

Methodology and price specifications – April 2023



#### Mission statement

Fastmarkets Metals and Mining is the leading global provider of pricing intelligence for the non-ferrous metal, steel, steelmaking raw materials, industrial minerals, ferrous and non-ferrous scrap markets, producing price assessments with Fastmarkets MB and Fastmarkets AMM since 1913 and 1882 respectively. Fastmarkets Forest Products meanwhile is the leading global provider of pricing intelligence for the global forest products industry, incorporating Fastmarkets RISI, Fastmarkets FOEX and Random Lengths.

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' reporters are required to abide by a <u>code</u> <u>of conduct</u> 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 price reporting teams for both metals and forest products. We have offices in London, New York, Boston, San Francisco, Eugene, Charlottesville, Atlanta, Pittsburgh, Beijing, Shanghai, Hong Kong, Singapore, Melbourne, Sao Paolo, Mumbai, Brussels, Helsinki, Dnipro and Istanbul. The aim of this document is to provide a clear overview of Fastmarkets' methodology and specifications for the prices it assesses. If you have any questions, please contact Fastmarkets Editorial Director Perrine Faye at <u>perrine.faye@fastmarkets.com</u> for metals, or Fastmarkets Forest Products' Senior VP of Indices, Matt Graves, at <u>mgraves@fastmarkets.com</u> for forest products.



# Methodology and price specifications

The Fastmarkets AMM US Ferrous Scrap Export Indices have been developed to provide a fair, transparent and objective representation of the market.

Fastmarkets AMM has been reporting on the US scrap market for more than 100 years and therefore has a unique level of experience and knowledge in providing benchmark prices to the industry.

The Fastmarkets AMM index methodology is a tonnage weighted calculation of transactions that have been normalized to our base specification using value-in-use curves as defined by the market.

The indices are based on actual transactions, which are reported to Fastmarkets AMM by any market participant who is conducting trades on a FOB US East Coast or FOB US West Coast basis, and is not restricted to a panel or selected group.

The Fastmarkets AMM Ferrous Scrap Export Index also utilizes aggregate transaction data, where available, in order to maximize the proportion of the market represented in the final Index.

Fastmarkets AMM is impartial and has no financial or other interest in the level or direction of the Index. Fastmarkets AMM will not pay any market player to participate in the Index.

#### Fastmarkets AMM US Ferrous Scrap Export Index specifications

The details below are the base target specification. Material of other grades will be normalized back to the base grade of HMS 1&2 (80:20 mix) to reflect the whole market and to increase the liquidity in the calculation.

The trades are normalized using the value-in-use of the different grades as defined by the market itself and are updated on a regular basis as the market movements dictate. In addition, where there is variation in other contract terms, such as a difference in pricing terms, these are adjusted back to the base specification. In addition, trades will be normalized for freight based on port of loading. Trades will be adjusted for loading in regional ports other than the base ports of New York or Long Beach before normalization for grade. The freight normalization will be based on the relevant freight route, with data supplied by a leading global freight broker.

The number of grades quoted can be increased according to market requirements. The grades are based on ISRI specifications from 2012.

### Index calculation

Each index consists of two sub-indices, based on data received from sellers and buyers of scrap.

The sub-indices are each based on a tonnage-weighted average of the normalized trade information, and the two index are combined with equal weighting to ensure that the market is fairly represented across all participants. Only the final index is published.

#### Data quality and verification

All data points that vary by more than 4% from the calculated index are excluded and the index recalculated to a single iteration. Outliers can be investigated, and attempts to influence the index unfairly will result in the data provider being warned or excluded.

In some cases, where prices appear out of line or anomalous, participants may be asked to provide evidence of the transaction in the form of a signed contract. Participants will have the right to decline to provide this and Fastmarkets AMM will have the right to exclude prices that cannot be substantiated.

The number of trades available for use in the index does, of course, vary depending on the market conditions prevailing, but Fastmarkets AMM seeks to utilize as many trades as possible.

Where insufficient transactions have taken place in the market – defined as less than 20% of the average weekly market volumes over the past 12 months – Fastmarkets AMM reserves the right to include estimates, bids and offers from market participants in the Index calculation.

Material of all origins is included in the calculation with no sources specifically excluded. However, the origin may have an influence on the normalization coefficients used, if appropriate to the grade.



Data is submitted in a secure manner by phone and e-mail survey.

