

# Chrome Ore Index



Methodology and price  
specifications – June 2020

## Mission statement

Fastmarkets is a leading commodity price reporting agency (PRA) covering the metals, mining, minerals and forest products industries. Our products include Fastmarkets MB, Fastmarkets AMM, Fastmarkets IM, Fastmarkets RISI, Fastmarkets FOEX and Random Lengths. For more than 100 years we have been providing commodities price reporting services for use by market participants in their day-to-day commercial activities. These services include assessments and indices of commodity prices as well as news, research and commentary on the underlying markets.

Our mission is to meet the market's data requirements honestly and independently, acting with integrity and care to ensure that the trust and confidence placed in the reliability of our pricing methodologies is maintained. We do not have a vested interest in the markets on which we report.

## Introduction

Fastmarkets MB is the leading global provider of pricing intelligence for the non-ferrous metal, steel, steelmaking raw materials, ferrous and non-ferrous scrap markets, producing price assessments since 1913.

Fastmarkets MB reporters are required to abide by a code of conduct and clear pricing procedures during their market reporting and pricing activities. Fastmarkets is completely independent and has no vested commercial interest in any of the markets it prices.

We are the world's largest dedicated metals price reporting team. We have offices in London, New York, Pittsburgh, Shanghai, Hong Kong, Sao Paulo, Melbourne, Singapore, Mumbai, Dnepr, Istanbul and five other US locations.

The aim of this document is to provide a clear overview of Fastmarkets MB's Chrome Ore Index methodology and specifications for the prices it assesses.

If you have any questions, please contact the Fastmarkets editorial director, Alex Harrison, at [aharrison@fastmarkets.com](mailto:aharrison@fastmarkets.com).

## Price discovery and methodology

### Methodology rationale

Fastmarkets MB produces independent, fair and representative price assessments and indices of non-ferrous metals, alloys, steel, steelmaking raw materials and ferrous scrap prices on a daily, bi-weekly, weekly or monthly basis.

Fastmarkets MB's rationale for adopting the price-discovery process described in this methodology document is to produce a consistent and representative indicator of market value to suit the chrome ore market's requirement for a transparent pricing mechanism.

During the price discovery process, the price reporter's goal is to discover at what representative level market participants have concluded business, made offers or received bids over a certain defined trading period.

This is generally the period since the conclusion of the previous price quotation.

If, for instance, the most recent price assessment published by Fastmarkets MB was on Friday at 2-3pm London time and our next assessment is due on the following Friday at 2-3pm London time, we will accept price data for business conducted and reported to Fastmarkets MB between Friday afternoon and the following Friday morning.

The time period, or window, identified to assess a market (eg, daily, bi-weekly, weekly, monthly) is determined by Fastmarkets MB after considering the number of data points that Fastmarkets MB can reasonably expect to collect on a consistent basis over the selected period to support the price assessment process.

### Data collection criteria

Fastmarkets MB reporters aim to talk to a broad sample of market participants specifically involved in the buying and selling of the product or raw material of interest, with a good representation of both sides of the market, including producers and consumers, as well as traders.

Data is collected from market participants directly involved in spot business primarily by telephone but also by email, digital messaging or by direct submission. All input data received is kept confidential and stored on a secure network.

Fastmarkets MB encourages organisations to submit all their pricing data, especially all the concluded transactions.

Depending on market liquidity, Fastmarkets MB reserves the right to also base its prices on bids, offers, deals heard and market participants' estimates or indications of prevailing values.

Fastmarkets MB welcomes organisations to submit transaction data from authorised back-office functions.

### Price specifications and reference units

Fastmarkets MB has clear specifications for all the price points that it covers. All the reference units, such as currency and volume, are in line with the trading conventions in recognised in the metals markets.

Fastmarkets MB's specifications detail the material's characteristics or quality, location, incoterm, payment terms and the minimum volume accepted. These specifications are determined in consultation with market participants and follow industry convention. Reporters ensure that the information they receive matches these specifications.

### Guidelines that control the exercise of judgment by price reporters during the assessment process

To produce the price assessment, greater weighting is generally given to actual concluded transaction data; bids/offers are second in order of importance; followed by data sources' own estimate of the market when they have no business to report. But other considerations might also intervene such as, the trustworthiness of a data source based on past data submissions or their willingness to provide data on a consistent basis.

