

Product Manual



Company Profile

Ganzhou Feiteng Light Alloy Co., Ltd. was established in 2008 and is located in Ganzhou, Jiangxi Province, the world-famous hometown of rare earths. It is a growing high-tech enterprise specializing in the R&D and production of rare earth metals and rare earth alloys. The factory covers an area of more than 6,500 square meters, with more than 4,000 square meters of self-built production workshops and office buildings.

The company has independent intellectual property rights and international advanced level of low-cost co-electrodeposition preparation of rare earth magnesium master alloys and other production technologies, providing high-quality products for enterprises specializing in the production of light alloys such as magnesium and aluminum. At the same time, the company has been actively cooperating with universities and committed to the research and development of new materials, and its products have been recognized by more and more domestic and foreign customers. Products are mainly used in: high-speed trains, automobiles, bicycles, 3C products, aviation, aerospace, etc. The company's main products, such as metal yttrium, metal gadolinium and magnesium rare earth master alloy, have obvious competitive advantages in terms of quality and price, and the proportion of export products has been increasing year by year.

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Yttrium Metal



Product Attribute

Color	Silver gray	SPEC	RE \geq 98% Y/RE \geq 99.9%
Size	Diam 185mm THK 25mm /Customized	Melting Point	1522°C

Content (wt.) %

RE	Y/RE	Fe	Al	Si	Ca	W	O
\geq 98	\geq 99.9	<0.15	<0.05	<0.03	<0.4	<0.2	<0.2

Application

It can improve the alloy's heat resistance, corrosion resistance and electrical conductivity. Mainly used for high-temperature alloys, high-performance magnesium alloys, conductive materials, etc



Gadolinium Metal

Product Attribute

Color	Silver gray	SPEC	RE≥99% Gd/RE≥99.5%
Size	Diam 185mm THK 25mm /Customized	Melting Point	1311°C

Content (wt.) %

RE	Gd/RE	Fe	Al	Si	Ca	W	O
≥99	≥99.5	<0.15	<0.02	<0.02	<0.2	<0.2	<0.1

Application

Can improve alloy strength, corrosion resistance, etc. Mainly used in high-performance magnesium alloys, neodymium iron boron magnetic materials, magnetic refrigeration materials and magneto-optical materials.



Erbium Metal



Product Attribute

Color	Silver gray	SPEC	RE \geq 99% Er/RE \geq 99.5%
Size	Diam 185mm THK 25mm /Customized	Melting Point	1529°C

Content (wt.) %

RE	Er/RE	Fe	Al	Si	Ca	W	O
\geq 99	\geq 99.5	<0.15	<0.05	<0.02	<0.2	<0.2	<0.1

Application

It can improve the alloy's stress corrosion resistance and alloy ductility. Mainly used for high-performance aluminum alloys and magnesium alloys.



High Grade Yttrium Aluminum Alloy



Product Attribute

Color	Silver gray	SPEC	RE: 85% 87%
Size	2-5mm Granule	Melting Point	1040°C 1020°C

Content (wt.) %

RE	Y/RE	Fe	Si	Ca	W	Ni	Cu
85±1	≥99.9	<0.2	<0.1	<0.3	<0.2	<0.01	<0.01
87±1							

Application

Used in the preparation of high-temperature alloys.



Aluminum Lanthanum Cerium Alloy



Product Attribute

Color	Silver white	SPEC	RE: 20%	30%
Size	445×155×80mm ; 8.5-9.5kg	Melting Point	650°C	920°C

Content (wt.) %

RE	LaCe/RE	Fe	Si	Cu	Ni	W
20±1	≥99.5	<0.15	<0.1	<0.01	<0.01	<0.05
30±1						

Application

Used to increase the strength of aluminum alloy and improve the corrosion resistance of aluminum alloy.



Aluminum Erbium Alloy



Product Attribute

Color	Silver white	SPEC	RE:	10%	20%
Size	445×155×80mm ; 8.5-9.5kg	Melting Point		655°C	770°C

Content (wt.) %

RE	Er/RE	Fe	Si	Cu	Ni	W
10±1	≥99.5	<0.15	<0.1	<0.01	<0.05	<0.01
20±1						

Application

Used to improve the stress corrosion resistance and ductility of aluminum alloy.



Aluminum Cobalt Alloy



Product Attribute

Color	Silver white	SPEC	Co: 10%
Size	445×155×80mm ; 8.5-9.5kg	Melting Point	880°C

Content (wt.) %

Co	Fe	Si	Cu	Ni
10±1	<0.15	<0.1	<0.01	<0.01

Application

Used in the high-performance aluminum alloys.



