

Ores and Alloys Marker Price Methodology and Specifications

Effective September 2025

Introduction

This statement of methodology for McCloskey by OPIS, a Dow Jones company's ["McCloskey"] price assessments reflect fundamental principles that form the foundation for McCloskey's price reporting service. This statement of methodology also includes detailed information on the formation of McCloskey's price assessments and the specifications for the various products assessed.

As ore and ferro alloy markets change, McCloskey's methodology for assessing prices will continue to evolve.

The McCloskey price assessment services team is composed of specialist reporters and senior analysts located around the world. The McCloskey team undertakes price discovery of the physical markets on a daily basis according to the specifications outlined in this statement of methodology.

For questions regarding price assessments, please contact Rohan Baid at rbaid@opisnet.com, Randy Fabi at rfabi@opisnet.com or Marian Hookham at mhookham@opisnet.com. OPIS also has compliance staff independent of the editorial group. For more information, please contact the OPIS Risk Management and Compliance Director at OPIS_Compliance_Team@opisnet.com.

McCloskey Publications

McCloskey publishes ore and alloy price assessments on a monthly, weekly and twice-weekly basis, along with market commentary, news, and analysis through its online business intelligence platform and publications.

Methodology Overview

McCloskey produces physical price assessments, termed "markers", for the major traded global hubs. Certain assessments are published once a week and others are published twice-weekly and monthly.

Price assessments are published in the weekly Ores and Alloys Report on Friday, as well as in the Manganese Mid-week Round-up, Chrome Mid-week Round-up and Silicon Mid-week Round-up on Tuesdays and Manganese End-week Round-up, Chrome End-week Round-up and Silicon End-week Round-up on Fridays.

All McCloskey markers share the following features and standards:

Basis of McCloskey Methodology

McCloskey assesses ores and alloys markets using a methodology that has been designed to reflect the way markets trade. The principal purpose of the methodology is to produce markers that are fair, consistent, and reliable indicators of standard market values in the markets being assessed. As a result, the assessment locations, standard traded units, and other particulars of a marker are determined by industry convention.

McCloskey uses the trading period deemed by McCloskey, in consultation with the industry, to be the most appropriate to capture market liquidity. In order to be included in the assessment process, trades, bids and offers must meet the minimum volume, delivery, timing and specification requirements as set forth in this Ores and Alloys Marker Price Methodology and Specifications guide (the "Methodology").

McCloskey markers are informed by data received from active market participants. Market reporters engage with the industry by proactively polling participants for market data. McCloskey will accept market data from all credible market sources, including electronic trading platforms. McCloskey will accept market data by telephone, instant messenger, email or other means.

McCloskey encourages parties that submit market data to submit all their market data that falls within the stated methodological criteria for the relevant marker. McCloskey encourages all sources of market data to submit transaction data from back-office functions. McCloskey will seek to ensure, so far as is able and is reasonable, that transaction data submitted are representative of all the submitter's actual physical-concluded fixed-priced transactions.

Throughout all markets, McCloskey is constantly seeking to increase the number of companies willing to provide market data. Market reporters are mentored and encouraged to expand their pool of contacts. The number of entities providing market data can vary significantly from day to day based on market conditions.

Judgment Guidelines

As part of the price reporting process, market reporters are required to use their professional judgment, to ensure the reliability of the data and marker compilation process. McCloskey has set forth guidelines throughout this Methodology to ensure that the use of judgment is consistent and fair. These guidelines can be found in the following sections of this Methodology:

- Anomalous or suspicious transactions
- Additional checks and analysis
- Comparative markets
- Transactions and survey weightings

McCloskey has developed a Price Reporting Manual that details the process for compiling each specific marker. In addition, McCloskey has developed a programme of training and oversight of market reporters that helps ensure uniformity in the application of judgment. The key elements of this programme include:

1. An initial course of training that explains and defines the parameters for the exercise of judgment
2. Suitably sourced staffing to ensure proper backup for sick days, vacations, etc.
3. Oversight of reporting teams by experienced market editors that are involved in daily mentoring and assisting in the application of judgment
4. A requirement that market editors (approvers) sign-off on all markers

Market Data Application and Thresholds

The specifications defined in the methodology and data used to compile each marker is deemed to be the most representative for that market. McCloskey will utilize various types of market data in compiling its markers, including:

- Transactions
- Bids and offers
- Other market information

Transaction information is the preferred source of data for the markers. However, depending on the liquidity of the markets being assessed, other information can be, and is used, such as bids and offers and other market information. This can be in combination with transactions, or can substitute transactions, depending on the market liquidity and specific market circumstances.