In its attempts to collect as much data from the market as possible, Fastmarkets AMM will use the means that best suit the prevailing market environment. If specific transaction information is not available on an individual basis, Fastmarkets AMM will accept aggregated purchasing or sales information as a single data point. This is provided the source indicates the average price received or paid for a total tonnage and assuming that all contract details are clear including payment terms and timings for normalization.

All correspondence is stored by Fastmarkets AMM. The data collection and Index calculation process will be made available for audit by a recognized and accepted third-party auditor.

#### Index publication

The indices are published every Wednesday from our New York office. All data must be received by 10 am New York time. Any data received after this time on the day of publication will not be included in that week's index calculation.

In the event of the Wednesday being a public holiday, the index will be published on the following working day. While the index will typically be published by Fastmarkets AMM's New York office, Fastmarkets AMM and its parent organization maintain offices in a number of locations and can publish the index from any of them as circumstances dictate.

Fastmarkets AMM reserves the right to change the publication frequency according to market requirements.

#### Security of data

Fastmarkets AMM stores the collected data and calculation process on secure off-site servers that are backed-up on a daily basis. The data is not accessible to parties outside Fastmarkets AMM or the group, and internally only to defined individuals within the index and editorial teams. If required, the Index calculation process is auditable by a recognized and mutually acceptable third-party auditor according to legal requirements and under non-disclosure agreements.

#### Internal compliance

Fastmarkets AMM has established extensive training to ensure that the methodologies of data collection,

index calculation, publication and information storage are strictly adhered to. This includes internal auditing, close management oversight and regular updating of standards to reflect any changes in market practice.

#### Why is the index calculation split into buyers and sellers?

The Fastmarkets AMM methodology is designed specifically, and uniquely, to balance out any bias in the market to create the most representative and objective price. Each Index is split into the two groups, buyers and sellers, to balance a number of factors, including tonnage bias, where more transactions are reported by one side or the other.

In this case, if more tonnage is reported on one side, it will contribute to the accuracy of the sub-index, but it does not over-influence the market as it will always be 50% of the final index calculation.

By splitting the calculation into two, influence from potential selective reporting of data is reduced. This is critical in a tonnage-weighted assessment which calculates the Index in a methodological and mathematical manner.

# How does the index methodology adjust for different levels of concentration between the buyers and sellers?

The sub-indices are based on a tonnage-weighted calculation of actual transactions normalized for grade, payment terms, etc. The final index is the non-weighted average of the two sub-indices, allowing for equal representation from both sides of the market, and also counters market distortion or selective reporting of data. Only the final Index is published.

The different market concentrations then do not matter, as both sides of the market are treated individually, and then combined equally.

#### What happens if the material is downgraded on delivery?

The transaction is done on the expected delivery specifications, including grade and payment terms, and the price settled on this basis. If it turns out to be different, then that is an issue between the two parties who entered the contract, and the index is not revised retroactively.



## Calculation of monthly average prices

Fastmarkets produces independent, fair and representative price assessments and indices for ferrous, non-ferrous and scrap metal prices on a daily, bi-weekly, weekly, bi-monthly or monthly basis. Fastmarkets calculates and publishes monthly averages based on these independent, proprietary assessments and indices by using simple averages.

The simple monthly averages are calculated by dividing the sum of the price quotations by the number of quotations published during the calendar month. For assessments, Fastmarkets derives both the monthly average high price and the Fastmarkets monthly average low price using this method. For indices, a single monthly average price point is calculated.

For example, there were five weekly price quotations for Chrome Ore South Africa UG2 concentrates index basis 42% cif China, \$ per tonne during the month of June 2018. Prices were published each Friday from June 1, 2018, with the assessments reading \$206 per tonne, \$208 per tonne, \$210 per tonne, \$211 per tonne and \$208 per tonne during the period. The simple monthly average is calculated by taking the sum of the five assessments and dividing that by the number of total assessments over the period - in this case, five. The simple monthly average for June 2018 was \$208.60 per tonne.

Most prices produced from the Americas prior to 2021 were calculated on a rolling-average basis. Rolling monthly averages were calculated by dividing the sum of the daily price quotations - including prices republished on non-assessment days - by the number of quotations published during the calendar month. Please contact pricing@fastmarkets.com, adding the subject heading 'Re: calculation of averages' for more information about Fastmarkets existing or legacy averages.



