

# Methodology and specifications guide

## Steel, ferrous scrap, ferroalloys and noble alloys

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<b>Introduction</b>	<b>2</b>	<b>Part V: Corrections</b>	<b>12</b>	Ferrous scrap	31
How this methodology statement is organized	2			Ferrous Scrap Forward Curve	34
<b>Part I: Input data</b>	<b>2</b>	<b>Part VI: Requests for clarifications of data and complaints</b>	<b>12</b>	Steel Mill Economics	35
Reporting data to Platts	3			Metallics	35
What to report	3	<b>Part VII: Definitions of the trading locations for which Platts publishes indexes or assessments</b>	<b>13</b>	Platts MVS China Steel Mill Margins	36
How to report	3			The Platts Turkey ARC Steel Tracker	36
MOC data publishing principles	3	Carbon steel	13	<b>Revision history</b>	<b>37</b>
<b>Part II: Security and confidentiality</b>	<b>7</b>	Flat	13		
		Long	19		
<b>Part III: Determining assessments</b>	<b>8</b>	Semi	21		
MOC price assessment principles	8	Pipe and Tube	22		
Normalization price adjustment techniques	8	Stainless steel	23		
Prioritizing data	9	Flat	23		
Assessment calculations	9	Long	23		
<b>Part IV: Platts editorial standards</b>	<b>12</b>	Scrap	23		
		Raw materials	24		
		Ferroalloys	24		

## INTRODUCTION

Platts methodologies are designed to produce price assessments that are representative of market value, and of the particular markets to which they relate. Methodology documents describe the specifications for various products reflected by Platts assessments, the processes and standards Platts adheres to in collecting data, and the methods by which Platts arrives at final assessment values for publication.

Platts discloses publicly the days of publication for its price assessments, and the times during each trading day in which Platts considers transactions in determining its assessments levels. This schedule of publication is available on Platts website, at the following link: <http://www.platts.com/HolidayHome>.

The dates of publication and the assessment periods are subject to change in the event of outside circumstances that affect Platts ability to adhere to its normal publication schedule. Such circumstances include network outages, power failures, acts of terrorism and other situations that result in an interruption in Platts operations at one or more of its worldwide offices. In the event that any such circumstance occurs, Platts will endeavor, whenever feasible, to communicate publicly any changes to its publication schedule and assessment periods, with as much advance notice as possible.

Platts methodologies have evolved to reflect changing market conditions through time, and will continue to evolve as markets change. A revision history, a cumulative summary of changes to this and previous updates, is included at the end of the methodology. Methodology is reviewed regularly to ensure it reflects current market reality. Such reviews are carried out by Platts reporters and their managers, supplemented and supported by price methodology specialists who operate separately from the reporting teams. Platts follows a clearly defined process for public consultation on material changes to its methodologies. This process is based on full transparency and communication with industry stakeholders aimed at gaining

market acceptance for any proposed introduction or changes to methodology. For more information on the review and approval procedures, please visit: <https://www.spglobal.com/platts/en/our-methodology/methodology-review-change>

All Platts methodologies reflect Platts commitment to maintaining best practices in price reporting.

### How this methodology statement is organized

This description of methodology for assessments is divided into seven major parts (I-VII) that parallel the entire process of producing the end-of-day price values.

- Part I describes what goes into Platts assessments, including details on what data market participants are expected to submit, the process for submitting data and criteria for timeliness of market data submissions, as well as the editorial collection of input data from market sources.
- Part II describes any security and confidentiality practices that Platts uses in handling and treating data, including the separation between Platts price reporting and its news reporting.
- Part III is a detailed account of how Platts collects bids, offers, trades and other market data, and what Platts does with the data to formulate its assessments. It includes descriptions of the methods that Platts uses for reviewing data, and the methods used to convert raw data into assessments. This also includes the procedures used to identify anomalous data. This section describes how and when judgment is applied in this process, the basis upon which transaction data may be excluded from a price assessment, and the relative importance assigned to each criterion used in forming the price assessment. This section describes the minimum amount of transaction data required for a particular price assessment to be published. This is based on reported transactions and other market information. Finally, this section describes how Platts addresses assessment periods

where one or more reporting entities submit market data that constitute a significant proportion of the total data upon which the assessment is based.

- Part IV explains the process for verifying that published prices comply with Platts standards.
- Part V lays out the verification and correction process for revising published prices and the criteria Platts uses to determine when it publishes a correction.
- Part VI explains how users of Platts assessments can contact Platts for clarification of data that has been published, or to share a complaint. It also describes how to find out more about Platts complaint policies.
- Part VII is a list of detailed specifications for the trading locations and products for which Platts publishes assessments for a particular commodity. This section describes why specific units of measurement are used, and what conversion factors are used to move between units of measurement, where relevant.

## PART I: INPUT DATA

Platts objective is to ensure that input data that editors use as the basis for their price assessments is of the highest quality. Ensuring that data used in Platts assessments is of high quality is crucial to maintaining the integrity of Platts various price assessment processes.

Platts encourages entities that submit any input data for consideration in its assessment processes to submit all market data that they have which may be relevant to the assessment being made. Platts aim is to determine the full circumstances surrounding all reported transactional data, including details of quality, specifications, order sizes, dimensions, lead times and any locational and loading/delivery information. Platts uses that

information to determine a typical and repeatable market level for the commodity being assessed.

### Reporting data to Platts

Platts assesses a variety of different markets and commodities. In some of these Platts receives information from back office functions. However, in many markets back office functions are not best placed to communicate relevant market data to Platts editors, and in these instances Platts has processes in place to ensure that data is corroborated either through reviews of entities participating in its process, or through source validation and publication of information.

As part of its standard editorial practise, Platts routinely reviews the companies participating in its price assessment processes. These reviews ensure the suitability of data and information that are used to formulate Platts end-of-day price assessments. These reviews are conducted on a regular basis, and may take into consideration an array of issues including, but not limited to, adherence to editorial guidelines, operational and logistical issues, as well as counterparty acceptance. Further details concerning Platts MOC Participation Guidelines can be found online at <https://www.platts.com/market-on-close>.

