

Aluminum Pricing 101

A Guide to the Pricing Components of Aluminum and Aluminum Alloys

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Aluminum Pricing 101

Managing aluminum price risk starts with understanding:

1. The difference between LME Aluminum screen pricing and an actual delivered physical price
2. How pure aluminum and value added aluminum products and alloys establish their cost basis
3. The components that make up pricing for both primary and recycled alloys
4. The pricing history of both pure aluminum and common recycled aluminum casting alloys



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2010-2018



What IS the published LME Aluminum price?

The London Metal Exchange (LME) Aluminum High Grade “AH” contract is for P1020 specification 99.7% “Pure Aluminum”

It's Also Known As...

- “The Screen Price”
- “High Grade”
- “LME Cash”
- “Al”
- “LME Official”
- “Spot LME”



NON-FERROUS ▾ CASH SETTLED FUTURES ▾ MONTHLY FUTURES ▾ ANALYTICS ▾ CHART PROFILES ▾ HELP

Non-Ferrous - Composite

Date: 16 Feb 21 Tom: 17 Feb 21 Cash: 18 Feb 21 3 Month: 17 May 21 15 Month: 18 May 22

3 Month Quotes							3 Month Trades						
Metal	Time	Src	Vol	Bid	Ask	Vol	Src	Open	High	Low	Src	Last	Select Vol
AH	18:59:57	SELC	3	2085.50	2087.50	4	SELC	2082.50	2089.50	2072.00	SELC	2087.50	8513

The same price shows up with different names in other publications:

“HG” in Platts Metals Week...

LME OFFICIAL PRICES

	Symbol	S/mt	Change	Date assessed
Aluminium				
HG cash	LMAAH00	2079.000-2079.000	+3.000	15-Feb
HG 3-months	LMAAC00	2082.500-2082.500	+1.500	15-Feb
HG 1 year	LMHGY10	2142.500-2142.500	+1.000	15-Feb
HG 2 year	LMHGY20	2175.500-2175.500	+2.000	15-Feb
HG 3 year	LMHGY30	2209.500-2209.500	+2.000	15-Feb
HG settlement	LMAAI10	2079.000	+3.000	15-Feb

Or the WSJ’s “LME High Grade Spot” Price

London Metals	2/16/21			
	BID	CHG	ASK	CHG
Aluminum - LME High Grade Spot	2079	3	2079	3
Aluminum - LME High grade 3 month future	2082.5	1.5	2082.5	1.5



The LME Screen Price - True or False

TRUE:

- LME “AH” is an exchange traded price for either Cash (Prompt) or 3 Month (Future) delivery
- It’s the “official” aluminum price that shows up in the WSJ and other publications
- It’s a market based price discovery mechanism and hedging tool
- It specifies P1020 grade, or 99.7% Pure Aluminum
- It is traded in “Lots” representing 25 metric tons (55,125lbs)

FALSE:

- It is a specification aluminum alloy that you can actually use in casting
- It represents a price for aluminum delivered anywhere in the world
- The metal will be duty paid
- The metal will be customs cleared
- It will include your payment terms
- One “Lot” quantity is a standard U.S. street legal 44,000lbs



What is the “Midwest Premium”?

- The Midwest premium represents the costs required above the LME published cash price to get metal to a typical large volume consumer of pure aluminum in the United States from where ever it was produced or warehoused.
- Includes:
 - Logistics costs
 - Financing
 - Duties
 - Customs clearing costs
 - Broker / Trader Profit margin
 - Other
- This Premium fluctuates not only with supply and demand but also with regulations like Section 232 Tariffs



What is the “UST Price”? (US Transaction)



What type of Aluminum do you actually use?

Few applications use P1020 – the “pure aluminum” spec traded with the LME AH contract

All Value Added Products will, at a minimum, have these additional pricing components:

- LME Cash + MW Premium (for the U.S. this will include the duty) + Alloy Premium (for chemistry alterations) + Form Premium (Ex: Billet Premium) + Fabrication costs

Most Casting Alloys are scrap based recycled alloys and they also require alloying elements like:

- Silicon (Si) 7-11% Typical (Current price of Silicon is \$1.25/lb)
- Copper (Cu) 0-4% Typical (Current price of Copper is \$3.67/lb)
- Other refiners and modifiers (Mn, Ti, Sr, etc) which are expensive, but added in small quantities (adding \$.005 - \$.015/lb)

Recycled Aluminum Alloy prices are scrap based, and while prices somewhat correlate to P1020, the actual pricing can be significantly lower or higher than P1020 based on many variables including scrap availability and alloy costs.



