

CRU Prices

Aluminium

Methodology and
Definitions Guide

August 2021

CRU Prices.....	1
<i>Methodology and Definitions Guide - Aluminium</i>	<i>3</i>
1 Scope	3
2 Methodology	3
3 Definitions	5
Merchant Premia	5
US Midwest ingot P1020.....	5
US Midwest billet upcharge.....	5
Rotterdam ingot duty-unpaid.....	5
Rotterdam ingot duty-paid.....	5
Germany billet delivered	6
Rotterdam billet in warehouse.....	6
Italy billet delivered	6
Germany primary foundry alloy (PFA) delivered	6
Germany wire rod delivered	7
Japan ingot spot CIF	7
Japan ingot quarterly CIF	7
Japan billet upcharge CIF	8
South Korea ingot CIF	8
Singapore ingot FCA.....	8
European scrap and secondary prices	8
3XXX External Clean Scrap (Tablet).....	8
5XXX External Clean Scrap	9
Class I F.O.B. can plant.....	9
Class II F.O.B. can plant.....	9
Class III F.O.B. can plant.....	9
Clean UBC without attachments (Talc)	10
Clean mixed old aluminium alloy sheet (Taint / Tabor)	10
Mixed clean castings (Tense)	10
Mixed aluminium turnings (Telic)	10
New extrusions scrap (6063 alloy) (Tata)	10
Secondary ingot prices - DIN 226	11

Methodology and Definitions Guide - Aluminium

1 Scope

This guide covers aluminium products prices in all geographical markets and should be read in conjunction with the CRU Group Compliance Framework and Methodology Guide. It details commodity-specific methodology which have precedence, with all other aspects covered by the Group methodology guide.

2 Methodology

CRU collects ingot and shapes premia as part of its assessment of broader market conditions that are published in the Aluminium Monitor and Aluminium Products Monitor. These premia are gathered from regular discussions with a wide network of market participants. This network is frequently reviewed to ensure a balance of buyers and sellers, and to reflect actual activity in the market. CRU also conducts consultations with the market about its methodology – all answers are treated as confidential.

Market participants include producers, traders and end users. In the absence of spot orders, data providers can submit an opinion on the prevailing market premium. Data providers are required to indicate whether their submission is an ‘actual’ transaction or an ‘opinion’. All data submitted is used solely for the purpose of calculating the final CRU regional aluminium premiums assessments.

Frequency

Premia are provided once a month (unless otherwise stated), with the final price assessment being published in the Aluminium Monitor and Aluminium Products Monitor.

The following premia are assessed and published weekly:

- US Midwest Ingot P1020
- Rotterdam Ingot Duty Paid
- Rotterdam Ingot Duty Unpaid
- Japan Ingot Western (Spot) CIF
- Germany Billet Delivered

European scrap and secondary prices are published once a month.

Assessment Method

Analysts use telephone and email services to collect premiums as well as to verify the information received. We endeavour to record actual transactions but we also include bids and offers. More weighting is given to transactions when assessing a price from a range of possible levels. Data is gathered through consultation with producers, consumers and traders. Published premia reflect the average of the deals concluded within the time frame under consideration. Outliers are excluded from the assessment.

Price determination in an illiquid market

If a market has been quiet with no deals concluded, premia are rolled over. However, if the overall market trend is strongly upward or downward but there were no transactions concluded, bids and offers will be used to form the assessment. Aluminium premia represent CRU’s assessment of the level at which business has been concluded, following discussions with industry participants.

Exclusion of outliers

Expert judgement may be used in the exclusion of a data point as an input to the calculation of a final price. In doing so consideration may be given to the range and distribution of data collected in the same timeframe from other data providers; previous data received from the same data provider; non-price information received from the data provider and the current market state from any other source. Inclusion or exclusion of input data in the final price is recorded.

Any data that deviates from the previous assessed price range or the collected price data for the trading period will receive extra scrutiny. For example, if a transaction is considered to be a potential outlier, supporting documentation as a means of further authentication may be asked for. Supporting documentation is typically a contract or purchase/sales order, but other

documentation may be accepted. Supporting documentation may not be asked for when, in CRU's judgement, the data is otherwise corroborated or deemed valid.

Expert Judgment

Expert judgement may apply to decisions on what type of price data is submitted; if the deal is executed at arms-length; if normalisation of price data submitted is required; the means of any normalisation, and the inclusion of a data point in the calculation of the final price (exclusion of outliers).

An analyst will consult with one or more colleagues before any application of expert judgement if in any doubt, or where collective input would improve the quality of a judgement.

