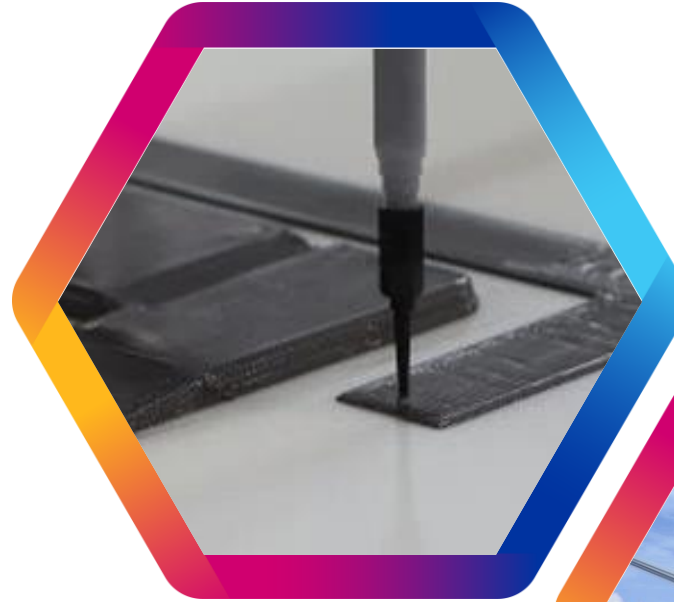


PPG ARE™ 3D Printed Sealants

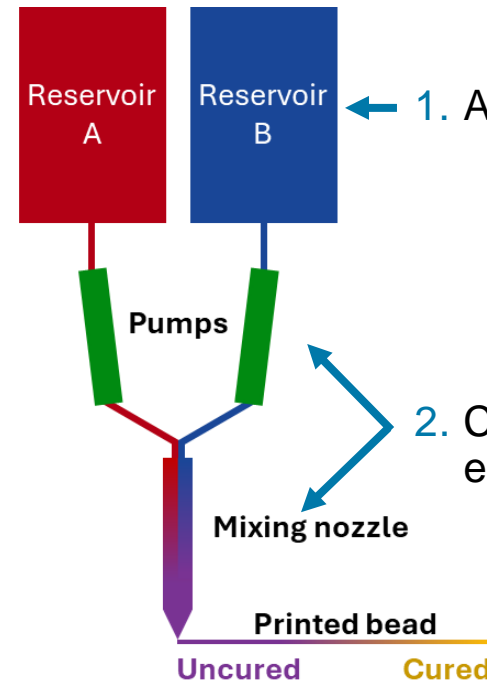
PPG Preformed Sealants



How PPG ARE™ 3D Printed Sealants Work



Ambient Reactive Extrusion (ARE)



1. A & B Pack are loaded into the 3D printer

2. Components are pumped to mixer and extruded

3. 3D printer moves position to create the desired part geometry

4. Material reacts and begins to cure on the print bed

PPG ARE™ automates part production using qualified PPG Aerospace Sealants

PPG 3D Printed Sealants Save You Time and Money

The Problem

Traditional hand-applied gaskets and seals require extensive labor, are inconsistent and may require rework.

