GRUPO

METMEX

METALES MEXICANOS

About Us.

Our Mission is to supply Companies with World Class Quality raw materials for machined goods.

Always giving the best prices available in market without diminishing quality of our products by keeping correct levels of stock, fast supply chains and correct administrative management.

We focus on being experts in delivering raw materials following Just-In-Time Philosophy.

Aluminum Alloy Ingots Supply.

We supply Ingots of different Aluminum Alloys:

Alloy A380 (AA A380 / ANSI) – Very good Machining Char.

Standard for Die Casting

Alloy A383 & A384 (AA A384 / ANSI)

Stronger (hot cracking) workable at higher temperatures than A380

Alloy A360 (AA A360 / ANSI)

Elevated Corrosion Resistance
Harder to cast
High Ductility
High strength at high temperatures

Alloy A13 (AA A413 / ANSI)

High Pressure Tightness (good for containing high pressure compounds)

Aluminum Alloy Ingots Supply.

Alloy 390 (AA B390 / ANSI)

Resistance to wear
Low ductility
Widely use in Automotive Engine Blocks

Alloy 43 (AA C443 / ANSI)

Very High ductility
Moderate corrosion resistance
Difficult to cast
Used for Marine Grade applications

Alloy 218 (AA 518 / ANSI) – Magnesium Major Alloying

Some of the best machinability
High Strength
High Ductility
High Corrosion Resistance
Good Finishing
Difficult to cast

Other Aluminum Alloys.

201
204
242
A242
295
319
328
355
C355
356
360
AO3601
309
SG 100B
LM2
JIS H5302 ADC3

A360
AO3602
SG 100A
GD-AlSi10Mg
Al-Si10Mg
380
AO3801
306.308
SC84A-B
I43
LM24
JIS H5302 ADC10
A380
AO3802
SC84-A

GD-AlSi8Cu
Al-Si8Cu3Fe
383
AO3831
JIS H5302 ADC12
384
AO3841
313
SC114A
A143
LM26
A384
AO3842
303

390
AO3902
B390
AO3901
LM28
413
13
AO4131
305
S12A.B
162
LM6
JIS H5302 ADC1
A14132
S12A
43

AO4431
305
443
35
S5B
123
LM18
518
218
AO5181
340

*Other Alloys may be requested

Table A-3-3 Die Casting And Other Characteristics: Al Alloys
(1 = most desirable, 5 = least desirable)

Commercial: ANSI/AA	Aluminum Die Casting Alloys										
	360 360.0	A360 A360.0	380 380.0	A380 A380.0	383 383.0	384 384.0	390* B390.0	13 413.0	A13 A413.0	43 C443.0	218 518.0
Resistance to Hot Cracking Ⓐ	1	1	2	2	1	2	4	1	1	3	5
Pressure Tightness	2	2	2	2	2	2	4	1	1	3	5
Die-Filling Capacity Ⓑ	3	3	2	2	1	1	1	1	1	4	5
Anti-Soldering to the Die Ⓒ	2	2	1	1	2	2	2	1	1	4	5
Corrosion Resistance Ⓓ	2	2	4	4	3	5	3	2	2	2	1
Machining Ease & Quality Ⓔ	3	3	3	3	2	3	5	4	4	5	3
Polishing Ease & Quality Ⓕ	3	3	3	3	3	3	5	5	5	4	1
Electroplating Ease & Quality Ⓖ	2	2	1	1	1	2	3	3	3	2	5
Anodizing (Appearance) Ⓗ	3	3	3	3	3	4	5	5	5	2	1
Chemical Oxide Protective Coating Ⓘ	3	3	4	4	4	5	5	3	3	2	1
Strength at Elevated Temp. Ⓙ	1	1	3	3	2	2	3	3	3	5	4

Ⓐ Ability of alloy to withstand stresses from contraction while cooling through hot-short or brittle temperature ranges. Ⓑ Ability of molten alloy to flow readily in die and fill thin sections. Ⓒ Ability of molten alloy to flow without sticking to the die surfaces. Ratings given for anti-soldering are based on nominal iron compositions of approximately 1%. Ⓓ Based on resistance of alloy in standard type salt spray test. Ⓔ Composite rating based on ease of cutting, chip characteristics, quality of finish, and tool life. Ⓕ Composite rating based on ease and speed of polishing and quality of finish provided by typical polishing procedure. Ⓖ Ability of the die casting to take and hold an electroplate applied by present standard methods. Ⓗ Rated on lightness of color, brightness, and uniformity of clear anodized coating applied in sulphuric acid electrolyte. Ⓘ Rated on combined resistance of coating and prolonged heating at testing temperature. Sources: ASTM B85-92a; ASM; SAE