All Fastmarkets MB price specifications define the minimum lot size accepted. When volume information is available, this is also taken into consideration in the assessment process. For instance, a deal with a bigger volume will typically carry more weight than a smaller-volume transaction. But price reporters will also consider, for instance, normalizing or discarding a price reported for a deal with an abnormally large or small volume.

Since commodity markets differ in liquidity levels at different periods, the methodology does not set any minimum number, or threshold, of transactions to be gathered on which to base the assessment.

## Data provision and quality

The basis of all our Indices is the data provided by the market. To provide the most representative pricing for the market, it is essential we are able to collect as many representative data points as possible.

Any market participant involved in the physical chrome ore market may be able to contribute data to the index following a review by Fastmarkets MB of their activities. Fastmarkets MB aims to engage a broad and balanced range of physical market participants in the provision of data.

All data sources are subject to review before being able to submit price data to the Indices. The aim is to make sure that submitters have sufficient visibility and understanding of the market to be able to provide reliable price data.

As well as back-office functions, data may be provided from anyone authorised by the company to submit data. Details of the submitter are recorded for contact and clarification purposes.

### Data sources

Fastmarkets MB utilizes multiple channels to collect data. These include phone calls, email, website input and messenger services across our offices in London, Shanghai, Singapore and Sao Paulo. The deadline for data submission is 2pm London time on Friday. Any data received after this time will be included in the next publication of the index.

The Fastmarkets MB Chrome Ore Index is a tonnage-weighted calculation, based on actual transactions. Fastmarkets MB will also collect estimates, offers and bids from the market to supplement transaction data. If included, this non-transaction price data will be weighted at the specified minimum tonnage for the respective index.

Fastmarkets MB aims to collect full details of each transaction including brand, commercial terms and any other details relevant to value and pricing.

### Confidentiality and Data Protection

The primary channel for data provision to the Fastmarkets MB Chrome Ore Index is from market participants by email to a single mailbox accessible only to our index analysts.

All data supplied to Fastmarkets MB Chrome Ore Index is strictly confidential and access is restricted to our index analysts. Fastmarkets MB will sign Data Submitter Agreements (DSAs) upon request with any data provider. All data is stored on secure servers.

## Index calculation

The Fastmarkets MB Chrome Ore Index methodology is designed to provide market participants with a fair and robust reflection of the physical chrome ore price. The methodology incorporates structures and mechanisms to ensure a balanced and consistent calculation that is able to resist possible undue influences.

### Market balance

The Fastmarkets MB Chrome Ore Index is structured to balance the influence of all sides of the market. This reduces the potential risk of market distortions and bias in the data and ensures that all parts of the market have the same influence on the final Index calculation.

The published index figure is the straight average of two sub-indices, each of which contains data from one side of the market: buyers and sellers. Each sub-index is a tonnage-weighted calculation of normalized price data. Only the final index is published. The use of two sub-indices means that each side of the market has a 50% weighting in the final index. This removes the possibility of bias or any single data provider having an overbearing influence on the final Index.

### Normalization

The data is normalized using a model developed in-house based on the value-in-use applied by the market to different chemistries and brands to a single specification.

The normalization coefficients have been developed using Fastmarkets MB's historical data and history of reporting prices in this market. Fastmarkets MB updates its normalization coefficients every quarter for its Chrome Ore Index to reflect the constantly changing value-in-use relationship.

Fastmarkets normalizes to the base specification any material that differs from that specification but that falls within the target range. The base specification has been chosen in consultation with the market to reflect the reality of the physical spot market.

Material is normalized for chrome content, and also by source. The origin normalization takes into account all

those other factors that may affect the price but that cannot be observed. Finally, material that is transacted on a different pricing basis is normalized to the index pricing terms using all relevant variables updated weekly including freight, exchange rates and port fees.

Payment terms are based on typical commercial practice in the market.

#### **Removal of outlier data**

The Fastmarkets MB Chrome Ore Index has been specifically constructed to automatically exclude outlier data. All data points that fall more than 10% away from the initial calculation of the index are automatically excluded - the index is then recalculated. Outliers will be investigated; suspected attempts to influence the index unfairly may result in the data provider being warned or excluded.

