Die casting alloy selection requires evaluation not only of physical and mechanical properties, and chemical composition, but also of inherent alloy characteristics and their effect on die casting production as well as possible machining and final surface finishing.

This table included selected die casting and other special characteristics which are usually considered in selecting an aluminum alloy for a specific application.

The characteristics are **rated from (1) to (5), (1) representing most desirable and (5) representing least desirable.** In applying these ratings, it should be noted that all alloys have sufficiently good characteristics to be accepted by users and producers of die castings. A rating of (5) in one or more categories would not rule out an alloy if other attributes are particularly favorable, but ratings of (5) may present manufacturing difficulties.

The benefits of consulting a custom die caster experienced in casting the aluminum alloy being considered are clear.

Alloy Characteristics	Aluminum				
	A360	A380	A383	B390	A413
Resistance to Hot Cracking	1	2	1	4	1
Pressure Tightness	2	2	2	4	1
Die-Filling Capacity	3	2	1	1	1
Anti-Soldering to the Die	2	1	2	2	1
Corrosion Resistance	2	4	3	3	2
Machining Ease & Quality	3	3	2	5	4
Polishing Ease & Quality	3	3	3	5	5
Electroplating Ease & Quality	2	1	1	3	3
Anodizing (Appearance)	3	3	3	5	5
Chemical Ozide Protective Coating	3	4	4	5	3
Strength at Elevated Temp.	1	3	2	3	3

Per NADCA Product Specification Standards for Die Castings/ 2015.