Consequently, in most markets there will be a relatively higher rank given to transactions over bids and offers and other market information in the compilation process.

McCloskey does not establish strict thresholds based on a count of completed transactions. McCloskey does, however, use transaction levels to determine the weighting between weighted average of price transactions and other market information (see “Transactions and Survey Weightings” below).

A strict adherence to a transaction-based threshold could lead to unreliable and non- representative markers because of the varying logistics found in the ore and ferro alloy markets, which determine the typical size of the transaction.

Verification of Transaction Data

Market reporters carefully evaluate all data gathered before it is used in the price compilation process. These data inputs include transactions, bids, offers, volumes, counterparties, specifications and any other information that contributes materially to the determination of a marker. Specific to transactions and bids and offers, market reporters seek to verify and validate the price, volume, specifications, and location basis, and with regards just to transactions, the counterparties.

Market reporters examine all the reported transactions to avoid duplication.

In order to promote transparency in the ores and alloys markets, McCloskey seeks to inform the market of any deals it identifies and significant movements of bids and offers through its commodity specific round-ups.

Scrutiny of Transactions

McCloskey has created guidelines that control the exercise of judgment by its market reporters.

Market reporters are trained to identify anomalous or suspicious transactional data that merit further investigation to verify if they are bona fide data for inclusion in the index compilation process.

If a transaction has been identified by a market reporter as anomalous or suspicious, it will be escalated to the markets editor. Further checks and analysis will be conducted by the markets editor when an anomalous or suspicious transaction is identified for further examination.

Anomalous or Suspicious Market Data

The following types of market data have been identified by McCloskey as potentially anomalous or suspicious:

- Transactions not transacted at arm's length, including deals between related parties or affiliates.
- Transaction prices that fall outside of the generally observed bids and offers that operated throughout the trading period.
- In the absence of observed bids and offers, transaction prices that deviate significantly from transactions seen for that trading period.
- Assessments of fair value that fall outside the reasonable parameters set by transactional information.
- Transactions that are suspected to be a leg of another transaction or in some way contingent on an unknown transaction.
- Transactions, bids and offers that deviate from the typical transaction volumes seen in that market.
- Any other transaction details that appear to stray from the usual trading behaviour seen in that market, including, but not limited to:
 - repeated trading activity in periods or pools of potentially low liquidity, such as the margins of the defined trading window (such as very early or very late deals),
 - counterparties not typically seen,
 - divergent specifications and
 - unusual delivery locations, or specific delivery location in a port that may have time specific issues affecting price.
- This will include transactions that are identified by other market participants as being, for any reason, potentially anomalous.
- Discrepancy in transaction details reported by counterparties.

Additional Checks and Analysis

The markets editor and market reporter(s) will undertake the following transactional and source analysis when a potentially anomalous or suspicious transaction is identified for further examination. They will assess the following transaction-based factors:

- The nature of the linkage of the perceived anomalous or suspicious transaction to other possible transactions
- The differences between counterparties on transactional details
- The impact of other factors on price and/or volume, including scheduling and logistic issues, demurrage issues and credit issues

The markets editor will also assess the following source-based factors:

- Whether the explanation provided by the source for the outlying nature of the transaction is plausible
- The credibility of the source. Sources will be deemed more credible if they (i) adhere to the reporting standards outlined in this Methodology; (ii) quickly respond to queries from market reporters; and (iii) have staff designated to respond to such queries.
- Whether the timing of the provision of information impacts the verification and validation process

Should this process determine that a transaction be excluded from the price assessment process, the markets editor will approve the exclusion and document the rationale. For markers used to settle derivatives, McCloskey has established internal procedures that involve escalating review within McCloskey management and, if necessary, notification and escalation of inquiry within the source's company.

Comparative markets

There exist tight price correlations between certain markets and the premiums and discounts between these markets, which are constantly assessed and compared by market participants.

By polling and entering into dialogue with the market, market reporters are able to quantify these relative values. Accordingly, in certain assessments when no relevant or insufficient market data exists, market reporters will assess market value using some or all of the following comparative metrics.

- Comparison to another market hub for the same quality of commodity,
- Comparison to a more actively traded but slightly different specification or quality in the same market hub,
- Other metrics, such as demand and supply data.