The reviews are not designed to impede a company's ability to bilaterally engage in market transactions; the objective at all times is to ensure the integrity of published price assessments. Platts does not disclose the nature or scope of routine reviews of data providers that participate in its price assessment activities.

Platts may consider verifiable data reported and published through the day as provided for publication by individual sources, through established editorial methods.

Platts has developed guidelines for Management of Sources that address source identification, source evaluation, source development, using source information and source dependency. Individual sources are verified as per Platts Source Management Guidelines.

Platts considers several criteria as whether to use source information. These criteria include:

- Company reputation
- Source position within a company
- Source understanding and knowledge of the market in question
- Ability of source to provide relevant, valuable information
- Ability of Platts to verify information with other sources
- Source credibility

### What to report

Platts encourages all market participants to submit all data that may be relevant to Platts assessments, including but not limited to:

- Firm bids that are open to the marketplace as a whole, with standard terms
- Firm offers that are open to the marketplace as a whole, with standard terms
- Expressions of interest to trade with published bids and offers, with standard terms
- Confirmed trades
- Indicative values, clearly described as such
- Reported transactional activity heard across the market, clearly described as such
- Other data that may be relevant to Platts assessments

### How to report

Platts accepts any reasonable method of delivery/communication for information provided for publication in real-time, including for bids, offers and transactions. Platts editors typically communicate with market participants through phone, eWindow (if relevant) and/or online instant messaging systems.

Platts tries to accommodate the communication needs of its customers and will endeavor to open any additional communication channels required. Other means of communication, such as emails during the assessment process, are acceptable but are considered to be atypical. If a market participant chooses to communicate with Platts editorial using such atypical means, this needs to be highlighted well ahead of the assessment process.

The following reporting methods are accepted by Platts editorial staff:

- Commonly used Instant Messaging software
- eWindow
- Telephone
- Email

Reporters covering the markets in Asia and the Middle East are contactable from around 09:30 to around 18:30 Singapore time, those covering Europe and Africa from around 09:30 to around 18:30 London time, and those covering the Americas from around 08:30 to around 17:30 Houston time.

### MOC data publishing principles

The Platts Market on Close (MOC) assessment process establishes core standards for how data is collected and published, how data is prioritized by value, and ultimately how data is analyzed in the course of completing Platts assessments.

Transparency underpins Platts data publishing processes. Under Platts MOC guidelines for collecting and publishing data, Platts publishes market information including but not limited to firm bids and offers, expressions of interest to trade and confirmed trades that are received from market participants throughout the day.

This information is published in real-time, as it is received, on Platts information services. Platts publishes all information received so that it can be fully tested by the market at large. Information collected and published includes the identities of buyers and sellers, confirmed prices, volumes, location, and stated trading terms.

Platts assessments are designed to reflect repeatable market value at the close of the assessment process. Platts tracks market price evolution during the entire day, and publishes a wide range of data relating to market value as it does so. All data that has been published through the day is analyzed during the assessment process. Towards the close of the day, Platts focuses its assessment process to publish named firm bids and offers, expressions of interest to trade and confirmed trades, with all relevant details. This transparent data is prioritized in the assessment process, because it is available to the entire market for testing.

In order to ensure that all firm bids and firm offers that still stand at the close of the assessment process have been fully tested in the market at large, Platts has established clearly defined time cut-offs that apply when publishing firm bids and firm offers in the MOC process. Time cut-offs for the submission and subsequent publication of new bids and offers are applied so that MOC participants cannot bid or offer late in the process, and to ensure that every bid and offer published by Platts is logistically executable.

Bids and offers published by Platts are considered to be firm until Platts is informed otherwise, or until the close of the assessment process for the day, whichever comes first. Platts expects all participants in the MOC process to be contactable at all times.

Platts will consider all firm bids and offers as open to the market at large and executable unless informed otherwise by the counterparty submitting the market information. If no communication is made to Platts to withdraw or change the parameters of the bid or offer it is assumed that it is available to the marketplace. Platts seeks verification of any transaction originating from a bid or offer submitted for inclusion in the Platts MOC process.

Input data may also include fully and partially confirmed bids, offers and trades, notional trading values and other market information as provided for publication by individual sources, through established editorial methods.

Market reporters endeavor to verify all market information they receive, including by testing it within the market through the publishing process. Trades reported as executed are verified as being executed and Platts ensures that any firm bids/offers reported are available to the market as a whole.

Platts uses various techniques to confirm the quality of data it receives, including cross checks with counterparties as well as requests for supporting documentation. Platts eliminates data in the price assessment process that cannot be verified in the market to the extent deemed appropriate.

All Platts market reporters are trained to analyze the data they receive and to question sources to establish the fullest set of information possible around price data. Reporters are trained to seek a wide variety of information to test reported transactional activity, including the specific price agreed, the counterparty to the trade, the point of origin and destination for delivery of the commodity, the size of the transaction, any physical quality commitments agreed as part of the trade, the terms and conditions of a trade and when a trade was agreed.

Platts publishes the most relevant information collected that meets its methodological standards, typically through real-time information services and with as much transparency as possible in order to test information within the market.

### MOC data submission process

Platts has specific guidelines around data submissions to ensure high quality of information in the assessment process. This includes detailed guidelines on timings for submissions, which can be found in the specific guide for each commodity process. The purpose of the time cut-offs is primarily to ensure logistical executability and standards of incrementability and repeatability to ensure an orderly assessment process. As such, they may be changed at short notice if evolving market conditions require.

To ensure proper dissemination of market information, new bids and offers for publication by Platts must be received by Platts no later than stated cut-off periods.

In order to ensure that all published data is fully tested in the market, Platts has established guidelines around how quickly bids and offers may be improved when they have been published, and by what amount. These incrementability guidelines define the quantum and speed at which bids and offers may typically be improved in the MOC assessment process. Incrementability does not apply to bids and offers that are moving away from market value, though Platts analyzes bids and offers that are moved lower, and higher, respectively, to ensure reasonability.

Platts may notify the market of any adjustment to the standard increments in the event of market volatility or a disruptive event. A market participant can withdraw a bid or offer from Platts MOC process at any time, so long as no other potential trading counterparty has indicated that it has interest to buy or sell into the bid/offer.

