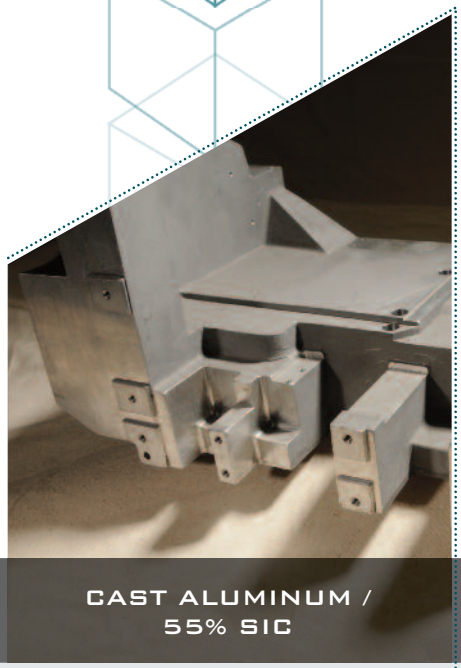
MCUBED TECHNOLOGIES INC.

METAL MATRIX COMPOSITES

Aluminum alloy reinforced with ceramic particles.

M Cubed Technologies has developed patented technologies used for casting large, complex shapes with very high reinforcement content.



CAST ALUMINUM / 55% SIC

Patented casting process unique in the industry

- Large installed capacity. Over 30 tons shipped to date.
- Density similar to aluminum but with the stiffness of steel
- Formed using traditional foundry techniques
- Complex shapes can be cast as large as 10 ft. square, 2000 lbs
- Tight as-cast tolerances; can also be machined if required
- Extremely high fatigue resistance, excellent dampening properties

ALUMINUM / 70% SIC

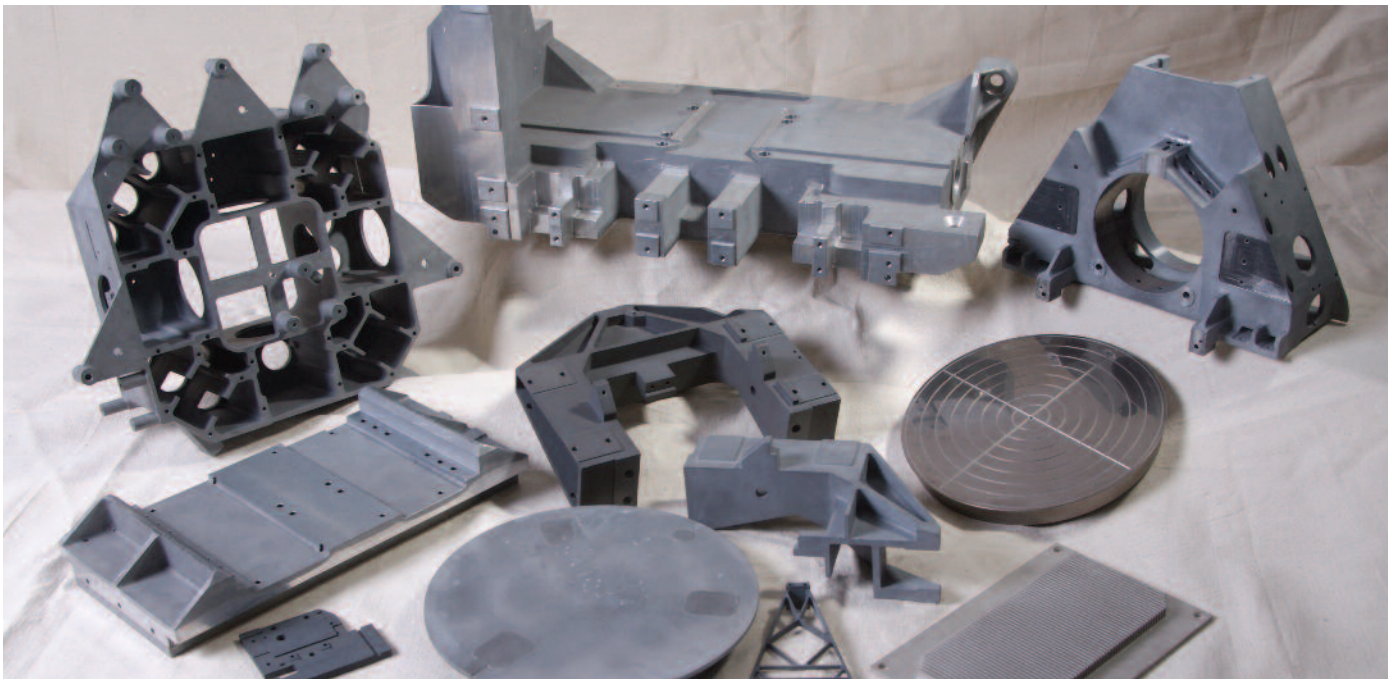
Produced using SiC preforms and a patented pressureless infiltration process

- High SiC content - very high stiffness and strength.
- Can be used to make very large, complex shapes
- Tight as-formed tolerances; can also be machined.
- Very low CTE
- Good wear resistance and hardness

50% ALUMINUM / B_4C

Used for applications requiring neutron absorption

- Unique process yields very high B_4C content
- Can be used to produce large, complex shapes
- Complementary to M Cubed's reaction-bonded B_4C product line



M Cubed Materials Summary

		Al-SiC			Al-B_4C	Al-Al_2O_3	Al (reference)
		ASC-301	MMC-S55	ASC-701*	ABC-501	AAC-501	AA-357
Particle Reinforcement		SiC	SiC	SiC	B_4C	Al_2O_3	---
Vol. % Reinforcement		30	55	70	50	50	---
Matrix		Al Alloy	Al Alloy	Al Alloy	Al Alloy	Al Alloy	Al
Density (g/cc)	ASTM C-135	2.78	2.96	3.01	2.58	3.3	2.7
Young's Modulus (GPa)	ASTM E-494	125	200	270	210	160	70
Poisson's Ratio	ASTM E-494	0.29	0.25	0.22	---	---	0.29
Flexural Strength (MPa)	ASTM C-1161	510	340	230	350	400	---
Fracture Toughness (MPa-$m^{1/2}$)	ASTM C-1421	15	13	10	---	14	---
CTE 25-100°C (ppm/K)	ASTM E-831	15.6	11.8	6.2	---	---	23
Thermal Conductivity (W/m-K)	ASTM E-1461	150	160	170	---	---	151
Knoop Hardness - 2 kg load (kg/mm^2)	ASTM C-1326	160	---	---	---	---	---

*ASC-701 is currently only available in plate form

Note: All of the above information is based upon internal testing. Although we believe the results to be reliable we expressly do not represent, warrant or guarantee their accuracy, completeness or reliability.

CONTACT INFORMATION

DAN WILSON
M Cubed Technologies, Inc.

[t] 302-766-0351
[e] d_wilson@mmmt.com

1 Tralee Industrial Park
Newark, DE 19711