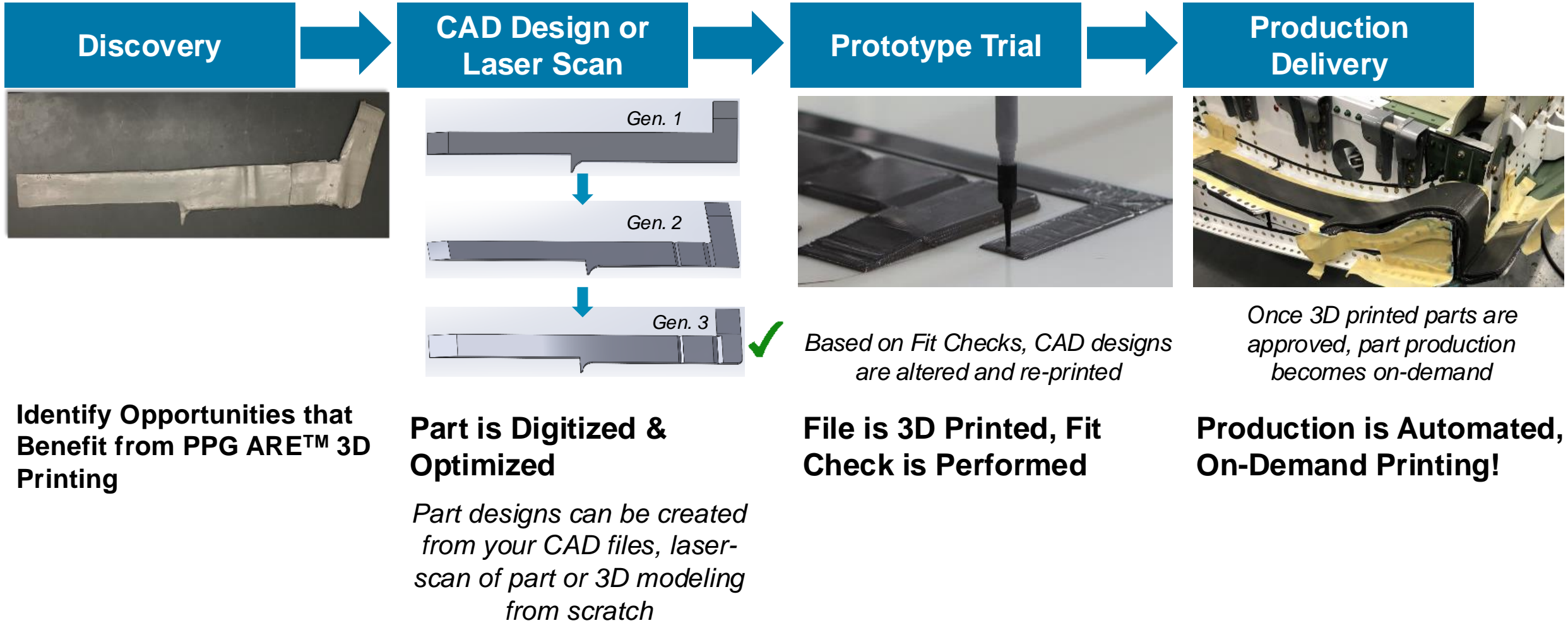


The Solution

PPG's **Ambient Reactive Extrusion (ARE™)** technology produces fully cured gaskets and seals that saves time and money with qualified PPG Aerospace Sealants.



How PPG ARE™ Parts Get into Production



PPG ARE™ Team will be apart of the entire process



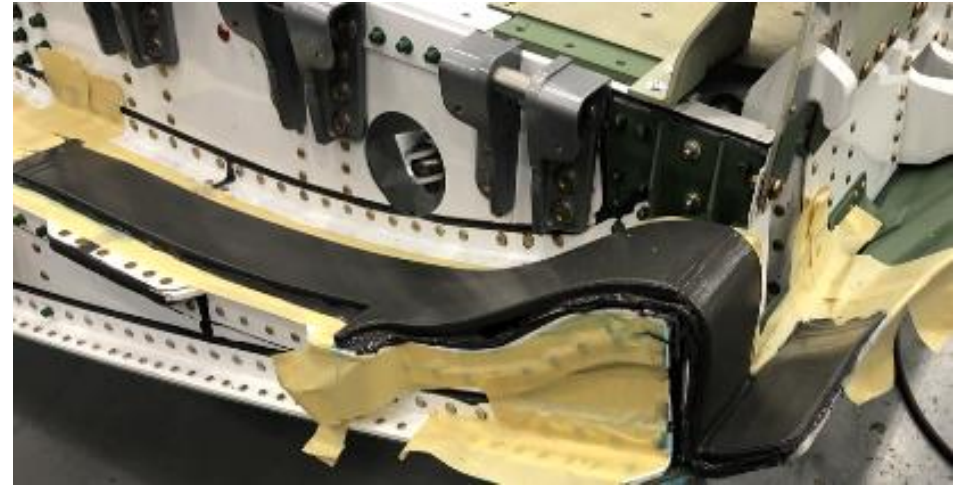
C-130 Ramp Seal Application



“These 3D printed components are a game-changer for the C-130J Super Hercules. PPG’s ARE technology is an outstanding example of how manufacturing innovation and evolution combine to deliver affordable, customized and durable components for our operators.”