Platts expects that market participants bidding and offering in the MOC process should perform on their bid/offer with the first company of record to express interest to Platts for publication during the MOC process. In the event of a dispute on the timing, Platts will review its records and determine which company communicated to Platts first its intention to execute on a bid/

offer displayed on the Platts systems. Platts prioritizes data on the basis of timeliness. This sequence is critical for an orderly assessment process.

Platts editorial guidelines governing its assessment process require it must consider only those transactions, bids or offers where market participants perform under typical contractual terms. Platts accepts that individual companies may have trading limits with counterparties and that national legislation may prevent companies from dealing in materials of certain origins. Such counterparty issues are dealt with on a case-by-case basis.

All bids and offers are firm from the moment of submission.

Submissions of bids, offers or transactions should not be considered as received by Platts unless acknowledged as received by Platts. For communication initiated by phone Platts will consider the time when the trader actually communicated the bid/offer or transaction. Acknowledgment may take the form of “yes,” “OK,” “y,” “k,” or any other reasonable forms, including by sending back the published information. Platts recognizes the time of receiving a message of a company’s intent to buy/sell, as opposed to the time a message was sent by the trading party.

Bids and offers submitted on time but in an incomplete form, where the terms are only clarified after the cut-off deadline, will not be used in the assessment process.

As a general recommendation Platts advises market participants not to wait for the last possible minute before the cut-off deadlines for bids and offers, as the communication may not be completed on time.

A buyer or seller can communicate with Platts directly to express buying or selling interest. Platts may also take into consideration bids and offers made via a broker, provided the buyer or seller have communicated to Platts that they have authorized the broker to speak on their behalf.

Platts only considers for publication and assessment transactional interest that is expressed by participants for bids or offers that have already been published by Platts. Interest in bids or offers at prices that have not been published, and therefore may not be fully available for testing in the marketplace as a whole, may be disregarded. Should a buyer lower its bid or a seller increase its offer, an expression to trade at a previously published level will not be considered.

Platts editorial processes require full clarity when communicating bids/offers and intentions to trade. When expressing an intention to hit a bid or lift an offer in the MOC processes, any message should typically include the specific price of the trade and the name of the counterparty. Information may not be published if it is not sufficiently clear when communicated to Platts.

Following any trade, an intention to rebid or reoffer must be received by Platts as soon as is possible and within a reasonable time frame, as per incrementability guidelines.

Unless sellers/buyers expressly inform Platts of their continued interest to buy/sell after a deal, Platts will presume the original buyers or sellers are not there for additional volume.

A rebid or reoffer must match the initial position’s parameters, with the exception of price. A rebid or reoffer can be made at the same level or inferior to the traded price. For example Company B hits Company A’s bid for \$100/mt during the MOC. Company A can rebid at \$100/mt or below this level. If the MOC process for the market includes a “freeze” period at the close of the process, bids and offers may only be repeated at the last published price.

When there are multiple bids or offers at the same level, the first participant to reach that level should be the first to be traded. Subsequent deals will go to the second, third and fourth participant at the same level. When a participant is traded, any repeat of their bid/offer will move to the back of the bid/offer queue.

Platts will consider the first participant to express their interest in a bid or offer to be the counterparty for the subsequent trade. Platts will monitor time stamps in the event of a dispute to determine who the first buyer or seller was. In the event of a bid or offer being repeated, the queue of participants expressing interest in that position will be reset. Platts will not consider any interest expressed in a rebid or reoffer before the position is published to be executable during the MOC assessment process.

After a bid or offer is published, only price can be changed, while in certain markets volume may be adjusted to be multiples of a minimum volume. The quality or loading/delivery timing cannot be changed. Buyers or sellers can withdraw bids/offers at any time, provided no prior interest to transact has been expressed by any potential counterparty. If a participant trades another position during the MOC assessment process, they must communicate to Platts if they wish to withdraw their existing position following the trade. Otherwise, it is assumed the participant’s own position remains active.

All participants that have reported bids and offers for publishing in the Platts process are expected to promptly report any transactions stemming from available bids or offers reported to Platts as part of the MOC assessment process.

Platts synchronizes its computer clocks every day precisely, and will compare the time of any submitted bid, offer or transactional interest against this synchronized time. Please note that Platts applies the timing deadlines strictly.

For the purposes of clock synchronization, market participants may find the following internet link to be helpful: [www.time.gov](http://www.time.gov). This link offers an atomic clock reading for US time zones.

In markets where Platts eWindow is in operation, the eWindow clock will be used to determine the correct sequence of events when a bid or offer is amended, withdrawn, or traded by an interested counterparty. Bids or offers submitted by phone, or any other medium, such as instant messaging software, shall be

clocked at the time the bid, offer or trade indication is actually transmitted through the Platts eWindow system. As per Platts methodology, buyers or sellers can withdraw bids/offers at any time when communicating through eWindow, provided no prior interest to transact has been expressed by any potential counterparty. All bids and offers are firm from the moment submitted into Platts eWindow to the moment they are traded, the window period closes or the bid/offer is withdrawn from the system by the trader or a Platts editor.

Platts is an information company and it aims to publish any credible bid or offer reported to it. Platts makes no commitment to publish every bid or offer submitted to it, however. For instance, frivolous bids and offers may not be published.

Terms of trade such as quality, delivery port, timing of delivery/loading and price are fully up to the company submitting the bid or offer.

Platts cannot make any guarantee in advance about how and whether market information received and published but not fully adhering to its defined methodology will be incorporated in its final assessments.

#### Atypical bids, offers, trades

Platts may publish bids, offers and trades with atypical pricing terms, including benchmark bases and timing. Market information with atypical pricing inherently differs in value from the typical and commonly observable information in the market.

Bids and offers which are deemed as atypical relative to the market may not be fully taken into consideration for the assessment process. In the absence of an associated, liquid derivative instrument atypical pricing bases may be difficult or impossible to evaluate on an outright price equivalent.

Such bids/offers or transactions would be at best indicators of an overall market condition but they would not be seen as exact indicators of market price.

