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HyDuct5™

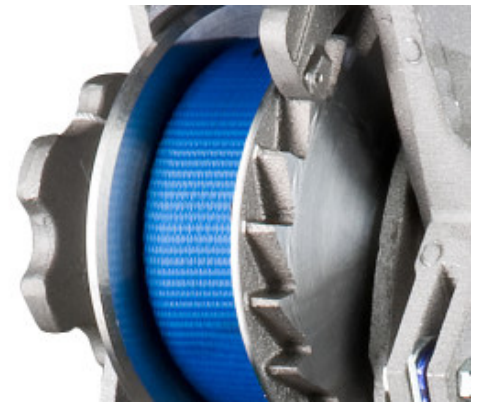
As the leader in vacuum tight and dimensionally stable aluminum castings, we are proud to announce the launch of a new alloy, HyDuct5™. This high ductility aluminum alloy is perfect for applications where high ductility is required. Additional benefits include superior corrosion resistance and excellent plating and anodization properties.

The table below summarizes the relative performance of these materials compared to the 356 series.

Table 1. Typical Alloy Characteristics

	HyDuct5™	356-T6	356-T51
Ultimate Tensile	35,000	33,000	25,000
Yield Strength	18,000	24,000	17,000
% Elongation	9%	3%	2%
Brinell Hardness	70	75	60
Machinability	1	2	4
Stability Rating	1	4	1
Material Cost	3	3	2
Corrosion Resistance	1	2	2
Anodization Appearance	1	4	4
Castability	4	1	1
Anodization Appearance	1	4	4
Castability	4	1	1

Relative ratings (1=excellent, 2=good, 3=fair, 4=poor)



From Table 1 it is easily recognized that 356-T6 suffers from poor dimensional stability while 356-T51 has poor machining characteristics. Both of these alloys also suffer from medium corrosion resistance and weak anodization properties. These drawbacks limit design flexibility and performance while increasing costs. In comparison, HyDuct5™ provides excellent properties for applications where high ductility is demanded. This alloy can also be used in marine applications where corrosion resistance is a must, and its anodization appearance make it an excellent choice for cosmetic parts. The one limitation of this alloy is applications where pressure or vacuum tightness is required.

For more information about HyDuct5™, call us today at 413-283-2976 or visit us on the web at PalmerFoundry.com.