

Valimet R&D

Special Alloys

Alloying Element Capabilities

Typical aluminum alloys include AA 2000, 6000, 7000 and 8000 series, high purity aluminum (99.9%+), as well as proprietary alloys. The table below describing limits of standard alloying elements will help with alloy selection. Valimet can also control the oxygen content of these powders from 300 to 5000 ppm. The typical particle size distribution can range from 2 to 250 microns and can be classified to precise sizing parameters.

Element	Wt. %, max.	Element	Wt. %, max.
Aluminum	100	Molybdenum	10
Bismuth	20	Neodymium	30
Boron	2	Nickel	40
Cerium	25	Platinum	30
Chromium	25	Praseodymium	40
Cobalt	25	Scandium	10
Columbium	25	Silicon	50
Copper	100	Silver	50
Gadolinium	50	Tantalum	3
Gallium	10	Tellurium	20
Iron	50	Tin	60
Lanthanum	30	Vanadium	5
Lithium	20	Yttrium	25
Magnesium	67	Zinc	100
Manganese	50	Zirconium	3