Any unusual condition or request regarding a commodity should be specified at the moment the initial bid or offer is made. Any unusual request that surfaces at the time a counterparty is ready to trade and that impedes the normal flow of a transaction could be seen as an impediment to trade.

Information reported by market participants that may have legal implications, including but not limited to potential libel, will not be published.

Market participants are encouraged to inform Platts when they cannot trade with another typical market participant due to performance, credit or legal issues before the cut off deadlines for initial bids and offers. Platts may ask market participants to provide supporting documentation to ensure the integrity of its assessment process.

#### Law

Contracts using English law are considered standard in the assessment process.

#### Embargoed products

Laws stating that nationals from specific countries may not buy products from embargoed countries may prevent market participants from lawfully executing transactions. A seller therefore may not assume that a buyer has the obligation to buy embargoed materials. Under Platts Market on Close assessment guidelines, commodities supplied from countries or entities that are subject to trading embargoes and sanctions recognized under international law should not be delivered against transactions concluded during the Platts MOC assessment processes. Bids and offers that contain statements surrounding delivery of embargoed materials will be considered by Platts for publication, and if published after review may be subject to normalization in value.

#### Late performance

Platts is aware that physical conditions regarding logistics which are beyond the control of the seller or buyer may result in lateness, quality issues or conditions seen as a deviation from the original wording in the contract, for example late delivery/loading.

These deviations will be seen in the larger context of physical trading, and should not be seen as an indication of Platts condoning lateness.

Platts will review patterns of logistical performance, as adjustments due to late performance and/or quality issues should be extraordinary and not recurring events.

Participants who are intending to sell should not offer when there is a known and distinct possibility that loading/delivery may be delayed. If congestion or delays prevent performance under the contractual terms, the seller should make reasonable and timely efforts to supply from an alternative source, or the seller should engage in other measures to alleviate the buyer's exposure.

Equally, a buyer should not over-commit and then aggregate nominations in a way that makes it logistically impossible for the seller to perform.

Platts will take appropriate steps to ensure the integrity of its assessments if issues of non-performance should arise.

In summary, performance is paramount and all bids and offers must be firm and transactions should be performable within the contractual parameters.

Platts only recognizes bids, offers and transactions where no party claims a right to unilaterally cancel a transaction. If a transaction becomes difficult the party causing the issue must seek resolution including alternative loadings, qualities, dates or book outs.

#### Compensation

Platts publishes bids, offers and transactions on the basis that participants will fulfil the full value of the physical contract.

A party deemed to have underperformed or not performed under the original contract is expected to compensate the affected party.

In almost all circumstances, the compensation is not, and should not be due to a flat price change, but should include parameters such as backwardation, logistics, and the inconvenience for the buyer in the case of a seller not performing, or contango, logistics and the inconvenience for the seller in the case of a buyer not performing. Compensation should not include consequential costs.

Such adjustments should be fair and in line with market practice, and should be reciprocal in the event that the inverse situation occurs in the future.

Compensation is subject to editorial review to ensure market practices and overall fairness in the transaction have been followed. Platts review may include an analysis of reasonable compensation. Platts views compensation as a part of full performance due under the parameters of a trade reported in the assessment process.

#### **Force majeure**

Force majeure is part of trading and may be invoked under very special circumstances. Platts editors will monitor the application of it to ensure that force majeure is not invoked frivolously.

#### **Booking out trades**

Booking out trades done during the Platts Market on Close assessment process is acceptable under exceptional circumstances. A stressed party may request to book out a trade, but its counterparty is under no obligation to accept such request.

In those exceptional cases where both counterparties agree to book out a trade, Platts expects the original spirit of the contract to be fulfilled where the non-performing party offers to buy/sell back the position and compensates the affected party.

In almost all circumstances, the adjustment is not and should not be due to a flat price change, but should be to include parameters such as market structure, logistics and the inconvenience for the buyer or seller expecting a normal

transaction. Such adjustments should be fair and in line with market practice, and should be reciprocal in the event that the inverse situation occurs in the future.

Furthermore, circle outs may occur when the original seller sells a parcel that is later sold into a third party that has a sale into the primary seller. Such “circle outs” are considered a normal part of trading as sometimes chains originate and finish at the same point.

Book outs and circle outs are subject to editorial review to ensure market practices and overall fairness in the transaction have been followed. Platts review may include proposals/arrangements to protect the integrity of its assessment process.

#### **Review of trades**

Platts may track all aspects of performance on trades reported during its MOC assessment process. Platts not only focuses on the performance of the transaction at the time of trade, but also on any significant issues stemming from such trades, including logistics and eventual delivery. Trades executed through the Platts Market On Close assessment process may be reviewed from time to time for performance completion. Platts therefore may request documentary material to determine performance and validity. Such material may include details of quality, location, vessel and laycan nominations. MOC trades may be subject to editorial review to ensure market practices and performance in the transaction have been followed.

A failure to meet Platts guidelines for participation and performance in the MOC may lead to an event driven review. Event driven reviews are designed to help ensure that transactional information and other data inputs used as the basis for Platts price assessments are representative of market value on an ongoing basis.

Post-deal tracking enables Platts to determine the actual performance of the participants in the trade and the validity of their inputs. Platts may publish confirmation of trade performance information.

#### **Specification**

Platts assessments reflect typically traded qualities of commodities. Specifications are available in individual specifications guides, published on the Platts website [www.platts.com](http://www.platts.com).

#### **Testing of products**

Traded commodities are subject to standard testing techniques and protocols to determine contractual performance. Platts typically follows the standards already in place in the trading market, although it may monitor these to ensure that the standards are adequate.

#### **Implied guarantees in specifications**

Bids and offers submitted to Platts that include numerical specifications will be assumed to have a series of zeroes to the right of the decimal point or to the right of the last digit to the right of the decimal point.

As an example, a fuel oil cargo with a maximum guarantee of 0.1 Shell Hot Filtration will be considered as 0.1000 etc. If the specification guarantees are otherwise, the buyer or seller should specify it clearly to avoid potential disputes.

#### **Merchantability**

Platts only considers in its assessments commodities that are merchantable. Hence, buyers may assume that offers or transactions are for a commodity that is merchantable. Sellers must ensure their offers or transactions are for merchantable commodities.