## Specifications

| MB-STE-0418      | Steel scrap HMS 1&2 (80:20),<br>export index, fob New York, \$/ |
|------------------|---|
|                  | tonne   |
| Quality:         | HMS 1&2 (80/20 mix) compliant to                                |
|                  | ISRI specifications 200 – 206                                   |
| Quantity:        | Min 5,000 tonnes  |
| Location:        | fob New York, other US East Coast                               |
|                  | ports normalized  |
| Timing:          | Within 1 month  |
| Unit:            | US dollars per tonne  |
| Payment terms    | Cash equivalent   |
| Publication date | Every Wednesday (or following day)                              |
| Notes:           | North America origin. bulk carrier                              |

# MB-STE-0425Steel scrap HMS 1&2 (80:20),<br/>export index, fob Los Angeles,<br/>\$/tonneQualityHMS 1&2 (80/20 mix) compliant to<br/>ISRI specifications 200 - 206Quantity:Min 5,000 tonnesLocation:fob Long Beach, other US West<br/>Coast ports normalizedTimingWithin 1 month

| Unit:            | US dollars per tonne               |
|------------------|------------------------------------|
| Payment terms    | Cash equivalent                    |
| Publication Date | Every Wednesday (or following day) |
| Notes:           | North America origin. bulk carrier |

#### MB-STE-0419 Steel scrap shredded scrap, export

|                  | index, fob New York, Ş/tonne         |
|------------------|--------------------------------------|
| Quality:         | Shredded scrap compliant to ISRI     |
|                  | specifications 210-212               |
| Quantity:        | Minimum 5,000 tonnes                 |
| Location:        | fob New York, other East Coast ports |
|                  | normalized                           |
| Timing:          | Within 1 month                       |
| Unit:            | US dollars per tonne                 |
| Payment terms    | Cash equivalent                      |
| Publication date | Every Wednesday (or following day)   |
| Notes:           | North America origin. bulk carrier   |
|                  |                                      |



#### Contacts

Sean Barry Global Scrap Editor +1 347 633 4860 sean.barry@fastmarkets.com

**Risk & Compliance Team** T: +44 20 7827 5264 or T: +44 20 7779 8519 riskandcompliance@fastmarkets.com

#### DISCLAIMER - IMPORTANT PLEASE READ CAREFULLY

This Disclaimer is in addition to our Terms and Conditions as available on our website and shall not supersede or otherwise affect these Terms and Conditions. Prices and other information contained in this publication have been obtained by us from various sources believed to be reliable. This information has not been independently verified by us. Those prices and price indices that are evaluated or calculated by us represent an approximate evaluation of current levels based upon dealings (if any) that may have been disclosed prior to publication to us. Such prices are collated through regular contact with producers, traders, dealers, brokers and purchasers although not all market segments may be contacted prior to the evaluation, calculation, or publication of any specific price or index. Actual transaction prices will reflect quantities, grades and qualities, credit terms, and many other parameters. The prices are in no sense comparable to the quoted prices of commodities in which a formal futures market exists.

Evaluations or calculations of prices and price indices by us are based upon certain market assumptions and evaluation methodologies, and may not conform to prices or information available from third parties. There may be errors or defects in such assumptions or methodologies that cause resultant evaluations to be inappropriate for use.

Your use or reliance on any prices or other information published by us is at your sole risk. Neither we nor any of our providers of information make any representations or warranties, express or implied as to the accuracy, completeness or reliability of any advice, opinion, statement or other information forming any part of the published information or its fitness or suitability for a particular purpose or use. Neither we, nor any of our officers, employees or representatives shall be liable to any person for any losses or damages incurred, suffered or arising as a result of use or reliance on the prices or other information contained in this publication, howsoever arising, including but not limited to any direct, indirect, consequential, punitive, incidental, special or similar damage, losses or expenses.

We are not an investment adviser, a financial advisor or a securities broker. The information published has been prepared solely for informational and educational purposes and is not intended for trading purposes or to address your particular requirements. The information provided is not an offer to buy or sell or a solicitation of an offer to buy or sell any security, commodity, financial product, instrument or other investment or to participate in any particular trading strategy. Such information and is not intended to be relied upon by users in making (or refraining from making) any specific investment or other decisions.

Your investment actions should be solely based upon your own decisions and research and appropriate independent advice should be obtained from a suitably qualified independent adviser before any such decision is made.