DATA SHEET

	SupremEX® Materials								
	AMC4632			**AMC225XE**			**AMC640XA**		
Manufacturing Method	*HIP*	*Forged*	*Extrusion*	*HIP*	*Forged*	*Extrusion*	*HIP*	*Forged*	*Extrusion*
Heat Treatment	*T6*			*T4*			*T6*		
UTS MPa (ksi)	440 (64)	440 (64)	460 (67)	570 (83)	610 (88)	680 (99)	556 (81)	570 (83)	620 (90)
0.2% YS MPa (ksi)	390 (57)	375 (54)	395 (57)	455 (66)	440 (64)	480 (70)	488 (71)	480 (70)	490 (71)
Strain to Failure % (At)	1.3	1.5	2.5	2	4	5	1.2	2.5	2.5
Modulus GPa (msi)	94 (13.6)			115 (16.7)			140 (20)		
CTE @25°C ppm/°C (ppm/°F)	16.1 (8.9)			16.1 (8.9)			13.4 (7.4)		
Thermal Conductivity @25°C W/m°K	129			150			130		
Specific Heat @ 25°C J/kg/°K	-			836			800		
Density g/cm^3 (lb/in^3)	2.7 (0.0975)			2.88 (0.104)			2.90 (0.105)		
Poisson's Ratio	0.32			0.3			0.3		
Fracture Toughness K_{IC} MPa-√m (ksi-√in)	-			19 (17)			*14 (13)*		
RB Fatigue, Kt=1 (@ 1x10^7) MPa (ksi)	*225 (32)*	*225 (32)*	-	275(39)	310 (45)	330(47)	-	271 (39)	-
Specific Stiffness GPa/g/cm^3 (msi/lb/in^3)	35 (139)			40 (161)			48 (190)		
Specific Strength MPa/g/cm^3 (ksi/lb/in^3)	163(656)	163 (656)	170 (687)	198 (798)	212 (846)	239 (952)	192 (771)	197 (790)	214 (857)

All data is typical data. For specification values, please contact Materion Aerospace Metal Composites. Forged and extruded data is indicated for LT or L direction. For the effect of deformation ratio & other directions please inquire. *Italicized values are predicted, based on existing Aerospace Metal Composites data.* *Axial fatigue, R=-1, Kt=1 (@1x10^7) ^Extruded Bar, Annealed

MAMC-10-12-005