## **PART II: SECURITY AND CONFIDENTIALITY**

Data is stored in a secure network, in accordance with Platts policies and procedures. Platts assessments are produced in accordance with Platts Market on Close assessment methodology. This means that all data for use in Platts assessments may be published by Platts editorial staff while assessing the value of the markets.



Platts does not have confidentiality agreements in place for information that is sent for use in its assessments.

## PART III: DETERMINING ASSESSMENTS

The following section describes how Platts uses concluded and reported transactions, bids, offers and any other market information it has collected in the manner described in section one, to formulate its price assessments. Additionally, this section describes other information, including the normalization of market data, assumptions and extrapolations that are considered when making a final assessment.

### MOC price assessment principles

Through the MOC assessment process, Platts considers market information gathered throughout the normal trading day, and publishes such information throughout the day. Platts analyzes all published information in determining its final published price assessments.

Platts seeks to establish and publish the value of markets that prevail at the close of the assessment process. Platts has aligned the timestamps reflected in its assessments with what typically is a period of high activity in the markets that Platts observes. Platts believes that aligning its price assessments to typical periods of greater market activity and liquidity provides a robust basis upon which to derive an assessment of market value. Timestamps for each assessment are included in the specifications guide for that assessment.

Platts has adopted the MOC methodology in order to provide complete clarity over the precise point in time reflected in its market assessments. Like the quality of a commodity, its delivery location, delivery dates, contract terms, and the volume to be supplied, the time of commercial activity is an important attribute considered in Platts price assessments. The time that a bid or offer is shown to the market, or a transaction concluded, is vitally important in understanding the market value of the respective

commodity, in the same way that the quality of the commodity, where it will be delivered and when it will be delivered are important factors. By clearly reflecting value at a defined point in time Platts is able to properly reflect outright and spread value.

The clarity established by providing a well-defined timestamp is also important for understanding the relationships between the markets that Platts assesses. By ensuring that all assessments within a region reflect market value at the same moment in time, spreads that exist between commodities are also able to be fully and properly reflected. For example, comparing the value of a raw material to a processed commodity is possible when both values have been determined at the same moment in time. By contrast, comparing the price of raw material in the morning, to processed material in the afternoon, might deeply impair the relationship between the commodities – particularly when the respective market prices move independently during the intervening period.

By providing clear timestamps for assessments, the Platts MOC process is designed to provide assessments that properly reflect outright and spread value during times of high volatility equally well as in times of modest volatility.

MOC guidelines are designed to avoid distortion of the final price assessments by eliminating inputs that are not fully verifiable, and by disregarding one-offs or unrepeatable transactions, or those that may distort the true market level. Transactions between related parties are, for instance, not considered in the assessment process.

Deals done below the level of prevailing bids or above the level of prevailing offers (i.e., selling through the bid or buying through the offer) will not be reflected in Platts assessments. Platts will only publish expressions of interest to trade with the most competitive, tradeable bid or offer available.

Platts does not specify a minimum amount of transaction data, or a transaction data threshold, for the publication of its price assessments. Physical commodity markets vary in liquidity. Any

particular market analyzed on its own will typically demonstrate rising and falling levels of transactional activity through time. Platts is committed to providing an assessment of value for every market that it covers, equally well in times of heightened or reduced liquidity.

Platts seeks to receive market information from as broad a cross section of the market as possible. If a very limited number of market-makers are active in the market, or if a limited number submit data that constitutes a significant proportion of the total data upon which the assessment is based, Platts will continue to seek fully transparent and verifiable data from the market at large and to apply Platts methodology principles of transparency and time sensitivity. Platts considers data for assessment of any market where a single company provides more than half of all available information to be one where such a company provides a significant proportion of data. For consideration in the MOC process such a company's bids or offers must be clearly available for execution by any other potential MOC trading counter party.

### Normalization price adjustment techniques

Platts seeks to align the standard specifications for the markets it assesses and the timestamps reflected in its assessments with standard industry practice. However, physical commodity markets are generally heterogeneous in nature. Key attributes often vary from the base standard reflected in Platts assessments as material is supplied to market.

The quality, delivery location and other specific terms of trade may vary in the physical commodity markets assessed by Platts. This means that simple averages of trades may not produce a representative assessment value of a physically heterogeneous market.

Because of the complex nature of the physical markets, market data typically must be aligned with standard definitions to allow for a fully representative final published assessment. Platts aligns data collected through an analysis of the physical markets with



its standard assessment specifications through a process called normalization.

Normalization is an essential price adjustment technique used to align reported market information to the base standard reflected in Platts price assessments.

Platts establishes the level of normalization by surveying markets and observing the economic impact of variance from the base standard. This is done by analyzing freight rates (for locational differences), quality premiums (for quality differences), the movements of all markets through time (for time differences) and other premiums associated with the size of trades and delivery terms.

Normalization for time may be done by analyzing movement in a related market observed through time, and that movement may provide a basis by which to align market value of an earlier reported bid, offer or transaction to market value at the MOC close. The alignment for time is essential to ensure that Platts price assessments reflect the prevailing value of a market at the close of the MOC process.

## Prioritizing data

Transparency underpins Platts assessment process, just as it does Platts data publishing processes. Platts assessment process considers firm bids, firm offers and arms-length transactions that are transparent and open to sufficient, credible counterparties. Bids, offers or transactions that are not transparent may not be considered in the assessment process; bids above transparent offers or offers below transparent bids are not considered in the assessment process. Platts considers changes to bids or offers when those changes are made transparently and in normal increments.

When determining a final market assessment, Platts gives the greatest priority to fully verifiable and transparent market information. A firm bid or offer that has been published by Platts in accord with its data publishing standards, as outlined in part

1 above, and which still stands open to the marketplace at the close of the assessment process, will establish clear parameters for Platts final published assessments. Platts will typically assess market value between the best firm bid and best firm offer open to the market at the close. This ensures that Platts assessments reflect the transactable value at the close.

Completed, transparent transactions that are fully published by Platts are important in helping establish where trading interest prevails in the market, and may help determine where, in a bid/offer spread, Platts may assess value for publication.

