



## The Leader in Water Soluble Tooling Solutions

Advanced Ceramics Manufacturing specializes in the development and production of water soluble mandrels, composite parts, and ceramic components for worldwide distribution. Our products and services are designed for applications such as Aerospace Defense, Aerospace Commercial, Defense, Manufacturing, Racing, Research and University uses.

Our services include, but are not limited to:

Precision Manufacturing

Technical Ceramics

Research

DIY Mandrel Materials

## SOLUABLE TOOLING SYSTEMS

### DIY Materials

#### AquaPour

- ✓ Dry powder - just add water to activate, then you can immediately cast
- ✓ Low viscosity mixture poured into female mold

#### AquaCore

- ✓ Moist sand that is pressure compacted into female mold
- ✓ Dehydration set to develop strength

#### ClaveCore

- ✓ Dry powder that is used to fill female mold and then heated to pre-expand the powder into a mandrel

#### FastPour

- ✓ Dry powder, just add water to activate, cast
- ✓ Sets fast & 800 F capable

### Pre-Formed Mandrels

#### FastCore

- ✓ Molded at our in-house facility using a dedicated female mold

#### RapidCore

- ✓ Rapid prototyped at our in-house facility

#### ClaveCore

- ✓ Molded at our in-house facility
- ✓ OOA/Self-pressurizing for OML driven specifications

#### RTMcore

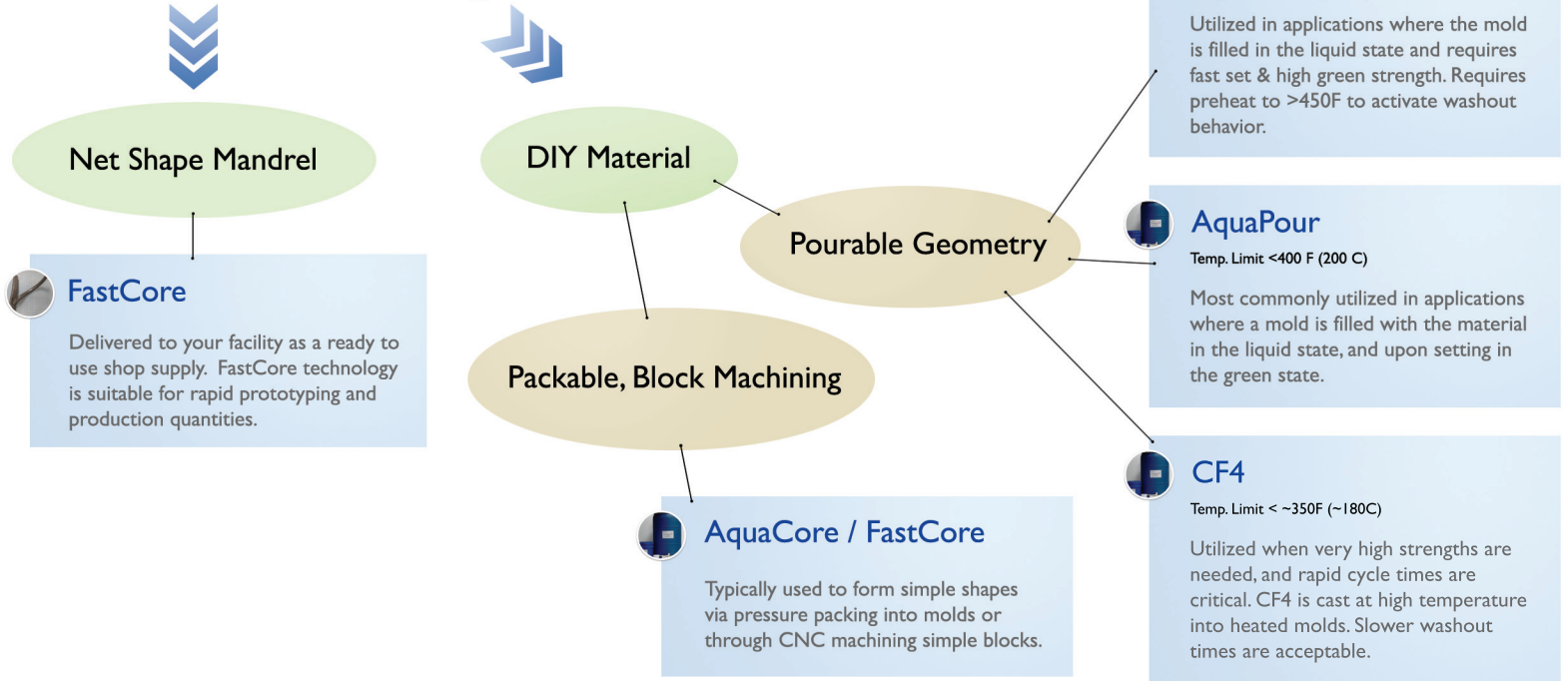
- ✓ Strong, non-porous and self-releasing

#### CF4

- ✓ A system of high strength, hard, castable eutectic salts with varying melt temperatures.

# PRODUCT SELECTION GUIDE

## AutoClave / Vacuum Bag



## Bladder / Silicone

**ClaveCore**

ClaveCore is a patented self-pressurizing tooling material. It is rigid at room temperature, but becomes an expanding semi-liquid at high temperature. It is designed for out of autoclave applications that are OML driven.

## Resin Infusion

**RTMcore**

RTMcore technology is the 1st soluble tooling system designed for resin infusion processes. Its unique properties allow it to be formed with heat and pressure and requires no drying. Its surface is impermeable to high pressure resin.

## Compression / Injection Molding

**CF4**

CF4's high compression strength enables it to work in compression molding elastomers as well as autoclave operations. Its surface is impermeable. Several grades are available.

To learn more information about our products, services and capabilities, please contact us.



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