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Example of Cost Components for taking delivery of P1020

Cost Components (estimated):

1) LME Official Price plus

(Note: Official price when purchasing)

2) LME FOT warehouse charge plus

(Note: Standard cost for LME warehouse to load truck)

3) Warehouse storage cost plus

(Note: Standard storage cost for LME warehouse)

4) Trucking from WH to Port or Plant plus

(Note: Cost varies based on destination/freight market)

5) Potential 2nd freight component plus

(Note: Cost varies based on destination/freight market)

6) Finance Costs for 90 – 120 days plus

(Note: Depends on tenure and cost of financing)

7) Duty / Tariff (Section 232 – 10%)

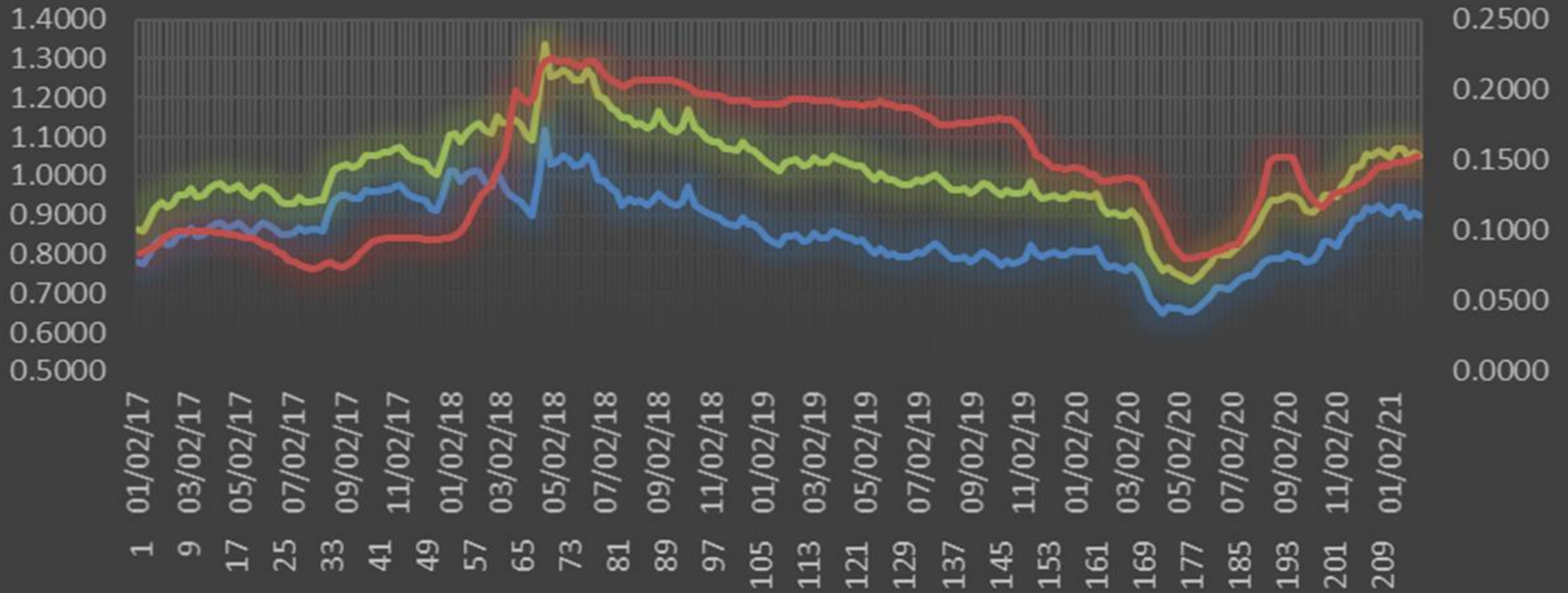
• Example:

	Component	\$ / mt	\$ / lb
1	LME Official Cash Price	\$2,070.50	\$0.9392
2	LME FOT Charge	\$ 45.00	\$0.0204
3	WH Storage / Mo	\$ 15.60	\$0.0071
4	Logistics Step 1 Overseas WH to U.S. Port	\$ 100.00	\$0.0454
5	Logistics Step 2 - Port to Plant	\$ 60.00	\$0.0272
6	Financing (Self)	\$ 22.91	\$0.0104
7	Duty / Import Fees	\$ 207.05	\$0.0939
	Total	\$2,521.06	\$1.1435
	Implied MW Premium	\$ 450.56	\$0.2044
	Current Actual MW Premium	\$337.31	\$0.1530



P1020 Price History (MW Premium RHS)

LME AH SET U.S.TRANS MW PREM



Recycled Aluminum Alloy Publications

At Spectro Alloys, we produce value added casting alloys that are created with recycled scrap aluminum. Our products more closely correlate with specific recycled alloy prices published by:

- Platts Metals Week – Most automotive contracts are based on Platts
- AMM / Fastmarkets
- Argus
- Davis Index
- Harbor Aluminum

Each of these and possibly others will have regularly published (daily, weekly, monthly) prices that can be used for formula pricing agreements with suppliers. Published prices that have specific surveys of the alloy you use will be a better indication than just the LME AH cash officials.