Fastmarkets MB reserves the right to see contracts and signed paperwork before inclusion of the data in the calculation. If this is refused, then the data, and the data supplier, may be excluded from the data collection process. Fastmarkets MB reserves the right to exclude data that is not fairly presented or is believed may be an effort to distort the index.

#### **Index calculation in periods of low data liquidity**

The Fastmarkets MB Chrome Ore Index is calculated based on price data collected from the market. The index is set up so that actual transactions have the greatest effect on the final calculated price.

Fastmarkets aims to calculate the index based on a robust data set and therefore, where necessary, will look to utilize price data including estimates, offers and bids collected from the market. Data points that do not represent actual transactions will be entered into the index like transaction data but will be weighted according to the lowest tonnage permissible for the index.

Fastmarkets does not specify a minimum amount of transaction data, or a transaction data threshold, required for the publication of its index given that liquidity varies across the chrome ore market. In the event that in a particular pricing session the dataset collected is not considered suitably robust (such as there being too few data points) for the calculation of an index, Fastmarkets will implement the following fall-back procedures (1-7) until a suitable number of data points is reached to calculate the index:

1. Carry over transaction data from other sub-indices in same calculation period
2. Carry over non-transaction data from other sub-indices in same calculation period
3. Carry over transaction data from the previous calculation in the appropriate sub-index
4. Carry over transaction data from the previous calculation from any sub-index
5. Carry over non-transaction data from the previous calculation in the appropriate sub-index
6. Carry over non-transaction data from the previous calculation from any sub-index
7. If no price data can be collected, the index price will be carried over

In the unlikely situation that more than half of the pricing data collected on one day is provided by a single source, Fastmarkets will use the fall-back procedures 3-7 (see above) to ensure there is not a dependency on a significant proportion of data being provided by a single entity.

The Chrome Ore Index is published every Friday at 3pm London time. Fastmarkets MB indices are not published on England and Wales bank holidays. England and Wales bank holidays\* 2019 are as follows:

Where public holidays occur on a Friday, the indices will be published on the following working day.

Please refer to the [pricing holiday schedule](#) for this year's public holidays.

#### **Corrections and delays**

If an index is published incorrectly, it will be rectified and republished as soon as possible. A correction notice will be sent to all subscribers.

Fastmarkets MB employs several procedures and measures to avoid delays in the publication of its indices. In the event of a delay, however, Fastmarkets MB will inform subscribers as soon as possible. In the event of late publication, only data that has been received within the correct standard time frame will be included in the calculations. No indices will be amended due to the emergence of new data or market activity after the initial publication. Retrospective changes to the published values will only be made in cases of administrative or calculation error.

### Changes to the Methodology

Changes to the methodology and/or index specification may be implemented following a formal consultation process, which starts with Fastmarkets MB posting on its website an advance pricing notice providing clear details and a timeframe for the change proposed. The objective of the consultation process is to give market participants sufficient time and opportunity to provide feedback and views about the change proposed.

Once a change has been confirmed Fastmarkets MB will issue an updated pricing notice to the market, notifying them of the decision and specifying the date from which any change will become effective.

### Index-related queries and complaints

Fastmarkets MB encourages engagement from the market on its pricing principles and methodology. The company promotes understanding of its calculation procedures and is committed to responding to requests for further information and clarification on a timely basis.

There are multiple channels for interaction with the Index department including email, telephone and instant messenger services.

If a subscriber has an issue with the published prices, then they may contact the Index team. In the event that the response is not satisfactory the issue may be escalated to the internal compliance department.

Fastmarkets MB takes all queries and complaints seriously and will seek to provide an explanation of the prices wherever possible. It is important to note, however, that calculation models and input data remain confidential and cannot be provided to third parties.

## Specification

# Chrome Ore Index

### MB-CHO-0003 **Chrome ore South Africa UG2 concentrates index basis 42%, cif China, \$/tonne**

Quality:	Sizing up to 1mm (95% min). Chrome base 42%, range 40-43%; silica max 6%; alumina max 18%; magnesium oxide max 0.15%; phosphorus max 0.01%; sulfur max 0.01%; chrome-iron ratio 1.2:1 min
Quantity:	Min 2,000 tonnes
Location:	cif China
Unit:	US\$ per dry metric tonne unit
Payment terms:	Payment on sight
Publication:	Friday 3pm London time
Notes:	Bulk (container deals normalized to bulk prices)

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