

# CONCEPT TO CREATION WITH ADDITIVE MANUFACTURING

**interface**  
FORCE MEASUREMENT SOLUTIONS.

*Additive manufacturing is a layer-by-layer process used to create objects, molds, or prototypes. Various materials, including polymers, metals, ceramics, foams, gels, and biomaterials, can be used. In contrast to traditional manufacturing, additive manufacturing can create complex shapes and small sizes. Interface load cells play a crucial role in this process, measuring the force or weight during dimensional printing to ensure precision and quality control.*

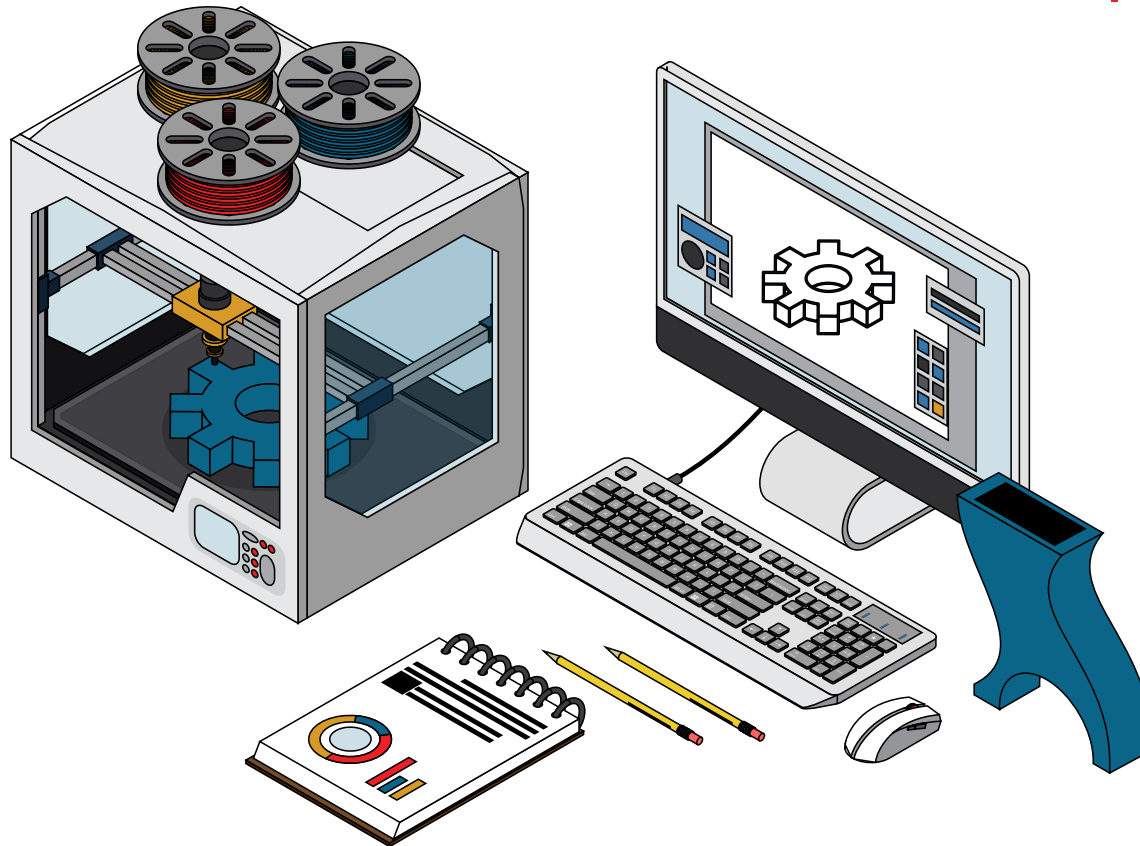
The global additive manufacturing market size was evaluated at \$17.9B in 2023, and it is expected to hit around \$110B by 2033.

In many sectors, additive manufacturing has become widely accepted as the fastest and most cost-effective way to produce functional prototypes during product development and testing. Additive manufacturing are also being applied in a growing range of “indirect” applications, including tooling, spare parts, and fixtures for conventional manufacturing machines.

The range of sensors is especially important for industries that need precision data and easy integration into equipment and testing. These include industries that are turning to additive manufacturing, such as aerospace, medical, and automotive. Selecting the right load cell is critical to product development, and manufacturers rely on Interface due to the accuracy and reliability of our solutions.

Additive manufacturing, known as 3D printing, has developed and grown since its first prototypes for 3-dimensional printing in the 1980s. By the early 2000s, additive manufacturing started to create functional products.

Additive manufacturing is used for making prototypes, research and now production. The design is basically made by using applications such as computer aided designs, software or just by scanning an object that has to be printed. Trends in additive manufacturing using sensors include automation, material diversity and high-level production.



The emergence of 3D printing with technological advancements has highlighted the importance of additive manufacturing processes. Additive manufacturing is basically made to scale the model of the final product at a robust pace without spending on the cost of creating a prototype and a typical setup process. This saves up the overall cost of the manufacturing process by promoting speedy manufacturing for end-user industries.

