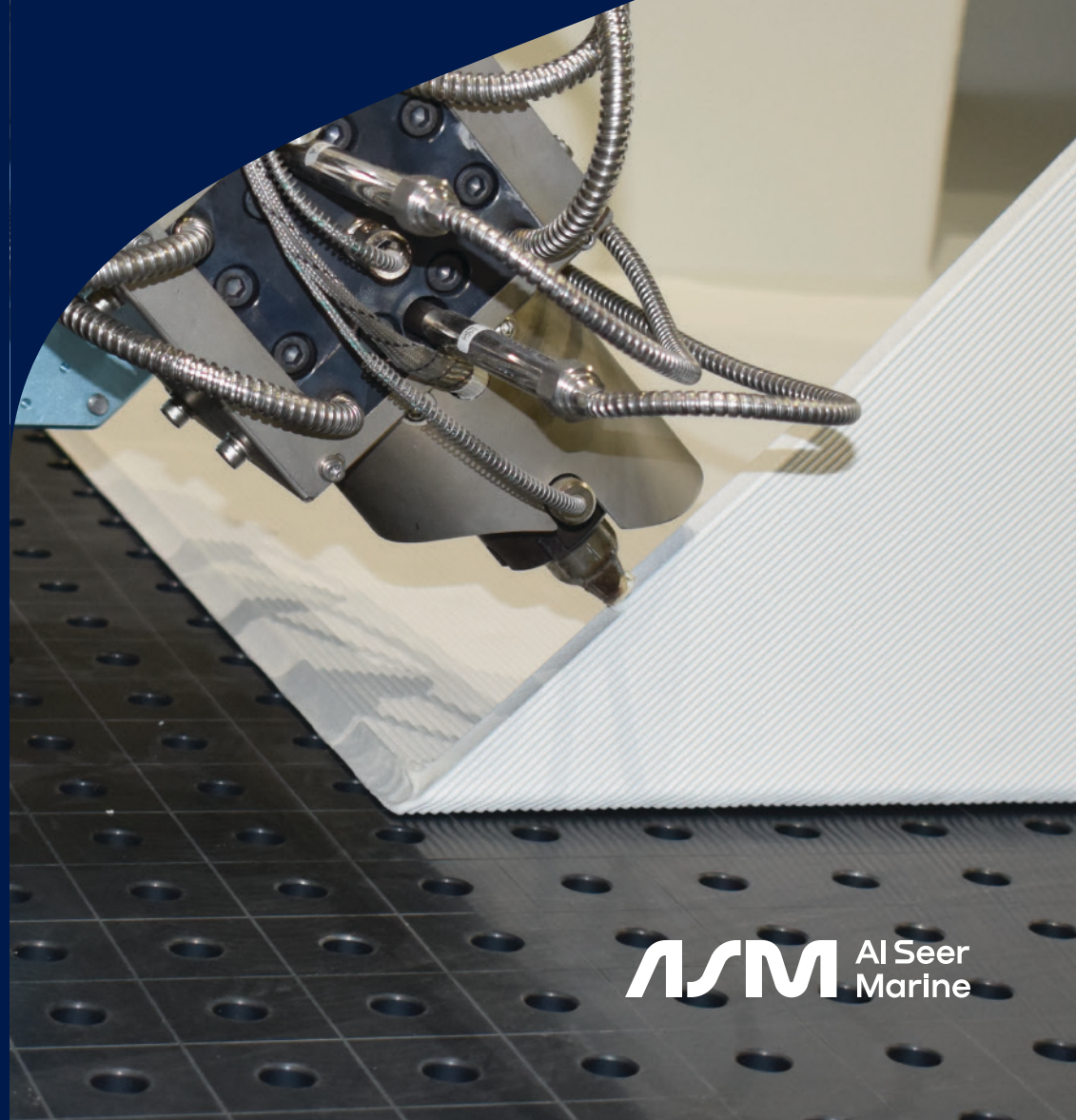


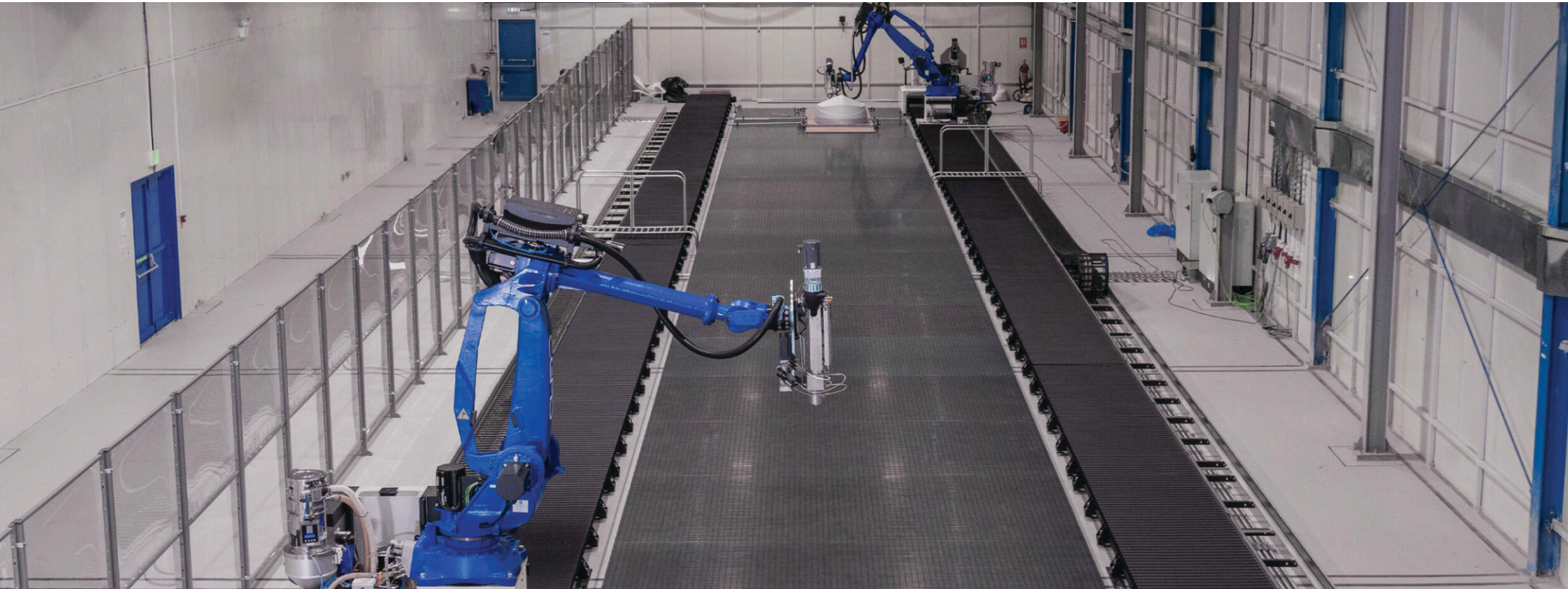
Large-Scale 3D Printing



Innovation & Sustainability

Al Seer Marine is at the forefront of innovation, pioneering large-scale 3D printing solutions by integrating Boatbuilding 4.0 principles with a connected data-logging platform. This revolutionary approach not only transforms traditional manufacturing processes, but also enables the production of complex components and structures using sustainable materials.

The innovative solutions cater to a wide range of industries, ensuring low-carbon footprint production through the use of recycled materials. This transformative process underscores the commitment to environmentally conscious practices within the industry.