Magnesium Yttrium Alloy



Product Attribute

Color	Silver gray	SPEC	RE: 20%	30%
Size	445×155×80mm ; 7-8kg	Melting Point	600°C	600°C

Content (wt.) %

RE	Y/RE	Fe	Al	Si	Ni	Cu
20±1	≥99.9	<0.05	<0.03	<0.03	<0.01	<0.01
30±1						

Application

Used to improve the heat resistance, corrosion resistance and high temperature strength of magnesium alloys.



Magnesium Gadolinium Alloy



Product Attribute

Color	Silver gray	SPEC	RE: 20%	30%
Size	445×155×80mm ; 7-8kg	Melting Point	620°C	560°C

Content (wt.) %

RE	Gd/RE	Fe	Al	Si	Ni	Cu
20±1	≥99.5	<0.05	<0.03	<0.03	<0.01	<0.01
30±1						

Application

Used to improve the strength and corrosion resistance of magnesium alloys.



Magnesium Neodymium Alloy



Product Attribute

Color	Silver gray	SPEC	RE: 25%	30%
Size	445×155×80mm ; 7-8kg	Melting Point	570°C	545°C

Content (wt.) %

Nd	Nd/RE	Fe	Si	Cu	Ni	Al
25±1	≥99.5	<0.05	<0.03	<0.01	<0.01	<0.03
30±1						

Application

Used to improve the corrosion resistance and fatigue resistance of magnesium alloys.



Magnesium Yttrium Neodymium Alloy



Product Attribute

Color	Silver gray	SPEC	RE:70%
Size	445×155×80mm ; 7-8kg	Melting Point	-

Content (wt.) %

RE	Y:Nd	Fe	Al	Si	Ni	Cu
70	70:30	<0.12	<0.05	<0.03	<0.01	<0.01

Application

Used to prepare high-performance magnesium alloys.



Magnesium Yttrium Gaddinium Alloy



Product Attribute

Color	Silver gray	SPEC	RE:70%
Size	445×155×80mm ; 7-8kg	Melting Point	-

Content (wt.) %

RE	Y:Gd	Fe	Al	Si	Ni	Cu
70	70:30	<0.12	<0.05	<0.03	<0.01	<0.01

Application

Used to prepare high-performance magnesium alloys.



Magnesium Lanthanum Cerium Alloy



Product Attribute

Color	Silver white	SPEC	RE:	20%	25%
Size	445×155×80mm ; 7-8kg	Melting Point		-	-

Content (wt.) %

RE	La:Ce	Fe	Al	Si	Ni	Cu
20±1	35:65	<0.15	<0.05	<0.03	<0.01	<0.01

Application

Used to improve the corrosion resistance and ductility of magnesium alloys.



WE43 Alloy



Product Attribute

Color	Silver white	SPEC	-
Size	445×155×80mm ; 7-8kg	Melting Point	-

Content (wt.) %

Y	Nd	Gd	Zr	Ca	Fe	W
3.7-4.3	2-2.5	1.5-2	0.3-1	<0.03	<0.03	<0.03

Application

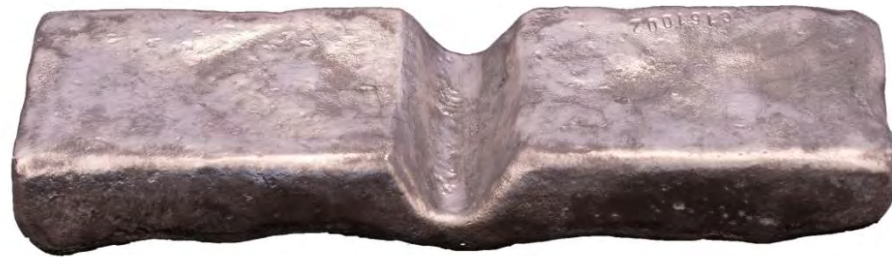
Used for die-casting various high-strength heat-resistant magnesium alloy products



Magnesium Zirconium Alloy

Product Attribute

Color	Silver gray	SPEC	Zr:	25%	30%
Size	445×155×80mm ; 7-8kg	Melting Point		-	-



Content (wt.) %

Zr	Fe	Al	Si
25±1	<0.05	<0.03	<0.03
30±1			

Application

Used to refine the grains of magnesium alloys and improve the strength of magnesium alloys.



Magnesium Strontium Alloy



Product Attribute

Color	Silver white	SPEC	Sr: 20%	25%
Size	445×155×80mm ; 7-8kg	Melting Point	580°C	600°C

Content (wt.) %

Sr	Fe	Al	Si	Ni	Cu
20±1	<0.05	<0.03	<0.03	<0.01	<0.01
25±1					

Application

It is used to refine the grains of magnesium alloys and improve the strength of magnesium alloys.