Deactivated premiums, fees and prices

Premia will remain active as long as it can be demonstrated that there are a sufficient number of buyers and sellers and/or traders which allow for the analyst to make an accurate assessment. If the quotation suffers from limited transparency or if business dynamics change, it will be deactivated. Its history will still be available to clients for a fee, should they require it, but no further information will be collected for that product from the time it is deactivated.

Sizes

Transaction sizes vary by commodity type-details are listed below.

Timing

spot assessments typically reflect transactions for a product to be supplied within 30 days – details are listed below.

3 Definitions

Merchant Premia

US Midwest ingot P1020

Material:	99.7% purity high-grade aluminium, P1020 Aluminium Association specification
Price basis:	Delivered, duty-paid
Shape/Dimensions:	Ingot, low profile T-bar, sow
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	Imperial pounds (lbs)
Frequency:	Weekly
Size:	Typical volumes 100-2000 tonnes.
Timing:	Prompt business for 7 to 30 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	10%.

US Midwest billet upcharge

Material:	6063 billet to Aluminium Association specifications (Si 0.2-0.6%, Mg 0.45-.9%, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others 0.05% each 0.15% total)
Price basis:	Delivered, duty-paid, up charge over US Midwest ingot premium
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	Imperial pounds (lbs)
Frequency:	Weekly
Size:	Typical volumes 100-2000 tonnes.
Timing:	Prompt business for 7 to 30 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium and US Midwest ingot premium at the time of contract confirmation
Duties/Tariffs:	10%

Rotterdam ingot duty-unpaid

Material:	99.7% minimum LME high-grade aluminium
Price basis:	Delivered, duty-unpaid
Credit/Payment terms:	Cash against documents
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Weekly
Size:	Typical volumes 100-1000 tonnes.
Timing:	Prompt business for up to 7-30 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	0%

Rotterdam ingot duty-paid

Material:	99.7% minimum LME high-grade aluminium
Price basis:	Delivered, duty-paid
Credit/Payment terms:	Cash against documents
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Weekly

Size:	Typical volumes 100-1000 tonnes.
Timing:	Prompt business for up to 7-30 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 3% import tariff (3% of LME cash + Rotterdam duty-unpaid premium)

Germany billet delivered

Material:	6063 alloyed aluminium (Si 0.2-0.6%, Mg 0.45-.9%, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others 0.05% each 0.15% total)
Price basis:	Delivered, duty-paid, over LME cash price includes Rotterdam duty-paid ingot premium
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Weekly
Size:	Minimum 25 tonnes, typical volumes 300-2000 tonnes.
Timing:	Prompt business for up to 7-90 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 4% import tariff (4% of LME cash)

Rotterdam billet in warehouse

Material:	6063 alloyed aluminium (Si 0.2-0.6%, Mg 0.45-.9%, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others 0.05% each 0.15% total)
Shape/Dimensions:	Length 5-7m, diameter 6-8" (150-210mm)
Price basis:	Delivered, duty-paid, includes Rotterdam duty-paid ingot premium
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Weekly
Size:	Typical volumes 300-2000 tonnes.
Timing:	Prompt business for up to 7-90 days ahead. Deliveries in shorter timeframe are normalised to standard delivery time.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 4% import tariff (4% of LME cash)

Italy billet delivered

Material:	6063 alloyed aluminium (Si 0.2-0.6%, Mg 0.45-.9%, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others 0.05% each 0.15% total)
Shape/Dimensions:	Length 5-7m, diameter 6-8"
Price basis:	Delivered, duty-paid, includes Rotterdam duty-paid ingot premium
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Monthly
Size:	Typical volumes 300-2000 tonnes.
Timing:	Prompt business for up to 7-90 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 4% import tariff (4% of LME cash)

Germany primary foundry alloy (PFA) delivered

Material:	Alloy aluminium (Si 7%, Mg 0.3%) – A.356.2 primary
Shape/Dimensions:	Ingot
Price basis:	Delivered, duty-paid, over LME cash includes Rotterdam duty-paid ingot premium

Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Monthly
Size:	Typical volumes 300-2000 tonnes.
Timing:	Prompt business for up to 7-90 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 6% import tariff (6% of LME cash)

Germany wire rod delivered

Material:	EC grade aluminium (Al 99.7%min, Fe 0.05- 0.18%, Si 0.03-0.09%, Cu 0.005%)
Shape/Dimensions:	9.5mm diameter
Price basis:	Delivered, duty-paid, over LME cash includes Rotterdam duty-paid ingot premium
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	metric tonne
Frequency:	Monthly
Size:	Minimum 25 tonnes, typical volumes 150-2500 tonnes. Prices for volumes outside of this range will be normalised to the standard volume.
Timing:	Prompt business for up to 7-90 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Includes 7.5% import tariff (7.5% of LME cash)