Corrections to markers

If warranted by the circumstances, McCloskey may publish corrections to markers after the publication date.

McCloskey will typically correct material errors that arise from the improper entry of information, the erroneous calculation of market data, misreported information, or the incorrect application of the stated methodology.

However, McCloskey will not retroactively assess markets based solely on new information learned after the publication date of the relevant marker. Corrections to markers will be conducted in accordance with the Price Assessments Correction policy.

Compliance and Ethics

McCloskey has implemented extensive compliance policies and procedures in accordance with the best practices of the price reporting industry. These include a comprehensive ethics policy that applies to all the McCloskey Price Reporting staff.

The OPIS & McCloskey Compliance Manual acts as the Price Reporting Agency (PRA) editorial code of ethics and is an expression of OPIS' intent to set out ideals for the ethical conduct of PRA personnel in the performance of their price assessment activities.

Review of Methodology

To ensure that they are representative of the market being assessed, McCloskey conducts reviews of its methodologies on both an internal and external basis.

McCloskey conducts a formal review of its methodologies and attendant documents on at least an annual basis.

Externally, McCloskey is in regular contact with market participants as such market participants are not only well situated to know the particulars of the market but have a vested interest in the implementation of accurate and relevant methodologies.

When conducting its reviews, McCloskey will consider a myriad of factors, including, but not limited to, activity in the market, visibility of market data and current and anticipated industry usage of the marker.

If the review process recommends a material change to the methodology, or termination of an existing benchmark, the markets editor will submit a proposal to McCloskey Editorial management for review.

Changes to Methodology

If either an internal or external review of a methodology results in a potential material change to the methodology or cessation of a benchmark, McCloskey will begin formal procedures for external consultation. Materiality is subject to professional judgment and considers the impact of the proposed change on the decision making of stakeholders.

The Market

McCloskey ores and alloys FOB and CIF markers assess fixed-price physical business for delivery or loading largely over a prompt two calendar month period. The ex-works markers assess physical business for delivery over a rolling 30 day period.

The weekly ore FOB and CIF markers assess business conducted Monday through Friday. In the event of an Indian holiday on any of the publishing days then the markers will be assessed and published on the preceding working day.

The twice-weekly FOB, CIF and ex-works alloys markers are assessed and published on a Tuesday and Friday each week, reflecting higher liquidity in the alloy market, and to represent the way the Indian market trades.

The start of the week for the twice-weekly markers is Saturday, with Sunday considered a non-market day. The Tuesday assessment captures physical business Saturday through Tuesday and the Friday assessment from Wednesday to Friday.

In the event of an Indian holiday on any of the publishing days of the alloy markers, then the markers will be assessed and published on the preceding working day.

The battery-grade manganese sulphate marker is assessed monthly covering business for the entire month up to and including the last Friday of the month. In the event of an Indian holiday on a publishing day, then the marker will be assessed and published on the preceding working day.

Manganese ore markers (184, 185, 186, 187 and 218) and ferro chrome markers (196 and 197) are rounded to two decimal places and all other markers are rounded to the nearest whole number. (See Appendix for details).

Transactional data

The prices for physical deals for the markers are averaged over the period of investigation on a tonnage weighted basis. Trades, bids and offers accepted are those that represent the most economic standard tonne in the market being assessed.

Where available, bids and offers are tracked over the period of investigation and the best bids and offers for each active trading window are arithmetically averaged. A tight market is achieved when the best bid/offer spread is 5% or less either side of the midpoint. For example, if the best bid/offer spread is \$92-100/t, the midpoint is \$96/t. Thus, anything between \$91.20-100.80/t is considered a tight market. The best bid or offer could be posted at any day in the period of investigation.

However, with the twice-weekly markers if the best bid or offer takes place on the same day as a trade, the trade supersedes that bid or offer for that particular day. As a result, the best bid and best offer will be taken from the other days when a trade does not occur.

For example, if a trade takes place on Wednesday, any bids or offers on that day will not be used in Friday's assessment. If there are no trades on Thursday and Friday, then the best bid and offer from those days will be taken into consideration and included if considered a tight market.

Market Survey

In addition to tracking physical business, the McCloskey price reporting team also undertakes a survey of the market on the final day of the period being assessed. This is done by entering into a dialogue with the survey participants using the information built up in terms of deals done and bid and offer values over the week.