**Rod McLean, VP and General Manager of
Lockheed Martin’s Air Mobility & Maritime
Missions**

LOCKHEED MARTIN 

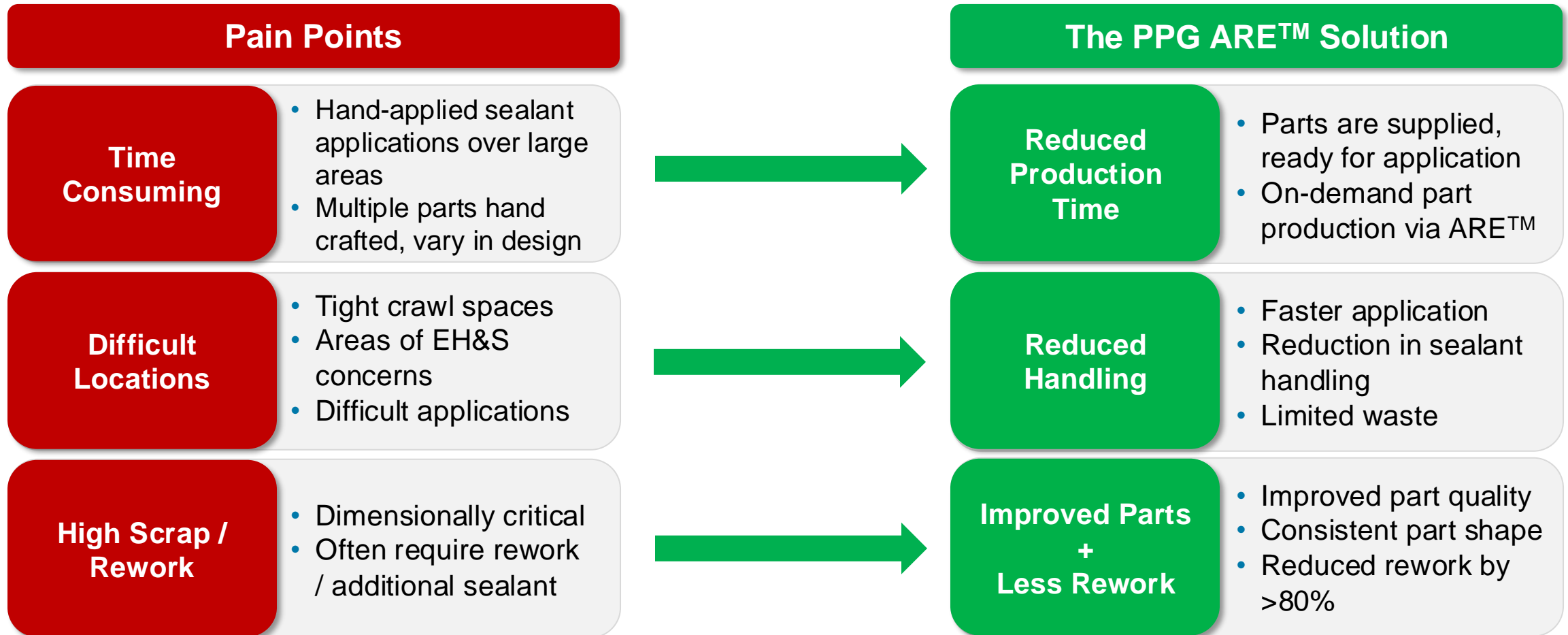


>30%
Customer Cost Savings

10X
Faster Installation Time

Stop Smearing, Start Sticking!

The Value of PPG ARE™ Parts



Joint Understanding of Your Process is Critical to ARE™ Product-Fit



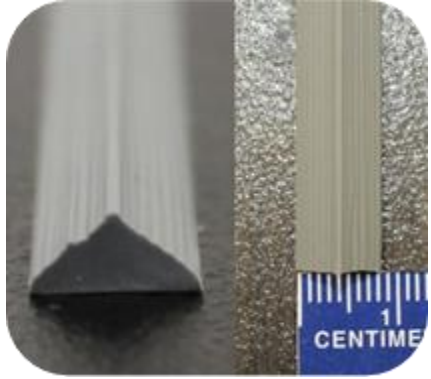
Please feel free to contact our ARE™ printing team to explore potential innovative solutions for your specific application.



We protect and
beautify the world®

Typical Aerospace Applications

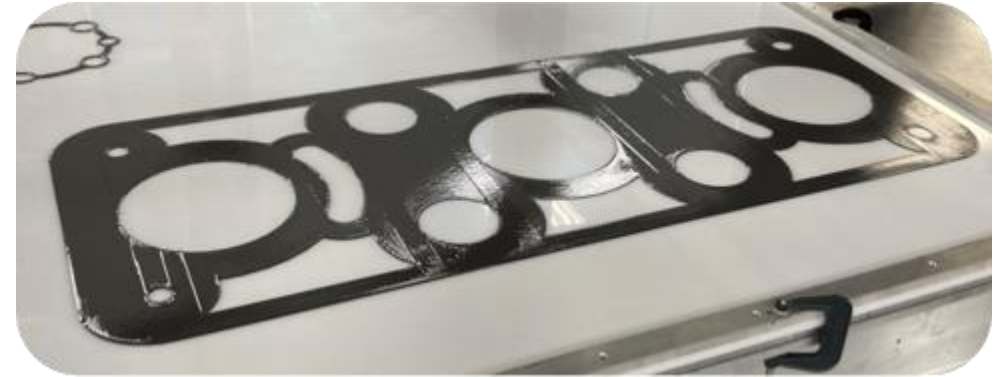
Gap Fillets



Smoothing Patches



Large Scale Fit-In-Place Gaskets



Fuel Panels



Flat Seals



Custom Seals



The Value of ARE™ for the Industry

Users have reduced costs, improved productivity, and access to new innovations.



High-Quality Parts and Materials

3D printed parts are uniform, consistent, and durable— all produced with high-quality PPG Materials.



Improved Productivity

3D printed parts are fully cured and ready for quick installation – maximizing output and cost savings.



Improved-Time-to-Market

With access to fast and efficient part production, users can get to market faster and stay ahead of the competition.



Customized Solutions

With additive manufacturing, **XXXX** receive parts catered to their specific needs.



Increased Innovation

By working with PPG, you have access to the latest advancements in material science and technology solutions.



Sustainability

By reducing waste and improving efficiency, end users can improve their own environmental footprint.

Another great application innovation by PPG!