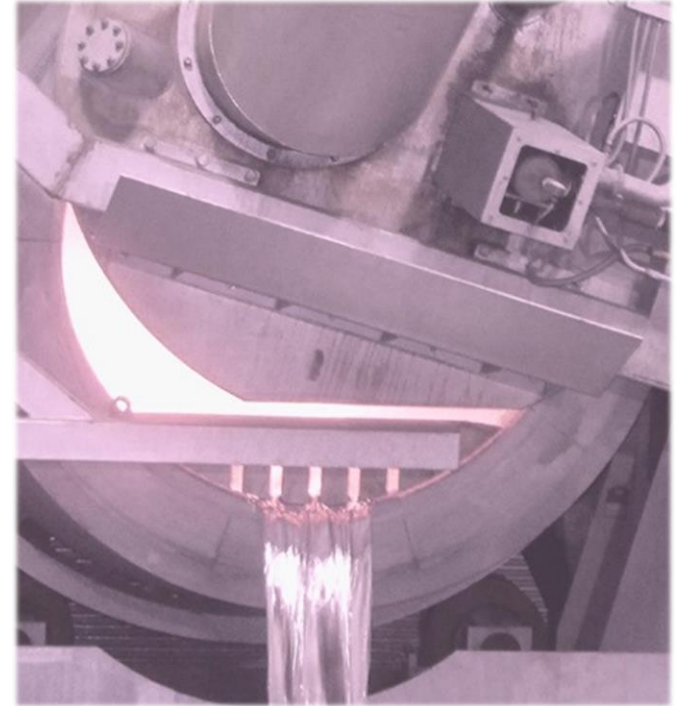
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P1020(Pure Al) vs A380 and 356 pricing history



Summary

- Make sure when budgeting that you understand all of the components to pricing
- The LME Cash Official published price is just the first component of many in the costing of primary or secondary aluminum products
- Aluminum casting alloys do not exactly follow the LME price
- Expect Volatility in commodities like aluminum – not just from the underlying screen price, but also from the other components
- Both LME and Published prices are just a reflection of that days market price. Tomorrow is a new day and starts a new price discovery
- A good supplier will provide pricing and risk management solutions to you and your supply chain team



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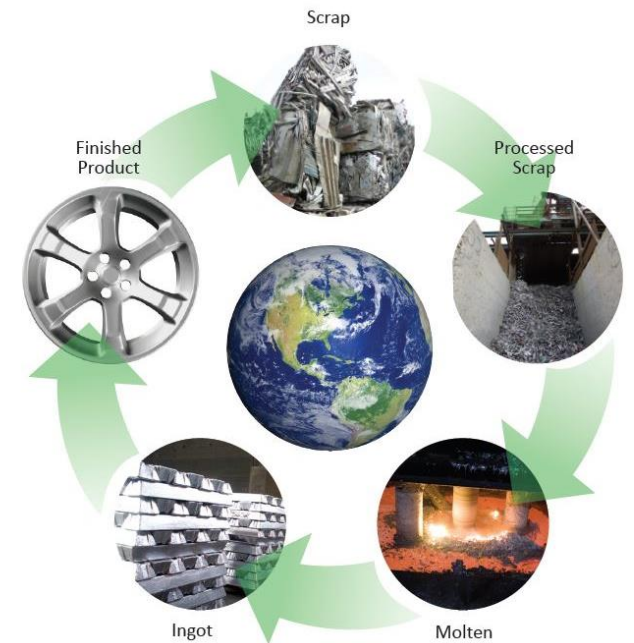
About Spectro Alloys

Spectro Alloys operates one of the highest efficiency aluminum recycling plants in the United States. Since 1973 we have been servicing large, medium and small foundries and die casters in the Midwest and beyond. As a manufacturer and broker of aluminum alloys, we focus as a team to be leaders with integrity.

Our mission is to provide better solutions through innovative recycling processes.

Our Core Values:

- We put Safety and People First
- We are Customer Driven
- We are Servant Leaders, Demonstrating Respect, Honesty, Integrity
- We are Committed to Sustainability, Growth and Continuous Improvement
- We are Each Accountable, and as One Team



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Spectro's Positive Environmental Impact

The Spectro Alloys aluminum recycling process uses 90%+ less energy and releases 90%+ less CO₂ than primary aluminum production. The Positive Impact in Perspective:



- Aluminum recycling production at Spectro saves enough energy to power over **200,000 homes**. That's more homes than in the entire city of Minneapolis
- Aluminum recycling production at Spectro reduces Green House Gas emissions equivalent to taking over **80,000 cars** off the road
- Recycling production at Spectro saves enough aluminum from landfills to **fill a box the size of a football field and over 200 feet high** every year

Spectro Alloys is where the rubber hits the road in the recycling process.



* Based on EPA study data. Visit www.spectroalloys.com for citation detail.