Market participants are asked where they see the market in terms of deals done and bid/offer levels through the week and where they would assess the market. An arithmetic mean is applied to the survey inputs. The use of the survey in determining the markers will vary depending on the level of liquidity and the spread of trades and evidential bids and offers across the respective trade windows for each marker.

Trade activity data and survey weightings

FOB and CIF markers

Under normal circumstances with the weekly and twice-weekly markers, if there is at least one trade in each of the two active window months, then the volume weighted average of the trades will comprise 75% and the survey 25%, unless there is a tight market, in which case the survey will comprise 0% and the value of the tight markets 25%. If deals are transacted in only one

month of the window, then, typically, the volume weighted average and the survey will comprise 50% each of the marker compilation unless there is at least one tight market, in which case the trade weight will be 50%, the tight market 25% and the survey 25%.

If there are no representative trades in the two month window, but there are two tight markets then the tight markets will consist of 50% of the weightings with the survey consisting of 50%. If there is only one tight market then the survey will typically comprise 75% of the marker and the average of the tight market 25%.

When there are no trades or tight markets, the survey result will be the sole determinant of the marker. For weekly indexes, in some circumstances and in discussion with the markets editor, these weightings can be adjusted. In such circumstances a reason for the deviation from standard practices will be recorded.

Ex-works markers

In the twice-weekly and monthly ex-works markers, the active trade window is 30 days.

If there is at least one trade in the active 30-day window, then the volume weighted average of the trades will comprise 50% of the marker, the survey 25%, and 25% tight market.

If there is a trade but no tight market, then the trade will comprise 50% of the marker and the survey 50%.

If there are no representative trades, but there is a tight market then the tight market will consist of 50% of the weightings with the survey comprising 50%.

When there are no trades or tight markets, the survey result will be the sole determinant of the marker.

In some circumstances and in discussion with the markets editor, these weightings can be adjusted. In such circumstances a reason for the deviation from standard practices will be recorded.

Weekly alloy FOB, CIF and ex-works markers

The weekly silico manganese, ferro manganese, ferro silicon and ferro chrome FOB and CIF markers are derived by taking the arithmetic average of the Tuesday and Friday assessments.

Weekly South Africa FOB manganese ore lumps (36.5%) marker

The South Africa FOB manganese ore lumps (36.5%) marker is calculated at the end of each week.

Due to limited liquidity in the current market, the marker is derived by subtracting freight from the China CIF manganese ore lumps (36.5%) price assessed by McCloskey on the same day.

Freight is assessed through a survey of the market.

Survey respondents that provide a fixed price for the marker will also be included and weighted the same as those providing freight assessments.

As liquidity in the marker emerges, trades and confirmed bids and offers will be included in the assessment. The volume-weighted average of the trade activity and survey will follow the other FOB and CIF markers stated above.

Marker timing

Twice-weekly markers

To be included in the markers assessments on Tuesday, trades, bids and offers must be executed between 08:00-17:00 India Standard Time (IST) on Saturday and between 08:00 IST on Monday and 17:00 IST on Tuesday. All values must be verified and/or validated by 18:00 IST on Tuesday.

To be included in the markers assessments on Friday, trades, bids and offers must be executed between 08:00 IST on Wednesday and 17:00 on Friday. All values must be verified and/or validated by 18:00 IST on Friday.

Market participants are asked to submit their assessments of fair value by 17:00 IST on the publication day. Any submissions that are received after 17:00 IST will normally be excluded in the survey average used in the marker compilation.

Monthly averages are compiled from the twice weekly markers. All markers published in the month up until the last working Friday of the month are included and averaged.

Weekly markers

The cut-off point for trades and survey numbers being accepted for inclusion in the formation of the Ores and Alloys weekly markers is 17:00 IST on Friday.

Trades done after this time will normally be excluded in the weekly markers compilation.

For both the twice-weekly and weekly markers, on days before major holidays, the marker trade and survey deadlines may be brought forward in line with market participants' working schedules. These days are usually over the Diwali and Holi period but can include other holidays. Market participants will be informed of any such changes to assessment time.

Weekly markers are averaged to produce monthly averages, with cut-off for inclusion the last working Friday of the month.

Monthly marker

The cut-off point for trades and survey numbers being accepted for inclusion in the formation of the Ores and Alloys monthly markers is 17:00 IST on the last Friday of the month.

For the monthly markers, on days before major holidays, the marker trade and survey deadlines may be brought forward in line with market participants' working schedules. These days are usually over the Diwali and Holi period but can include other holidays. Market participants will be informed of any such changes to assessment time.