Firm bids and offers that are available to the entire market may take precedence over trades that have been concluded earlier in the assessment process when establishing the value of the market, particularly if bids are available at the close above previously traded levels, or offers are available to the market below previously traded levels. Value is a function of time.

Similarly, firm bids and offers that are available to the entire market take precedence over transactional activity reported to Platts after completion.

The level of each bid or offer must stand firm in the marketplace long enough for any counterparty to transact; otherwise the bid or offer may be deemed non-executable. Platts may not consider bids, offers or transactions that are the result of market gapping. Gapping occurs when a bid and an offer are more than one increment apart and a trade occurs. Platts will analyse and evaluate such trades for their representative value. They may not be fully reflected in the final assessment.

Platts assessment guidelines are designed to avoid any distortion of the final price assessment and so inputs that are not verifiable and “one-off” or unrepeatable transactions may be disregarded from the price assessment process.

Single transactions may be a reflection of market value. However single transactions need to be measured against the broad

span of similar transactions. If for instance a buyer decides to trade an offer but is unwilling to buy more material offered at the same level if the seller reoffers it would be determined that the buyer failed the repeatability test. Equally if the seller does not reoffer, the seller fails the repeatability test. As such the transaction may not be fully reflected in the price assessment.

Similarly, Platts may not publish bids or offers that are provided through untested price levels. When transactions are concluded at levels that have not been fully tested by the market because price changes have been non incremental, Platts may determine that actual market value is between the last incremental bid and the transaction at the gapped level.

When no bid, offer or transaction data exists, Platts may consider other verifiable data reported and published through the day, including fully and partially confirmed trades, notional trading values and other market information as provided for publication. Platts may observe direct market activity as well as the effect of movements in related markets through spread differentials or blending and shipping economics, for example.

Platts takes into account representative transactions executed at arms-length in the open market occurring during the trading day, up to the close, and additionally taking into account bid and offer information submitted during this period. Platts editors may require direct verification from the principals to a reported bid, offer or deal when communicated through a third party, including a broker.

## Assessment calculations

### Units of measurement

Platts publishes its assessments reflecting the currencies and units of measurement in which the products typically trade.

Commodities are generally internationally traded in US dollars, and Platts assessments are typically published in that currency as a result. Certain markets, such as regional markets, trade

using local currency. Platts assesses the value of such markets as appropriate in local currency.

Commodities typically trade in volumetric or energy units, and Platts assessments for these markets reflect common practice in each market. The units and unit range considered for each individual Platts assessment of a physical market is described in the specification guide for each commodity.

In certain cases Platts converts its assessments to other currencies or units of measurement to allow for ease of comparison or analysis in regional markets. Such conversions are done using exchange rates published regionally. Conversion factors are described in the specifications guide for each commodity alongside individual assessment codes.

### Use of judgment

Judgment guidelines promote consistency and transparency and are systematically applied by Platts. Where judgment is exercised, all information available is critically analyzed and synthesized. The various possibilities are critically analyzed and fully evaluated to reach a judgment.

Platts reporters follow specific methodology when exercising judgment or discretion during their assessment process. Platts editors apply judgment when determining (1) whether information is suitable for publication, (2) when and how to normalize data and (3) where to assess final value. All such judgment is subject to review by Platts editorial management for adherence to the standards published in Platts methodologies.

Judgment may be applied when analyzing transactional data to determine if it meets Platts standards for publication; judgment may also be applied when normalizing values to reflect differences in time, location, and other trading terms when comparing transactional data to the base standard reflected in Platts assessments.

To ensure all assessments are as robust as possible, Platts editorial systems are backed by a strong corporate structure

that includes managerial and compliance oversight.

An evaluation process is conducted before publication on every benchmark assessment by a competent peer or manager. The price assessments are reviewed and the exercise of judgment is further discussed and verified during this process. Finally, assessments that are used as benchmarks are supported by assessment rationales. These rationales explain the application of judgment and are published together with the relevant price assessment, offering full transparency to the market.

To ensure the consistent exercise of discretion, Platts ensures that reporters are trained and regularly assessed in their own and each other's markets. Platts manages and maintains internal training guides for each of the different products assessed which aim to ensure Platts price assessments are produced consistently.

Every assessment of a benchmark, including the use of discretion, is reviewed and approved by a competent peer or manager prior to publication.

Reporters are trained to identify potentially anomalous data. Platts defines anomalous data as any information, including transactions, which is inconsistent with or deviates from our methodology or standard market conventions.

As a publisher owned by S&P Global, independence and impartiality are at the heart of what Platts does. Platts has no financial interest in the price of the products or commodities on which it reports. Platts aim is to reflect where the actual market level is.

Platts focuses primarily on assessing the value of a commodity trading in the spot market. A spot price for a physical commodity is the value at which a standard, repeatable transaction for merchantable material takes place, or could take place, in the open market at arms' length. Platts spot price assessments reflect this value at precisely the close of the

assessment process.

Platts overall objective is to reflect the transactable value of the commodity assessed. In cases where the apparent value of the commodity includes extra optionalities, the intrinsic value of the commodity may be masked. In such cases, Platts reporters may use judgment to normalize bids, offers or transactions with such extraneous elements to the base market standard, or may exclude them altogether. Optionalities that may mask the value of the commodity include but are not limited to loading or delivery options held by the buyer or seller, size option tolerances exercisable by the buyer or seller, or quality specifications.

### Outright, differential and spread prices

Platts assesses the outright value of a commodity, as well as differentials when it trades with reference to a benchmark. Platts analyzes all data collected and published by Platts throughout the day. Final assessments are above firm bids, and below firm offers, that stand at the close of the Market on Close assessment process. This is true for outright values and differentials.

Platts physical price assessments use a variety of inputs, including outright price bids/offers, floating price bids/offers, spread price bids/offers (including EFPs, EFSs etc.) and combinations of fixed and floating prices. Platts' objective is to assess the prevailing tradable outright price of the commodity at the close of the market assessment period. In the event of an observed conflict between outright values and differentials or spreads, outright values prevail in Platts final published assessments.

