

by Victoria Birk Hill November 12, 2019



3D Printed Insert

Collaborative research sponsored by Defense Logistics Agency works to reduce metal casting scrap using 3D additive manufacturing.

ACRC in collaboration with American Metalcasting Consortium, The North American Die Casting Association, Mercury Marine and Ryobi Die Casting are working on conforming cooling research that uses additive manufacturing and powdered steel to create die cast die inserts with unique conformal cooling systems to aid in solidification and reducing die cast scrap.

The research, which is sponsored by the Defense Logistics Agency, will allow the cooling lines of high-pressure castings to be 3D printed in any geometry, eliminating the need for the lines to be straight. This will help the industry achieve uniform solidification and reduce shrink porosity.