

Carbon is Life

Carbon is the basic building block of all organic substances and is therefore the basis of all living things. Because carbon combines readily with oxygen, giving off heat as a by-product, it is also a vital energy source. Carbon is one of the most useful of all chemical elements, and Asbury Carbons is the most experienced processor of carbon products for industry use today.

Aluminum Production — Enhanced by Asbury

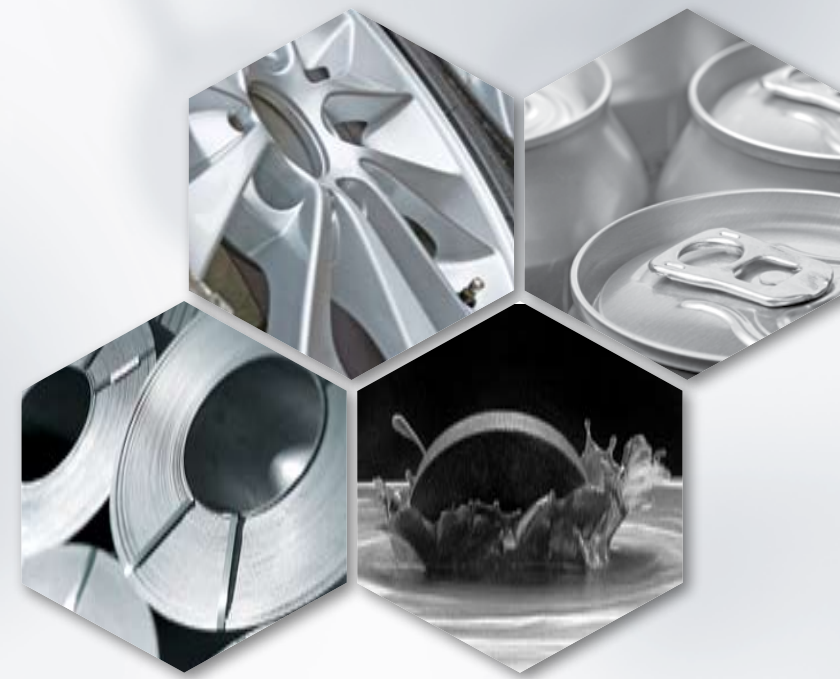
Asbury manufactures many products to enhance properties and improve performance of your products. Our complete line includes fluxes, alloys, master alloys, degassers, grain refiners, coatings and metalworking lubricants. These products are available in bag, pail, drum, totes or bulk shipments and are manufactured using high-quality raw materials that will meet or exceed your specifications. One hundred years of experience, with emphasis on quality and a manufacturing/distribution network make Asbury the aluminum industry's choice for quality, variety, reliability, availability and fast delivery.



**Please contact Asbury Carbons today,
for the carbon products solutions of tomorrow.**

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Products for
the Aluminum
Industry

Asbury Fluxmaster



We Meet Your Specifications and Exceed Your Expectations.

Asbury manufactures and supplies products for every step of the aluminum production, casting, extruding and forming processes.

You have challenges... we offer solutions.

METALWORKING COATINGS and LUBRICANTS

Asbury's metalworking coatings and specialty products are recognized worldwide as premier products for non-ferrous metalworking applications — offering excellent adherence, heat conduction with a low coefficient of expansion, and pressure resistance.

Graphokote — High-purity graphite lubricants; resistant to high temperature, pressure and chemical conditions; water-, oil- and solvent-based binder formulations.

Aquakast — Water-based graphite coatings specifically developed for high-temperature and high-wear applications.

Borokote — Water-based formulated boron nitride dispersion used in cast house and foundry applications.

Kastkote — Water-based bone ash coating that provides high heat transfer, fills in small voids, has excellent non-wetting properties and has low reactivity with metals. Also available in powder form.

Marcote — Talc-based coating providing excellent non-wetting properties. Available in powder form.

Non-Ferrous Metalworking Applications

Aluminum Sheet Casting
GK 90X • Aquakast

Billet Casting
GK 450, GK 495, GK 410S solvent-based graphite coatings

Slab Casting
GK 495, GK 410S solvent-based graphite coating

Billet Extrusions
Lube sticks • Graph On sticks • Borokote water-based boron nitride coating • AEL 384 grease

Heavy Extrusions
Kastkote 10 water-based talc coating

Maintenance
Bone ash powder • Graphite Plus • Graphite greases

Mold/Sow Coatings
GK 645, GK 667 water-based graphite coatings • Kastkote 200, Kastkote 210 water-based bone ash coating

Wagstaff Rings
GK 410S solvent-based graphite coating • Borokote 100 water-based boron nitride coating

ASBURY FLUX for ALUMINUM APPLICATIONS

Asbury Fluxmaster provides four main categories of flux — Drossing, Furnace Cleaning, Metal Treatment and Specialty Fluxes. Each formulation is tailored for specific end use: magnesium removal, oxide reduction, as well as sodium-free and fluoride-free applications. All fluxes are formulated to work within specific temperature ranges.

Use	Standard	Sodium Free	Fluoride Free
Drossing 1200°F – 1370°F	770, 721, 781	712, 4003, 879	4005, 4001, 4006
Drossing > 1300°F	707	785, 708	4001
Drossing < 1230°F	711, 713, 860	879, 712, 4003	4005, 4003
Cleaning	737, 729, 721	739, 785, 879	4005, 4041
Wall Cleaning	780	785, 784	4031
Cover	770, 837	706	4006, 4001
Fluidity	783, 738	785	—
Injection	737, 738	889, 739	4041
Fused Flux	821F	—	—
MgChl	872	—	—

MODIFIERS, GRAIN REFINERS and DEGASSERS

Asbury Fluxmaster offers titanium/boron additives for refining, as well as strontium alloys for modifying aluminum. Other metallic alloys are available, such as silicon metal and manganese flake. Our Tizox products are the most economical way to introduce titanium to hot metal. We also offer nucleating and degassing tablets as well as tablets for introducing gas back into the metal. Master Alloys for modifying and refining are also available in various forms. Chlorine- and nitrogen-based degassers are formulated for multifunctional needs, including oxide removal, furnace cleanliness, and the improvement of microstructure by grain refinement and/or silicon modification.

Alloys	Master Alloys			
Silicon Metal	Tibor	3/1	5/1	—
Manganese flake	Strontium	10%	15%	20%
Alloy Compacts				

Tizox Grain Refiners				
Tizox	Ti%	B%	Ti:B	Note
161	16	1	16:1	High Flux, multipurpose
322	32	2	16:1	Good fluxing action, grain refiner
323	32	2	16:1	Sodium-free version of 322
401	40	1	40:1	Grain refiner, cleaner, good solution rate
404	40	4	10:1	High boron ratio, sodium free
501	50	1	50:1	Strong cleaning action
604	60	4	15:1	No flux, sodium free
750	75	0	—	Higher titanium, moderate cleaning
751.5	75	1.5	50:1	Less flux, sodium free
950	95	0	—	Little flux, high titanium
980	98	0	—	Commercial-purity titanium
999	20	4	5:1	Grain refiner, metal cleaner, fast acting, sodium free

Degasser Formulations
Degasser 185 Use with high-conductivity aluminum or on high-manganese-content alloys
Degasser 190 Active degassing action and grain refinement
Degasser 450 Effective degassing/cleaning agent, slow dispersal
Degasser 601 Easy application, low smoke
Degasser 752 Effective degassing/cleaning agent, low smoke