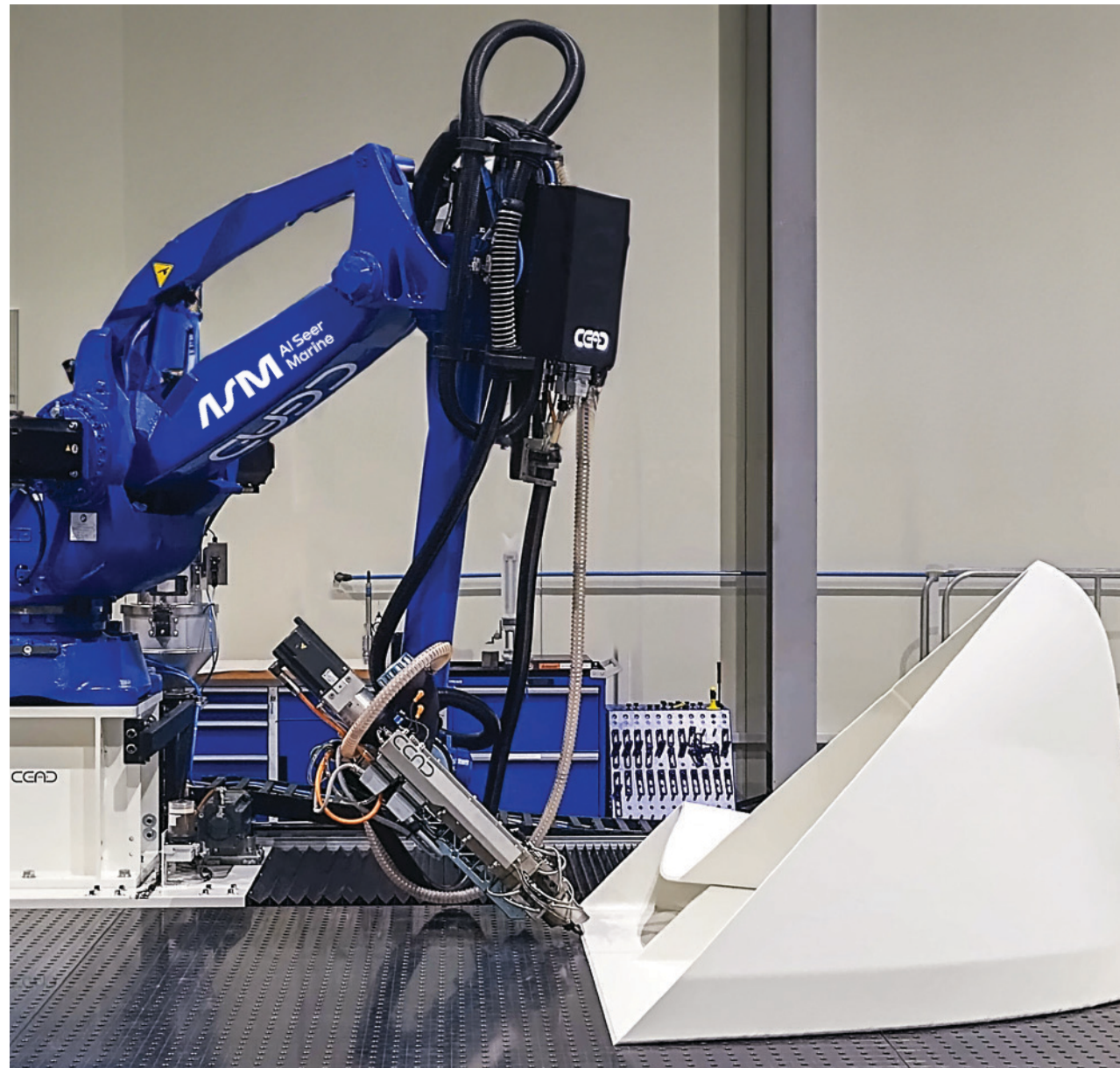
Large-Scale 3D Printing

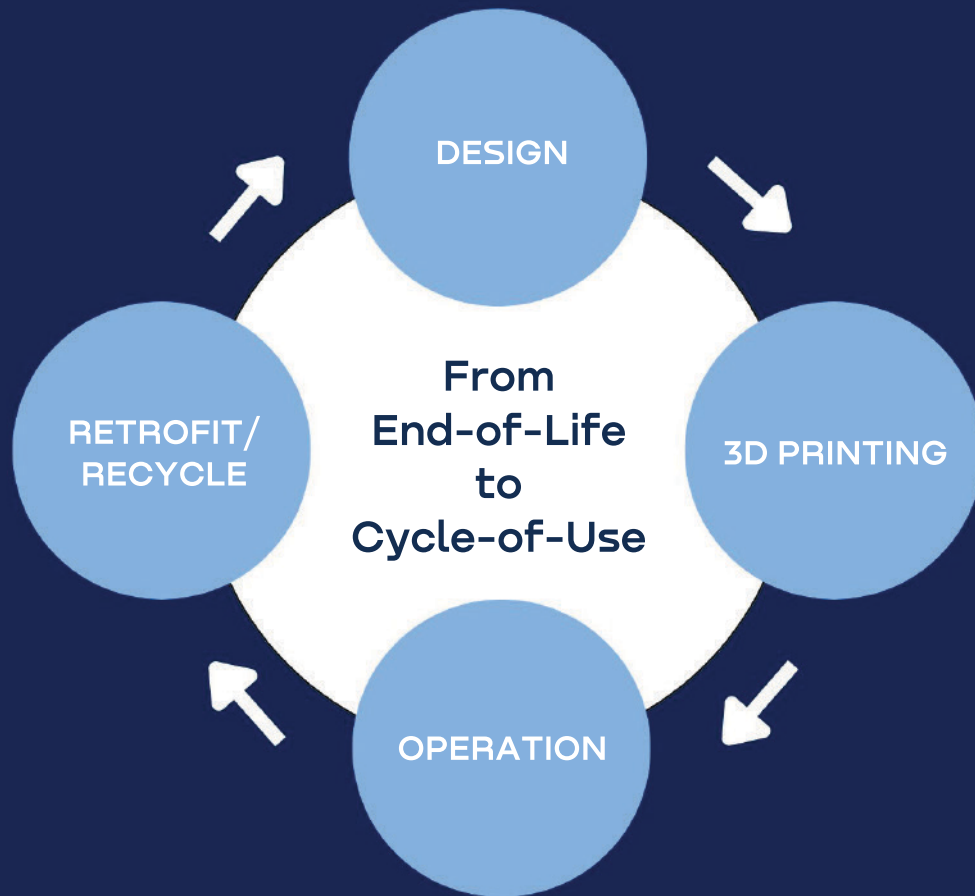
Our commitment to innovation and sustainability is evident in our advanced 3D printing capabilities. By employing cutting-edge techniques, we produce high-quality, complex components that revolutionize traditional manufacturing processes across various industries. This transformative approach not only enhances efficiency and precision but also supports environmentally conscious practices using sustainable materials.

- Largest 3D Printer in the world
- 2 Flexbot - hybrid (printing or milling)
- Wide range of advanced materials

Applications Across Industries

- Aerospace
- Railways
- Automotives
- Marine and more





End-of-Life to Cycle-of-Use

Al Seer Marine's implementation of Industry 4.0 principles extends seamlessly from end-of-life to cycle-of-use. Meticulous design and quality control processes from start of a project is transforming concepts into reality. The transition into operational environments offers unparalleled reliability, efficiency, and cost effectiveness.

In line with our commitment to sustainability, our products are designed to last. When upgrades or changes are needed, the digital warehouse ensures easy and fast retrofitting or recycling easy ensuring minimal environmental impact.

MAIN PROJECTS



Water Taxi – Largest 3D Printed Boat

Al Seer Marine and Abu Dhabi Maritime unveiled the world's first 3D Printed Water Taxi, securing a Guinness World Records title for the Largest 3D Printed Boat and giving rise to a new era in maritime transportation, emphasizing sustainability as its core principle.

- Length: 11.98 meters
- Width: 4 meters
- Printing time of the hull: 6 days
- Certified for commercial marine use for up to 29 passengers



Exhibition Stand – Dubai

The North Star, a 3D-printed pavilion, designed by Nyxo Visionary Design and built by Al Seer Marine explores additive manufacturing using recycled PETG to demonstrate the incorporation of recycling into real-world architecture. The pavilion's design fluidly weaves together a series of S-shaped curves inspired by ogee arches found in Islamic architecture, creating a seamless and connected space.

