

Aluminum

A356.0 PRIMARY, 356.0 SECONDARY

This aluminum and silicon alloy must be heat treated to develop full strength, hardness and allow ease in machining. Once heat treated it has excellent pressure tightness, very good resistance to corrosion and good machinability. Major uses include water- cooled cylinder heads, transmission cases, axle housings, wheels, bridge rail parts, pump bodies, marine and tool parts, hose fittings and other liquid pressure items.



Specifications	Alloy	Tensile	Yield	Elong	BHN
ASTM B26	A356 F Primary (as cast)	19,000	9,500	2	55
	A356 T6 (heat treat)	34,000	24,000	3.5	80
	356 F Secondary (as cast)	19,000	9,500	2	55
	356 T6 (heat treat)	30,000	20,000	3	70

319

Used in general purpose sand castings, engine parts and auto cylinder heads.



Specifications	Alloy	Tensile	Yield	Elong	BHN
ASTM B26	319 F (as cast)	23,000	13,000	1.5	70
	319 T-6 (heat treat)	31,000	20,000	1.5	80

ALMAG 535

Almag 535 is a high purity alloy of aluminum and magnesium possessing the highest and most stable combination of strength, shock resistance and ductility of any as cast non-heat treated aluminum alloy. It has a high resistance to corrosion, superior machinability, high polishability, is easy to straighten and is easily anodized. It is however, not suitable for pressure castings.



Specifications	Alloy	Tensile	Yield	Elong	BHN
ASTM B26	535	35,000	18,000	9	70