Trade window and rollovers

The active window starts one month ahead of the current month and rolls over after the close of business on the last working Friday of the month.

For example, this means that Monday 1 March 2025 was the first assessment day for the active window that was made up of April 2025 and May 2025.

In some cases, depending on when the calendar month begins or ends, the monthly average could contain some days from the previous month as defined by the methodology for twice-weekly markers.

The ex-works window rolls forward every day and extends out for 30 days.

Manganese

Weekly manganese ore markers

China CIF manganese ore lumps (43%)

The China CIF manganese ore lumps 43% marker is a weekly marker assessing the price of 43% manganese ore lumps delivered to China (basis Tianjin Port). Prices are assessed in US dollars per dry metric tonne unit (\$/dmtu).

This marker reflects the following specifications:

Size: 5.5-75mm lump

Mn content: 43% (40-44%)

Iron: 5% (Max 10%)

Silica: 11% (Max 12%)

Alumina: 5% (Max 10%)

Phosphorus: 0.1% (Max 0.15%)

Moisture: 4% (Max 12%)

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 t.

Publication: 18:00 IST, Friday

India CIF manganese ore lumps (43%)

The India CIF manganese lumps 43% marker is a weekly marker assessing the price of 43% manganese ore lumps delivered to Eastern India (basis Vizag/Haldia Port). Prices are assessed in US dollars per dry metric tonne unit (\$/dmtn).

This marker reflects the following specifications:

Size: 5.5-75mm lump

Mn content: 43% (40-44%)

Iron: 5% (Max 10%)

Silica: 11% (Max 12%)

Alumina: 5% (Max 10%)

Phosphorus: 0.1% (Max 0.15%)

Moisture: 4% (Max 12%)

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 t.

Publication: 18:00 IST, Friday

China CIF manganese ore lumps (36.5%)

The China CIF manganese ore lumps 36.5% marker is a weekly marker assessing the price of 36.5% manganese ore lumps delivered to China (basis Tianjin Port). Prices are assessed in US dollars per dry metric tonne unit (\$/dmtn).

This marker reflects the following specifications:

Size: 5.5-75mm lump

Mn content: 36.5% (35-38%)

Iron: 5% (Max 10%)

Silica: 6% (Max 12%)

Alumina: 0.2% (Max 1%)

Phosphorus: 0.025% (Max 0.1%)

Moisture: 4% (Max 12%)

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 t.

Publication: 18:00 IST, Friday

India CIF manganese ore lumps (36.5%)

The India CIF manganese ore lumps 36.5% marker is a weekly marker assessing the price of 36.5% manganese ore lumps delivered to Eastern India (basis Vizag/Haldia Port). Prices are assessed in US dollars per dry metric tonne unit (\$/dmtn).

This marker reflects the following specifications:

Size: 5.5-75mm lump

Mn content: 36.5% (35-38%)

Iron: 5% (Max 10%)

Silica: 6% (Max 12%)

Alumina: 0.2% (Max 1%)

Phosphorus: 0.025% (Max 0.1%)

Moisture: 4% (Max 12%)

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 t.

Publication: 18:00 IST, Friday

South Africa FOB manganese ore lumps (36.5%)

The South Africa FOB manganese ore lumps 36.5% marker is a weekly marker assessing the price of 36.5% manganese ore lumps from South Africa (basis Port Elizabeth). Prices are assessed in US dollars per dry metric tonne unit (\$/dmtn).

This marker reflects the following specifications:

Size: 5.5-75mm lump

Mn content: 36.5% (35-38%)

Iron: 5% (Max 10%)

Silica: 6% (Max 12%)

Alumina: 0.2% (Max 1%)

Phosphorus: 0.025% (Max 0.1%)

Moisture: 4% (Max 12%)

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 t.

Publication: 18:00 IST, Friday

Twice-weekly manganese alloy markers

India FOB silico manganese (65-16)

The India FOB silico manganese 65-16 marker is a twice-weekly marker assessing the price of 65-16 silico manganese loaded at the Indian ports in Vizag and Haldia. Prices are assessed on an FOB basis and in US dollars per metric tonne (\$/t).

