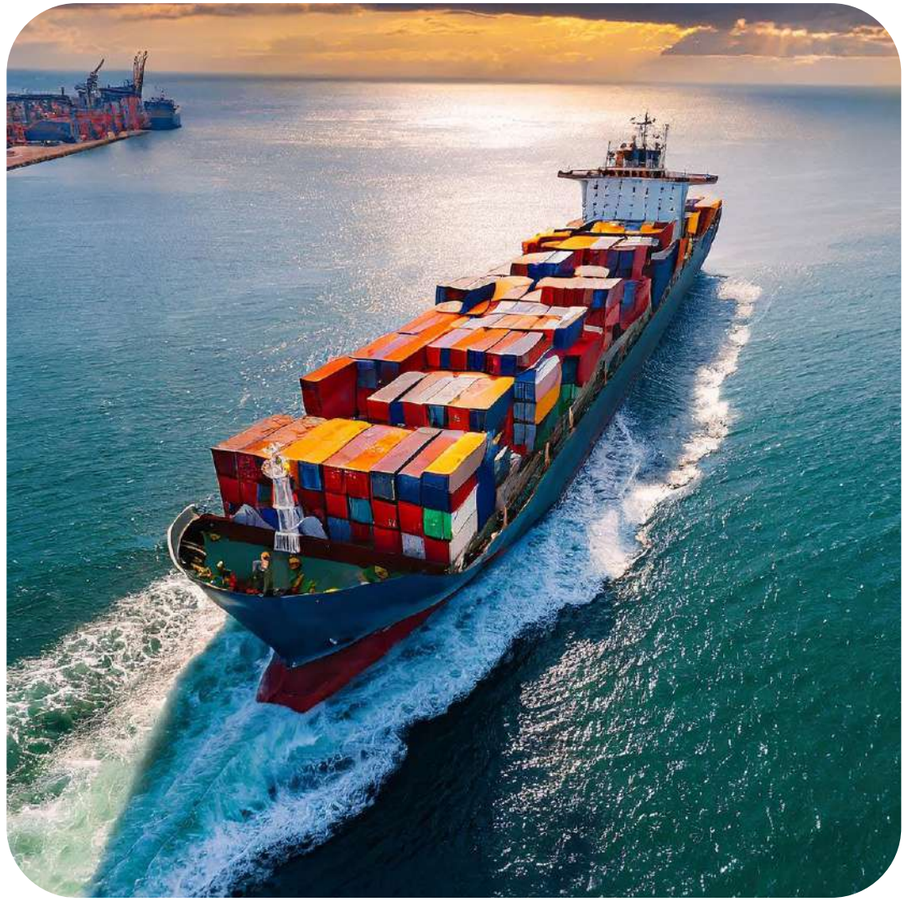
- **Application Areas**
  EV chassis, battery housings, load-bearing battery modules.
- **Benefits**
  Improved safety, significantly extended range through weight reduction, optimized thermal management.
- **Impact**
  Promotes broader adoption of e-mobility by increasing efficiency, performance, and sustainability—a clear step toward an emission-free future.

Our Products

Corrosion-Resistant Materials for the Maritime Sector

Durable lightweight solutions for shipping and offshore infrastructure. This solution is designed for applications where corrosion resistance and mechanical stability are critical. It contributes to extending service life and reducing maintenance costs in extreme environments.

- **Application Areas**
  Ship hulls, yachts, offshore structures, maritime platforms for renewable energy.
- **Benefits**
  Excellent corrosion resistance, increased structural strength, reduced maintenance intervals and costs.
- **Impact**
  Extends the lifespan and sustainability of maritime infrastructure while reducing its environmental footprint.



BLOOH Solution follows an advanced circular economy approach by recovering scandium directly from our lithium processes. This innovative method not only ensures a secure supply of high-quality alloys but also significantly reduces environmental impact compared to conventional extraction methods.

Global market analyses show a clear rise in demand for scandium alloys—driven by industries seeking lighter, stronger, and more sustainable materials. With our innovation capabilities, commitment to sustainability, and high-quality product portfolio, BLOOH Solution is well-positioned to take a leading role in this strategic sector worldwide.