Japan ingot spot CIF

Material:	99.7% minimum LME high-grade aluminium
Shape/Dimensions:	Ingot, T-bar, sow
Price basis:	CIF main Japanese ports
Credit/Payment terms:	Cash against documents
Type:	Spot
Currency:	US dollar
Weight Unit:	Metric tonnes
Frequency:	Weekly
Size:	Minimum 25 tonnes, typical volumes 250-1000 tonnes. Prices for volumes outside of this range will be normalised to the standard volume.
Timing:	Prompt business for 7 to 30 days ahead. Deliveries in shorter timeframe are normalised to standard delivery time.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	Not applicable

Japan ingot quarterly CIF

Material:	99.7% minimum LME high-grade aluminium
Shape/Dimensions:	Ingot, T-bar, sow
Price basis:	CIF main Japanese ports
Credit/Payment terms:	Cash against documents
Type:	Japan quarterly premium is negotiated in the last month of the prior quarter.
Currency:	US dollar
Weight Unit:	Metric tonnes
Frequency:	Quarterly
Size:	Large volume deals agreed by major producers and consumers, deals typically in excess of 1000 tonnes.
Timing:	Deliveries for agreed period, standard is four quarterly contracts per year.
Pricing:	Communication with major producers and consumers on settled quarter ahead contracts.

Duties/Tariffs: Not applicable

Japan billet upcharge CIF

Material: 6063 alloyed aluminium (Si 0.2-0.6%, Mg 0.45-.9%, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others 0.05% each 0.15% total)

Shape/Dimensions: Length 5-7m, diameter 6-8" (150-210mm)

Price basis: CIF main Japanese ports, up-charge over Japan CIF ingot premium

Credit/Payment terms: Cash against documents

Type: Spot

Currency: US dollar

Weight Unit: Metric tonnes

Frequency: Monthly

Size: Minimum 25 tonnes, typical volumes 200-1000 tonnes. Prices for volumes outside of this range will be normalised to the standard volume.

Timing: In the absence of spot orders, data providers can submit an opinion on the prevailing market premium.

Pricing: N/A

Duties/Tariffs: Not applicable

South Korea ingot CIF

Material: 99.7% minimum LME high-grade aluminium

Shape/Dimensions: Ingot, T-bar, sow

Price basis: CIF

Credit/Payment terms: Cash against documents

Type: Spot

Currency: US dollar

Weight Unit: Metric tonnes

Frequency: Weekly

Size: Large volumes transactions, imports by the Korean Public Procurement Service (PPS) are typically greater than 500 tonnes

Timing: Periodic large imports, typically monthly or quarterly. Less frequent smaller volume transactions

Pricing: Communication with major producers, traders and consumers.

Duties/Tariffs: Not applicable

Singapore ingot FCA

Material: 99.7% minimum LME high-grade aluminium

Shape/Dimensions: Ingot, T-bar, sow

Price basis: FCA Singapore

Credit/Payment terms: Cash against documents

Type: Spot

Currency: US dollar

Weight Unit: Metric tonnes

Frequency: Monthly

Size: Minimum 25 tonnes, typical volumes 100-500 tonnes. Prices for volumes outside of this range will be normalised to the standard volume.

Timing: Prompt business

Pricing: communication with major producers, traders and consumers.

Duties/Tariffs: Not applicable

European scrap and secondary prices

3XXX External Clean Scrap (Tablet)

Material: 3000 series alloys, uncoated, unpainted, to be free of paper, plastic, ink, and any other contaminants.

Price basis: Delivered

Credit/Payment terms: 30 days payment terms

Frequency: Monthly

Type: Spot
 Currency: Euro
 Weight Unit: Metric tonne
 Delivery: Prompt business for up to 7-30 days ahead
 Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

5XXX External Clean Scrap

Material: 5000 series alloys, uncoated, unpainted, to be free of paper, plastic, ink, and any other contaminants.
 Price basis: Delivered
 Credit/Payment terms: 30 days payment terms
 Frequency: Monthly
 Type: Spot
 Currency: Euro
 Weight Unit: Metric tonne
 Delivery: Prompt business for up to 7-30 days ahead
 Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Class I F.O.B. can plant