This marker reflects the following specifications: quality parameters:

Manganese: 65% Min

Silicon: 16% Min

Phosphorus: 0.3% Max

Sulphur: 0.03% Max

Carbon: 2% Max

Size: 25-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

India FOB silico manganese (60-14)

The India FOB silico manganese 60-14 marker is a twice-weekly marker assessing the price of 60-14 silico manganese loaded at the Indian ports in Vizag and Haldia. Prices are assessed on an FOB basis and in US dollar per metric tonne (\$/t).

This marker reflects the following specifications:

Manganese: 60% Min

Silicon: 14% Min

Phosphorus: 0.3% Max

Sulphur: 0.03% Max

Carbon: 2.5% Max

Size: 25-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

India ex-works silico manganese (60-14)

The India ex-works silico manganese 60-14 marker is a twice-weekly marker assessing the price of 60-14 silico manganese sold in the domestic Indian market. The price does not include any local taxes.

Prices are assessed in Indian rupees per tonne (INR/t).

This marker reflects the following specifications:

Manganese: 60% Min

Silicon: 14% Min

Phosphorus: 0.35% Max

Sulphur: 0.035% Max

Carbon: 2.5%

Size: 25-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

India FOB ferro manganese (75%)

The India FOB ferro manganese 75% marker is a twice-weekly marker assessing the price of 75% ferro manganese loaded at the Indian ports in Vizag and Haldia. Prices are assessed in US dollars per metric tonne (\$/t).

This marker reflects the following specifications:

Manganese: 75% Min
 Silicon: 1.2% Max
 Phosphorus: 0.3% Max
 Sulphur: 0.03% Max
 Carbon: 6-8%
 Size: 25-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

India ex-works ferro manganese (70%)

The India ex-works ferro manganese 70% marker is a twice-weekly marker assessing the price of 70% ferro manganese at Durgapur, India. The price does not include any local taxes.

Prices are assessed in Indian rupees per tonne (INR/t).

This marker reflects the following specifications:

Manganese: 70% Min
 Silicon: 1.5% Max
 Phosphorus: 0.35% Max
 Sulphur: 0.035% Max
 Carbon: 6-8%
 Size: 25-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

Chrome

Weekly chrome markers

China CIF chrome ore (46-48%)

The China CIF chrome ore 46-48% marker is a weekly marker assessing the price of 48% chrome ore lumps delivered to China (basis Tianjin Port). Prices are assessed in US dollars per metric tonne (\$/t).

This marker reflects the following specifications:

Cr₂O₃: 46%-48%
 Chrome/Iron Ratio: 3.2

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 tonnes.

Publication: 18:00 IST, Friday

China CIF chrome ore (40-42%)

The China CIF chrome ore 40-42% marker is a weekly marker assessing the price of 42% chrome ore lumps delivered to China (basis Tianjin Port). Prices are assessed in US dollars per metric tonne (\$/t).

This marker reflects the following specifications:

Cr₂O₃: 40-42%
 Chrome/Iron Ratio: 1.3

The minimum cargo size accepted for inclusion in the marker assessment is 5,000 tonnes.

Publication: 18:00 IST, Friday

Twice-weekly ferro chrome markers

China CIF ferro chrome (60%)

The China CIF ferro chrome 60% marker is a twice-weekly marker assessing the price of 60% ferro chrome delivered to Chinese ports. Prices are assessed in US dollars per pound (\$/lb).

This marker reflects the following specifications:

Chromium: 60% Min

Silicon: 4% Max

Phosphorus: 0.04% Max

Sulphur: 0.05% Max

Carbon: 8% Max

Size: 10-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

Japan CIF ferro chrome (60%)

The Japan CIF ferro chrome 60% marker is a twice-weekly marker assessing the price of 60% ferro chrome delivered to Japanese ports. Prices are assessed in US dollars per pound (\$/lb).

This marker reflects the following specifications:

Chromium: 60% Min

Silicon: 3% Max

Phosphorus: 0.03% Max

Sulphur: 0.05%

Carbon: 8.5%

Size: 10-50mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

China ex-works ferro chrome (50%)

The China ex-works ferro chrome 50% marker is a twice-weekly marker assessing the price of 50% ferro chrome at Inner Mongolia. Prices are assessed in Chinese yuan per metric tonne (RMB/t).

This marker reflects the following specifications:

Chromium: 50% Min

Silicon: 4% Max

Phosphorus: 0.04% Max

Sulphur: 0.05% Max

Carbon: 8.5% Max

Size: 10-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

India ex-works ferro chrome (60%)

The India ex-works ferro chrome 60% marker is a twice-weekly marker assessing the price of 60% ferro chrome sold in India's domestic market. The price does not include any local taxes.