Platts establishes the hedgable, outright value of floating and spread price indications by applying them to the observable, prevailing value of underlying relevant derivatives instruments. In the event of conflicts observed between the outright values derived from floating and spread prices with different underlying references, Platts takes into account considerations that include the relative liquidity of each relevant derivatives market, and the typicality of a given spread or floating price, when exercising

judgement around whether to prioritize one particular floating price or spread over another.

Platts may publish bids, offers and trades with atypical pricing terms, including benchmark bases and timing. Market information with atypical pricing inherently differs in value from the typical and commonly observable information in the market.

Bids and offers which are deemed as atypical relative to the market may not be fully taken into consideration for the assessment process. In the absence of an associated, liquid derivative instrument atypical pricing bases may be difficult or impossible to evaluate on an outright price equivalent.

Such bids/offers or transactions would be at best indicators of an overall market condition but they would not be seen as exact indicators of market price.

### Timing

Platts produces time-sensitive assessments that reflect the value of the markets it covers precisely at the close of the price assessment process in each region. By providing clear timestamps for every region the Platts assessment process is designed to provide price assessments that properly reflect outright and spread value.

As an example, gasoline has a value, naphtha has a value and the gasoline versus naphtha spread has a value, and all three match when measured at the same time. By contrast, a system of averages can lead to distortions in the gasoline versus naphtha spread if the distribution of deals done for gasoline and naphtha differs over the averaging period. Thus if gasoline trades actively at the beginning of the assessment period and naphtha trades actively at the end of the assessment period in a rising market, the assessed spread value resulting from an averaging process will not be reflective of actual market value. This distortion can arise even if the value of spread trades in their own right has remained constant. The MOC approach drastically reduces the possibility of such distortions.

Assessments reflect typical loading and delivery schedules for each market assessed. The standard loading and delivery periods are included in the individual specifications guide for each commodity.

Market structure, such as backwardation and contango, is also factored into the Platts assessment process. If a company offers a parcel loading 15 days forward, the offer may provide market information for the Platts assessment for parcels loading 15 days forward. Platts would still need to assess days 16 through 30 (in a 15-30 day market) and publish an assessment that reflects market value 15-30 days forward ahead of the day of assessment.

### Market structure

Platts is very stringent in following timings for loading or delivery due to the variability in market value across time. This variability increases as the market structure, backwardation or contango, in the markets increases.

Platts factors in the backwardation/contango and reflects its impact on the published assessment. The assessment reflects the value of the commodity normalized to the center of the loading/delivery window. In a contango market, the excess of prompt material causes the front period to be significantly lower in value than material available at the end of the window. In a backwardated market the tightness of supply causes the prompt material to be at a higher price than material available at the end of the window.

Platts methodology eliminates any arbitrary movement in assessments caused simply by the different loading/delivery ranges traded. By normalizing prices to the mid-point of a clearly defined date range, the consistency of prices is maintained. The day-to-day changes in the price assessments therefore reflect an actual price move in the value of the commodity, rather than an artificial change because a cargo happens to be loading/delivering in the front period of the window rather than the back period, or vice versa.

The date ranges reflected by Platts reflect the prevailing trading practices in the region. By not taking very prompt days into consideration, transactions reflecting distressed prices are excluded. The definition of this period varies according to specific markets.

### Determination of backwardation or contango

In calculating market structure, the prices of tradable instruments, including derivatives such as futures and swaps, may be used.

Typical calculations include a determination made for the difference in price over a month; a granular value is then calculated from this for each day.

### Outright and floating price information

The three main factors used in the commodities markets for price determination are:

- Outright price
- Differentials
- Derivatives

These three factors — outright price, premiums and derivatives – converge in a spot price. Platts may use all three in its assessments.

**Outright price:** The ultimate question in the mind of an end-user, producer, trader or broker is price. Outright prices are the simple statement of a price at which something can be bought or sold, with the entire value stated – for example, an offer of a cargo of iron ore at \$100/mt. Price in turn determines expense, processing margin, profit, loss, etc. The spot market trades actively on an outright price basis and a floating price basis. Platts takes both into account in its assessments. Platts will publish activity on both a fixed and floating basis.

**Differentials:** Many transactions are carried out in relation to a benchmark. In this case a differential, also known as a premium/discount is generated. Differentials can arise if the quality, volumes or loading times for a given transaction differ from the benchmark. In addition, floating price transactions are done in relation to assessments that will be published in the future – for example, a bid for a cargo at \$10/mt above the Platts assessment of that same commodity, as published immediately before, during and after delivery of the cargo. Premiums usually rise when the market's backwardation steepens, and the steeper the curve, the greater the premium. In a contango situation, premiums have a tendency to turn into discounts.

**Derivatives:** Derivatives are a major determinant in price; they trade frequently and throughout the day. These markets are very reactive and may provide market participants with timely information on market conditions. They can react to arbitrage conditions or movements in overseas markets as well as local conditions. Derivatives may allow companies to adapt their price exposure because they enable market participants to transform floating prices to fixed or fixed to floating.

## PART IV: PLATTS EDITORIAL STANDARDS

All Platts employees must adhere to the S&P Global Code of Business Ethics (COBE), which has to be signed annually. The COBE reflects S&P Global's commitment to integrity, honesty and acting in good faith in all its dealings.

In addition, Platts requires that all employees attest annually that they do not have any personal relationships or personal financial interests that may influence or be perceived to influence or interfere with their ability to perform their jobs in an objective, impartial and effective manner.

Market reporters and editors are mandated to ensure adherence to published methodologies as well as internal standards that require accurate records are kept in order to document their work.

Platts has a Compliance function that is independent of the editorial group. The Compliance team is responsible for ensuring the quality and adherence to Platts policies, standards, processes and procedures. The Compliance team conduct regular assessments of editorial operations, including checks for adherence to published methodologies.

S&P Global Platts appoints an independent, external auditor with appropriate experience and capability to review and report on its adherence to this stated methodology. The annual report is published online at <https://www.platts.com/regulatory-engagement>.

## PART V: CORRECTIONS

Platts is committed to promptly correcting any material errors. When corrections are made, they are limited to corrections to data that was available when the assessment was calculated.

## PART VI: REQUESTS FOR CLARIFICATIONS OF DATA AND COMPLAINTS

Platts strives to provide critical information of the highest standards, to facilitate greater transparency and efficiency in physical commodity markets.

