



Aluminum Hardeners

Aluminum's mechanical and physical properties are enhanced with the use of alloying elements. These alloying elements are commonly referred to as hardeners. Aluminum based master alloys which contain the hardener elements in high concentrations, provide a convenient and economical way to add them to aluminum to achieve desired properties. These master alloys readily go into solution at lower liquid aluminum temperatures, thus minimizing dross formation and solubility of hydrogen. Lower furnace temperatures also mean reduced energy consumption and longer furnace life.

Aluminum Copper

Alloy		Composition Limits Maximum unless shown as a range					Aluminum Association Color Coding	Form
20%Cu	H2120	Cu 19-21	Si 0.35	Others Each	0.05	 1 Yellow	Slab Ingot	
			Fe 0.5	Total	0.15			
33%Cu	H2132	Cu 32-34	Si 0.2	Others Each	0.05	 1 Yellow	Waffle Ingot Slab Ingot	
			Fe 0.3	Total	0.15			
50%Cu	H2150	Cu 48-52	Si 0.1	Others Each	0.05	 1 Yellow	Slab Ingot	
			Fe 0.15	Total	0.15			
54%Cu	H2154	Cu 51-57	Si 0.1	Others Each	0.05	 1 Yellow	Broken Ingot	
			Fe 0.1	Total	--			