** Two other aluminum alloys, 361 & 369, are being utilized in limited applications where vibration and wear are of concern. There are also other heat treatable specialty alloys available for structural applications, such as the Silafonts and AA365. Contact your alloy producer for more information.*

Note: Die castings are not usually solution heat treated. Low-temperature aging treatments may be used for stress relief or dimensional stability. A T2 or T5 temper may be given to improve properties. Because of the severe chill rate and ultra-fine grain size in die castings, their "as-cast" structure approaches that of the solution heat-treated condition. T4 and T5 temper results in properties quite similar to those which might be obtained if given full T6 temper. Die castings are not generally gas or arc welded or brazed.

High Quality Guarantee & Material Analysis: Methods.

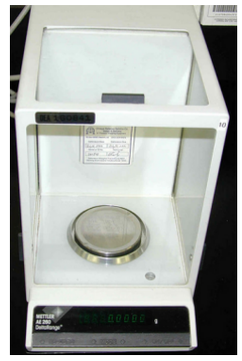
Here at GRUPO METMEX METALES MEXICANOS , we guarantee that the products supplied are of the best quality by performing highest level chemical composition tests:

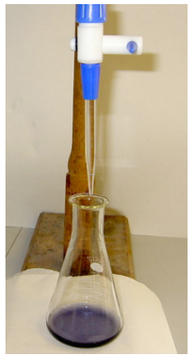
- Nominal Density Verification
- X-ray Emission Spectrometry
- Optical Emission Vacuum Spectrometry
- Atomic Emission Vacuum Spectrometry
- X-ray Fluorescent Spectrometry (AFS)
- Atomic Absorption Spectroscopy (AAS)
- Spark Atomic Emission Spectrometry

Quality
First

High Quality Guarantee & Material Analysis: Methods.

- Ultraviolet Spectrometry
- Direct Current Plasma Emission Spectrometry
- Specific Gravity Comparison Standards
- Electro Thermal Atomic Absorption Spectrometry
- Gravimetric Analysis
- Volumetric Analysis





Titration (Titrimetry)

Conductivity

pH

Potentiometer

Precipitation analysis

Thermometric Titrimetry

ASTM INTERNATIONAL
Standards Worldwide

High Quality Guarantee & Material Analysis: Measurements

By performing high level analysis we guarantee in-spec concentration of elements in alloys, assure performance of alloy and uphold no-contamination materials specifications (ROHS). Measurements include :

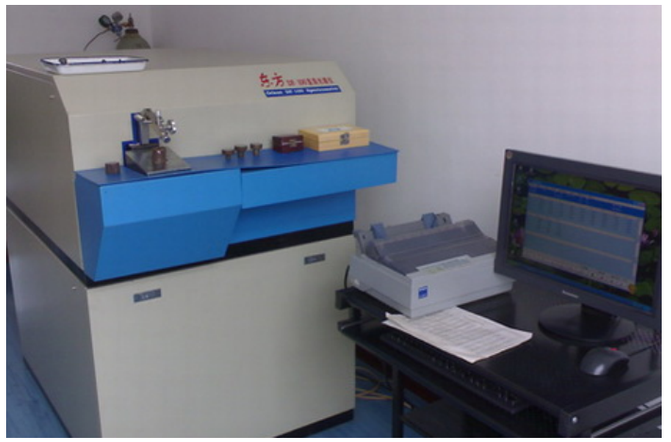
- Ultimate Tensile Strength
- Yield Strength
- Elongation
- Hardness
- Shear Strength
- Impact Strength
- Fatigue Strength
- Young's Modulus (Stress)
- Density
- Melting Range
- Specific Heat
- Coefficient of Thermal Expansion
- Electrical Conductivity
- Thermal Conductivity
- Poisson's Ratio

ROHS

NADCA Product Specification Standards for Die Castings / 2009

Pure Industrial Minerals (Raw Material)

To fulfill intake of Metal Industries we supply pure material ingots non-ferrous metals such as:



