PMI press metal 澳美铝业	EXTRUSION ALUMINIUM ALLOY	EN AW - 6063

All PMI products with aluminum alloy type EN AW 6063 are compliance with the spec in below table, which is referred to EN755-2:2016 standard for mechanical properties and EN573-3:2013 for chemical composition. We commit to customer that all products supplied to customer by us have passed our quality assurance inspection and met the standard and customer's requirement.

Physical characteristics

Density:	2.71	g/cm^3
Lower melting point:	600	℃
Specific heat between 0 and 100℃:	897	J/Kg° K
Linear modulus of elasticity E:	69000	N/mm^2

Thermal conductivity at 20 ℃:	in state O:	2.09	W/cm° K
	in state T6:	1.72	W/cm° K
Linear thermal expansion coefficient:	-20~100℃	$23.2*10^{-6}$	1/° K
	-20~200℃	$24.1*10^{-6}$	1/° K
	-20~300℃	$25*10^{-6}$	1/° K
Electrical resistivity at 20℃:	in state O:	3.14	uΩ • cm
	in state T6:	3.85	uΩ • cm

Chemical composition according to European Standard EN 573.3

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
									Each	Total	
EN AW-6063	0.20 -0.60	0.35 max	0.10 max	0.10 max	0.45 -0.90	0.10 max	0.10 max	0.10 max	0.05 max	0.15 max	rest

Minimum mechanical properties, according to European Standard EN 755.2

Types of profile	Temper state	D / S / t(wall thickness)		Tensile strength Rm(MPa)		Limit elasticity load Rp0.2(MPa)		Elongation	
				min	max	min	max	A %min	A_{50mm}%min
Full bars	O,H111	D≤200	S≤200	-	130	-		18	16
	T4(*)	D≤150 150≤D≤200	S≤150 150≤S≤200	130 120	-	65 65	-	14 12	12 -
	T5	D≤200	S≤200	175		130		8	6
	T6(*)	D≤150 150≤D≤200	S≤150 150≤S≤200	215 195	-	170 160	-	10 10	8 -
	T66(*)	D≤200	S≤200	245		200		10	8
Extruded pipe	O,H111	t≤25		-	130	-		18	16
	T4(*)	t≤10 10≤t≤25		130 120	-	65 65	-	14 12	12 10
	T5	t≤25		175		130		8	6
	T6(*)	t≤25		215	-	170	-	10	8
	T66(*)	t≤25		245		200		10	8
Sections	T4(*)	t≤25		130	-	65	-	14	12
	T5	t≤3 3≤t≤25		175 160		130 110		8 7	6 5
	T6(*)	t≤10 10≤t≤25		215 195	-	170 160	-	8 8	6 6
	T64(*)	t≤15		180		120		12	10
	T66(*)	t≤10 10≤t≤25		245 225		200 180		8 8	6 6

a D = Diameter for round bar.

b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.

c Properties may be obtained by press quenching.

d Bending quality.

e If a profile cross section is comprised of different thickness which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section.