Prices are assessed in Indian rupees per metric tonne (INR/t).

This marker reflects the following specifications:

Chromium: 60% Min

Silicon: 4% Max

Phosphorus: 0.04% Max

Sulphur: 0.05% Max

Carbon: 8% Max

Size: 10-150mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

Silicon

Twice-weekly ferro silicon markers

India ex-works ferro silicon (70%)

The India ex-works ferro silicon 70% marker is a twice-weekly marker assessing the price of 70% ferro silicon sold in India's domestic market. The price does not include any local taxes.

Prices are assessed in Indian rupees per metric tonne (INR/t).

This marker reflects the following specifications:

Silicon: 70% Min

Alumina: 1.5% Max

Sulphur: 0.04% Max

Carbon: 0.15% Max

Size: 25-150 mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

Bhutan FOB ferro silicon (70%)

The Bhutan FOB ferro silicon 70% marker is a twice-weekly marker assessing the price of 70% ferro silicon sold to Indian consumers by road. The price does not include any local taxes.

Prices are assessed in Indian rupees per metric tonne (INR/t).

This marker reflects the following specifications:

Silicon: 70% Min

Alumina: 1.5% Max

Sulphur: 0.04% Max

Carbon: 0.15% Max

Size: 25-150 mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday

China ex-works ferro silicon (72%)

The China ex-works ferro silicon 72% marker is a twice-weekly marker assessing the price of 72% ferro silicon in China. Prices are assessed in Chinese yuan per metric tonne (RMB/t).

This marker reflects the following specifications:

Silicon: 72% Min
Alumina: 2.5% Max
Sulphur: 0.02% Max
Carbon: 0.2% Max
Size: 10-150 mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday.

China FOB ferro silicon (72%)

The China ex-works ferro silicon 72% marker is a twice-weekly marker assessing the price of 72% ferro silicon loaded at Chinese ports. Prices are assessed in US dollars per metric tonne (\$/t).

This marker reflects the following specifications:

Silicon: 72% Min
Alumina: 2.5% Max
Sulphur: 0.02% Max
Carbon: 0.2% Max
Size: 10-150 mm

The minimum cargo size accepted for inclusion in the marker assessment is 100 tonnes.

Publication: 18:00 IST, Tuesday and Friday.

Battery raw materials

China ex-works manganese sulphate (32%)

The China ex-works manganese sulphate marker is a monthly marker assessing the price of manganese sulphate for use in battery applications. Prices are assessed in Chinese yuan per metric tonne (RMB/t).

This marker reflects the following specifications:

Quality: Powder
Manganese: 32% Min
Iron: 0.001% Max
Zinc: 0.001% Max
Copper: 0.001% Max
Lead: 0.001% Max
Cadmium: 0.0005% Max
Potassium: 0.01% Max
Sodium: 0.01% Max
Calcium: 0.01% Max
Magnesium: 0.01% Max
Nickel: 0.005% Max
Cobalt: 0.005% Max
Insoluble residue: 0.01% Max
Pondus Hydrogenii (pH): 4.0-6.5

The minimum cargo size accepted for inclusion in the marker assessment is 30 tonnes.

Publication: 18:00 IST, last Friday of the month.

Appendix

Identification number	Marker
	Manganese ore
184	China CIF manganese ore lumps (43%)
185	India CIF manganese ore lumps (43%)
186	China CIF manganese ore lumps (36.5%)
187	India CIF manganese ore lumps (36.5%)
218	South Africa FOB manganese ore lumps (36.5%)
	Silico manganese
189	India FOB silico manganese (65-16)
190	India FOB silico manganese (60-14)
191	India ex-works silico manganese (60-14)
	Ferro manganese
192	India FOB ferro manganese (75%)
193	India ex-works ferro manganese (70%)
	Chrome ore
194	China CIF chrome ore (46-48%)
195	China CIF chrome ore (40-42%)
	Ferro chrome
196	China CIF ferro chrome (60%)
197	Japan CIF ferro chrome (60%)
198	China ex-works ferro chrome (50%)
199	India ex-works ferro chrome (60%)
	Ferro silicon
200	India ex-works ferro silicon (70%)
201	Bhutan FOB ferro silicon (70%)
220	China ex-works ferro silicon (72%)
221	China FOB ferro silicon (72%)
	Battery raw materials
222	China ex-works manganese sulphate (32%)

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