- Measures: 8.9m x 8.9m x 4.2m
- Printing Time: 11 days
- Crafted from PETG30GF-UV, a sustainable blend of industrial recycled PETG with 30% glass fiber and UV protection compounding



Image Source: Nyxo Visionary Design

3D-Printed Electric Abra

Al Seer Marine manufactured the world's first Electric Abra in cooperation with Roads and Transport Authority (RTA), a groundbreaking project that showcases our innovative use of 3D printing technology while preserving the traditional Abra design. This eco-friendly marvel reimagines the traditional Abra, delivering incredible benefits:

- Measures: 11m x 3.1m
- 23 passenger capacity
- Faster production time
- Reduced operation & maintenance cost
- Enhanced passenger experience: Quieter, smoother rides

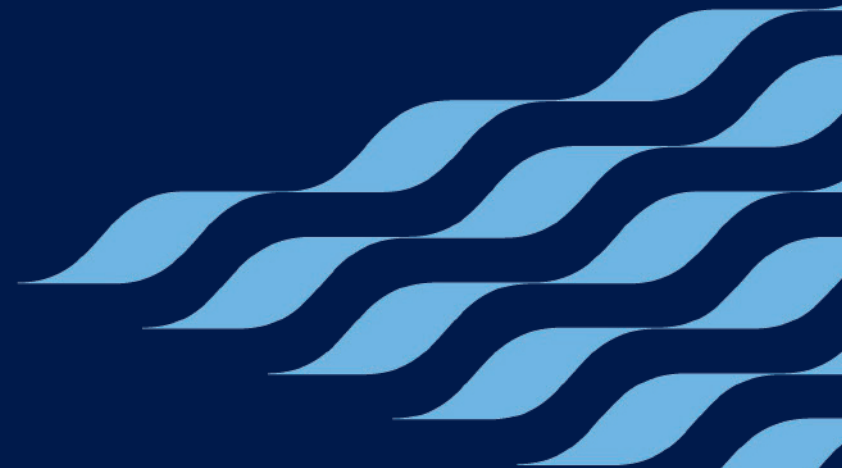


Image Source: Roads and transport Authority

ADOPTION OF 3D PRINTING TECHNOLOGIES ACROSS INDUSTRIES

3D printing is revolutionizing not only the Marine industry but also aerospace, railways, and automotive industries by changing how components are designed and manufactured. This advanced technology allows the rapid and precise production of complete parts, establishing itself as an indispensable tool for innovation. The capability of 3D printing to significantly reduce lead times and lower production costs is driving its widespread integration, cementing its role as a cornerstone of contemporary manufacturing.

Moreover, the integration of a digital storage system for 3D printing designs further enhances cost savings. By eliminating the need for physical storage and enabling easy access to digital blueprints, companies can reduce overhead costs and streamline their production processes. This digital approach not only minimizes material waste but also allows quicker modifications and updates to designs, fostering a more agile and responsive manufacturing environment.



Aerospace

In the Aerospace industry, 3D printing plays a major role in manufacturing customized tools from advanced composite materials. These tools feature ergonomic designs and are built to endure high temperatures and harsh environments, enhancing efficiency and precision

Applications include:

- Helicopter Blade Molds
- Molds & Production Tools
- Simulators & Testing Models
- Large Prototypes



Image Source: HLH Rapid

Railways

3D printing provides significant benefits to the Rail industry by enabling the production of original parts, without compromising on time and the need for traditional tooling. This sustainable solution facilitates the replacement and modernization of system parts, allowing for upgrades with new components.

By leveraging 3D printing, the Rail industry can achieve faster turnaround times and improved sustainability in its operations.

Applications include:

- Skirts, Grab Handles, Armrest, Enclosures, ducts, etc.
- Printing end-use parts
- Molds & Production Tools
- Solution to Obsolete parts



Image Source: Deutschen Bahn

Automotives

3D printing plays a major role in the Automotive industry, offering significant benefits by enabling the production of tools at lower costs with innovative designs. This technology allows the creation of ergonomically designed, lightweight tools that drastically reduce expenses.

As a result, engineers can think outside the box, bringing more innovative ideas to life while reducing costs, improving quality, and saving time.

Applications include:

- Molds & production tools
- Custom vehicles
- Retrofit parts



Image Source: CEAD Group




Image Source: Nyxo Visionary Design

Contact

To learn more about our 3D Printing
and advanced production
capabilities

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