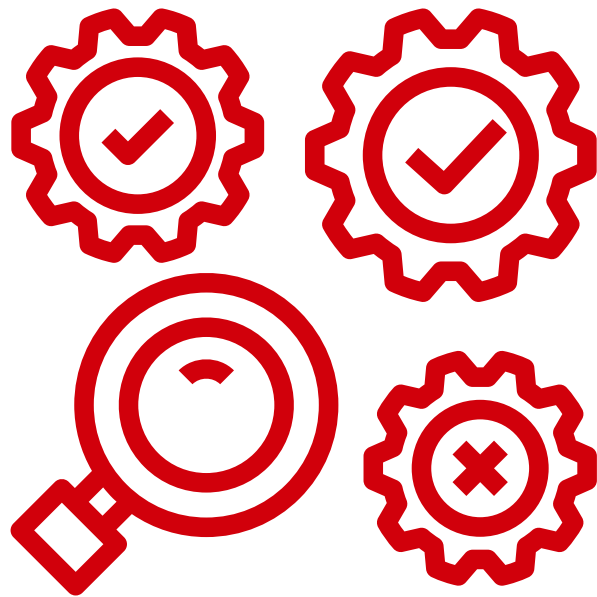


Why Hot Isostatic Pressing for Aerospace Components?

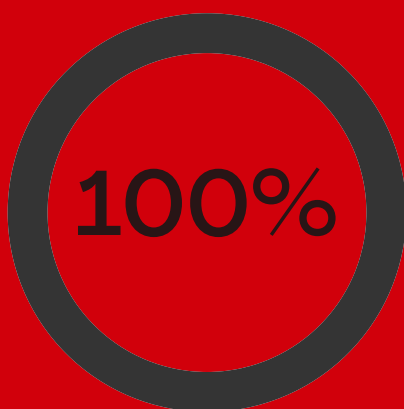
When a material is processed with Hot Isostatic Pressing (HIP), temperature and pressure are utilized to reduce the presence of internal defects such as gas porosity and voids. This results in a very dense, HIP:ed component that exceeds the requirements of aerospace manufacturers.

HIP is utilized to optimize the performance of aerospace components. By reducing the presence of internal defects, the likelihood of failures initiating at these defects is virtually eliminated. Mechanical properties of HIP:ed components can be improved by a factor of nearly 100x.

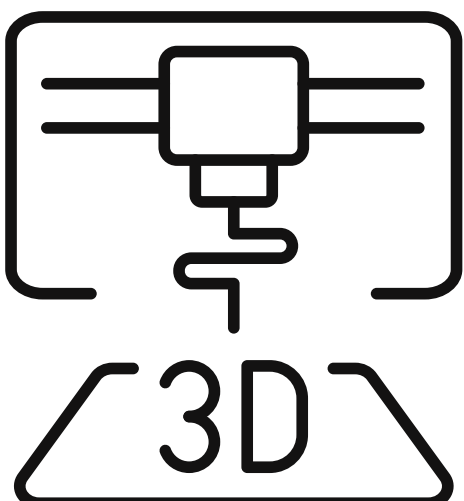
Non-destructive tests (NDT) such as X-ray are used to identify internal defects. The HIP process offers the potential to reduce the need for extensive NDT testing.



One hundred percent of the major aerospace manufacturers involved in both the civil and military industries utilize HIP.



Hot Isostatic Pressing and 3D Printed Parts for the Aerospace Industry



3D Printing offers a range of possibilities for the aerospace industry. Without the limitations of traditional production methods, 3D printing allows for new designs that reduce costs, save weight and improve reliability.

3D printing has opened doors for a variety of new materials to be incorporated into the manufacturing processes for industries such as: medical, aerospace and defense, and other mission critical industries.