- Pure Aluminum Ingots
- Pure Copper Ingots
- Pure Zing Ingots

Raw Pure Minerals

- Aluminium Ingots

Aluminum Ingot General Data	
CAS No.:	7429-90-5
Chemical Composition:	Al
Al (Min):	99.70%
Appearance:	Silvery White Metal
Product Name:	Aluminum Ingot
Property:	Clean and Smooth Surface, Low Melting Point, High Formability, High Press Productivity, Good Conductivity. Discontinous melting with scrap. Fast Melting.
Application:	Automobile Industry, pinning and weaving, electron broadly, door making, windows, cans, among other things

Aluminum	
Metal	Typical Value
AL (%)	99.70 Min
Si (%)	0.10 Max
Fe (%)	0.20 Max
Cu (%)	0.01 Max
Ga (%)	0.03 Max
Mg (%)	0.02 Max
Zn (%)	0.03 Max
Mn (%)	-
Others (%)	0.03 Max

Raw Pure Minerals

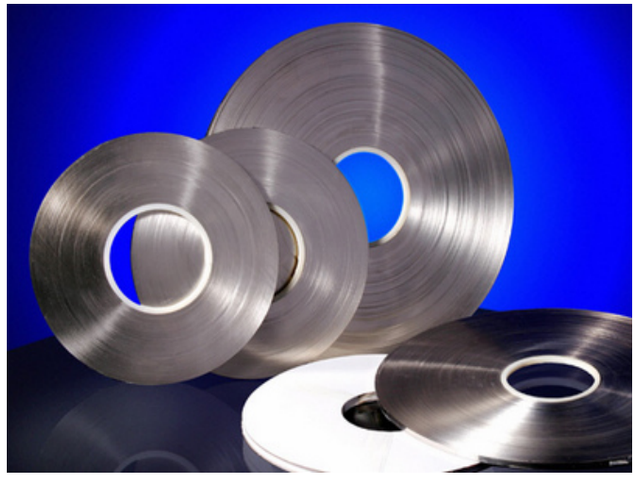
- Magnesium Ingots

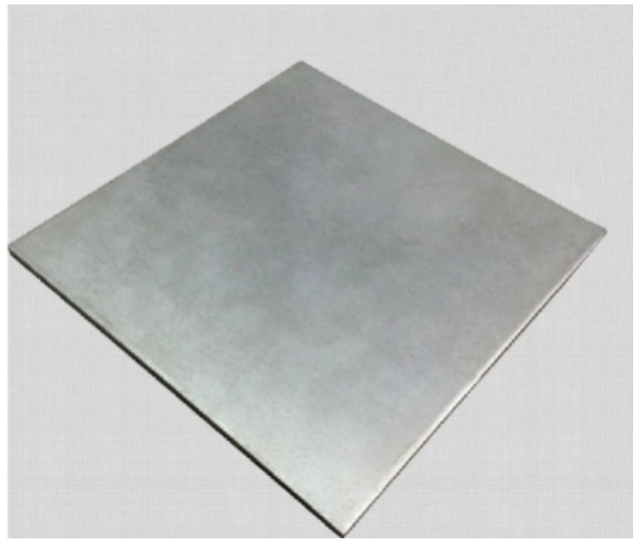
Magnesium Ingot Specification									
Specification	Mg	Fe	Si	Ni	Cu	Al	Ci	Mn	Total Impurities
	% (=>)	% (=<)							
Grade 1	99.98	0.0002	0.0030	0.0005	0.0005	0.0040	0.0020	0.0020	0.0200
Grade 2	99.95	0.0030	0.0100	0.0010	0.0020	0.0100	0.0030	0.0150	0.0500
Grade 3	99.90	0.0400	0.0200	0.0010	0.0040	0.0200	0.0050	0.0300	0.1000
Grade 4	99.80	0.0500	0.0300	0.0020	0.0200	0.0500	0.0050	0.0500	0.2000

Magnesium Ingot General Data	
CAS No.:	7439-95-4
Chemical Composition:	Mg
Mg (Min):	99.8%-99.98%
Appearance:	Bright Color
Product Name:	Magnesium Ingot
Specifications:	Surface by acid wash and no oxidized

Other Materials & Alloys

- Nickel Bar
- Nickel Strip
- Nickel Plate
- Nickel Coil
- Nickel Wire
- Ferrite Magnets Rings
- Cooper Stainless Steel
- Stainless Steel Wire
- Galvanized Wire
- Lead Ingots
- Ferrosilicon Powder
- Aluminium Ingots Pure and Alloys





Prices/Quotes

Feel free to ask for more information or request for quotation at our webpage:

www.metmex.com.mx

Or Contact us at email below:

sales@metmex.com.mx

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Thank You.