Material: Class I Can Plant Scrap. Bare undecorated aluminium can body stock (3xxx).
 Price basis: Delivered
 Credit/Payment terms: 30 days payment terms
 Frequency: Monthly
 Type: Spot
 Currency: Euro
 Weight Unit: Metric tonne
 Delivery: Prompt business for up to 7-30 days ahead
 Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Class II F.O.B. can plant

Material: Class II Can Plant Scrap. Bare undecorated aluminium can lid stock (5xxx).
 Price basis: Delivered
 Credit/Payment terms: 30 days payment terms
 Frequency: Monthly
 Type: Spot
 Currency: Euro
 Weight Unit: Metric tonne
 Delivery: Prompt business for up to 7-30 days ahead
 Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Class III F.O.B. can plant

Material: Class III Can Plant Scrap. Decorated aluminium can body stock (3xxx).
 Price basis: Delivered
 Credit/Payment terms: 30 days payment terms
 Frequency: Monthly
 Type: Spot
 Currency: Euro
 Weight Unit: Metric tonne
 Delivery: Prompt business for up to 7-30 days ahead
 Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Clean UBC without attachments (Talc)

Material:	Clean scrap used food and/or beverage container without attachments. UBC is of medium grade, typically collected from street collection points.
Price basis:	Delivered
Credit/Payment terms:	30 days payment terms
Frequency:	Monthly
Type:	Spot
Currency:	Euro
Weight Unit:	Metric tonne
Delivery:	Prompt business for up to 7-30 days ahead
Pricing:	Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Clean mixed old aluminium alloy sheet (Taint / Tabor)

Material:	Clean old alloy aluminium sheet of two or more alloys, free of contaminants.
Price basis:	Delivered
Credit/Payment terms:	30 days payment terms
Frequency:	Monthly
Type:	Spot
Currency:	Euro
Weight Unit:	Metric tonne
Delivery:	Prompt business for up to 7-30 days ahead
Pricing:	€/t as per the transactions and bids/offers reported to us on the month of publication

Mixed clean castings (Tense)

Material:	All clean old aluminium castings which may contain automotive and airplane castings but without attachment.
Price basis:	Delivered
Credit/Payment terms:	30 days payment terms
Frequency:	Monthly
Type:	Spot
Currency:	Euro
Weight Unit:	Metric tonne
Delivery:	Prompt business for up to 7-30 days ahead
Pricing:	€/t as per the transactions and bids/offers reported to us on the month of publication

Mixed aluminium turnings (Telic)

Material:	Clean, uncorroded aluminium borings and turnings of two or more alloys with a limit of 5% moisture. To avoid dispute, material should be sold on basis of definite maximum zinc, tin and magnesium content.
Price basis:	Delivered
Credit/Payment terms:	30 days payment terms
Frequency:	Monthly
Type:	Spot
Currency:	Euro
Weight Unit:	Metric tonne
Delivery:	Prompt business for up to 7-30 days ahead
Pricing:	€/t as per the transactions and bids/offers reported to us on the month of publication

New extrusions scrap (6063 alloy) (Tata)

Material:	Shall consist of one alloy (typically 6063). Material may contain “butt ends” from the extrusion process but must be free of any foreign contamination.
Price basis:	Delivered
Credit/Payment terms:	30 days payment terms
Frequency:	Monthly
Type:	Spot
Currency:	Euro
Weight Unit:	Metric tonne
Delivery:	Prompt business for up to 7-30 days ahead

Pricing: Price expressed as a percentage of the LME cash price as per the transactions and bids/offers reported to us on the month of publication

Secondary ingot prices - DIN 226

Material: Aluminium alloy in sow or ingot form that conforms to A380.1, 226 or AD12.1
Price basis: Delivered
Credit/Payment terms: 30 days payment terms
Frequency: Monthly
Type: Spot
Currency: Euro
Weight Unit: Metric tonne
Delivery: Prompt business for up to 7-30 days ahead
Pricing: €/t as per the transactions and bids/offers reported to us on the month of publication

Glossary of abbreviations

INCO TERM RULES FOR ANY MODE OR MODES OF TRANSPORT:

- EXW – Ex-Works
- FCA – Free Carrier
- CPT – Carriage Paid To
- CIP – Carriage and Insurance Paid To
- DAT – Delivered at Terminal
- DAP – Delivered at Place
- DDP – Delivered Duty Paid

INCO TERM RULES FOR SEA AND INLAND WATERWAY TRANSPORT:

- FAS – Free Alongside Ship
- FOB – Free On Board
- CFR – Cost and Freight
- CIF – Cost Insurance and Freight

COUNTRY ABBREVIATIONS USED:

We use ISO 3166 alpha-2 standard country codes