Platts customers raise questions about our methodologies and the approach we take in our price assessments, proposed methodology changes and other editorial decisions in relation to our price assessments. These interactions are strongly valued by Platts and we encourage dialog concerning any questions a customer or market stakeholder may have.

However, Platts recognizes that occasionally customers may not be satisfied with responses received or the services provided by Platts and wish to escalate matters. Full information about how to contact Platts to request clarification around an assessment, or make a complaint, is available on our website, at: <http://www.platts.com/ContactUs/Complaints>.

## PART VII: DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES INDEXES OR ASSESSMENTS

The following Steel & Ferrous Scrap specifications guide contains the primary specifications and methodologies for Platts Steel & Ferrous Scrap assessments throughout the world/region. The various components of this guide are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification issues.

This methodology is current at the time of publication. Platts may issue further updates and enhancements to this methodology and will announce these to subscribers through its usual publications of record. Such updates are included in the next version of the methodology. Platts editorial staff and managers will usually be ready to provide guidance when assessment issues require clarification.

Platts steel and ferrous scrap price assessments are timestamped; the time and location are noted below unless otherwise stated:

Asia: Singapore/Shanghai 5:30 pm

US: Pittsburgh 3:30 pm

Europe: London 4:30 pm

### Carbon steel

#### FLAT

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Hot-Rolled Coil</b>										
HRC EXW Ruhr	STHRE00	T SMA003		European Norm EN10025-2:2004. Grade S235JR	min. 100 mt	W 1200-1500mm, T 2.5-8mm	EXW Ruhr	4-10 weeks	Prompt Payment on delivery	Eur/mt
HRC EXW Ruhr	STHRM00			European Norm EN10025-2:2004. Grade S235JR	min. 100 mt	W 1200-1500mm, T 2.5-8mm	EXW Ruhr	4-10 weeks	Prompt Payment on delivery	\$/mt
HRC CIF Antwerp	STHRA00	STHRA03		European Norm EN10025-2:2004. Grade S235JR	500-5000 mt	W 1200-1500mm, T 2-15mm	CIF Antwerp	6-12 weeks	At sight	Eur/mt
HRC FOB Black Sea	STHRB00	STHRB03	STHRB04	European Norm EN10025-2:2004. Grade S235JR	2000-3000 mt	W 1200-1500mm, T 2-15mm	FOB Black Sea	6-8 weeks	At sight	\$/mt
HRC CPT Moscow	AAXJI00	AAXJI03		Russian grade St3sp/St3ps	100 mt	W 1200-1300mm, T 2-4mm, Wt 5-8 mt/coil	CPT Moscow	3-5 weeks	Prompt payment on delivery from mill	Ruble/mt
HRC FOB China SAE1006	STHSA00	STHSA03		SAE1006	5000 mt	W 1,200-1,500mm, T 2mm	FOB Tianjin, China	4-8 weeks	At sight	\$/mt
HRC FOB China SS400	STHRZ02	STHRZ03		SS400	5000 mt	W 1,200-1,500mm, T 3mm	FOB Tianjin, China	4-8 weeks	At sight	\$/mt
HRC FOB China SAE1006 Premium	STHRY00	STHRY03		SAE1006, expressed as premium to SS400	5000 mt	W 1,200-1,500mm, T 2mm	FOB Tianjin, China	4-8 weeks	At sight	\$/mt
HRC EXW S.EU	SB01152	T MAP03		European Norm EN10025-2:2004. Grade S235JR	min. 100 mt	W 1200-1500mm, T 2.5-8mm	EXW South Europe	4-8 weeks	Prompt Payment on delivery	Eur/mt
HRC DDP West Midlands, UK	STHWM04	STHWM03		European Norm EN10025-2 Grade S275JR	100-1000mt	W 1000-1830mm, T 3-12.5mm	DDP West Midlands, UK	2-12 weeks	At sight	GBP/mt
HRC Europe Imp CIF S Euro Port Mthly	SB01143			European Norm EN10025-2:2004. Grade S235JR	min 500mt	W 1200-1500mm, T 2-15mm	CIF South Europe	6-12 weeks	At sight	Eur/mt
HRC Mid East Imp CFR Persian Gulf Port Mthly	SB01146			European Norm EN10025-2:2004. Grade S235JR	500mt	W 1200-1500mm, T 2-15mm	CFR Dubai	4-8 weeks	At sight	\$/mt
HRC Russia Black Sea Exp FOB Mthly	SB01151			European Norm EN10025-2:2004. Grade S235JR	2,000-3,000mt	W 1200-1500mm, T 2-15mm	FOB Russia Black Sea	6-8 weeks	At sight	\$/mt
HRC Turkey EXW Wkly	SB01154			European Norm EN10025-2:2004. Grade S235JR	min. 100mt	W 1200-1500mm, T 2-8mm	EXW Turkey	2-6 weeks	Prompt Payment on delivery	\$/mt
HRC Turkey Exp FOB Wkly	SB01155			European Norm EN10025-2:2004. Grade S235JR	500mt	W 1200-1500mm, T 2-15mm	FOB Turkey	8-10 weeks	At sight	\$/mt
HRC Turkey Imp CFR Turkish Port Mthly	SB01156			European Norm EN10025-2:2004. Grade S235JR	500mt	W 1200-1500mm, T 2-15mm	CFR Turkey	6-8 weeks	Prompt Payment on delivery	\$/mt
CbnStl HRC CIF Antwerp US\$/Mt	STHAM00	STHAM03		European Norm EN10025-2:2004. Grade S235JR	500-5000 mt	W 1200-1500mm, T 2-15mm	CIF Antwerp	6-12 weeks	At sight	\$/mt

**FLAT**

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
HRC Brazil Dom Prod Ex-Works Wkly	SB01138			ASTM A36	1000-2000 mt	W 1080-1128 mm, T 2-3 mm	EXW Southeast Brazil	3-6 weeks	Net 30 days after delivery	Real/mt
HRC Brazil Exp FOB Brazilian Port Mthly	SB01139			ASTM A 1011-06a Commercial Type B	1000-2000 mt	W 1200-1300 mm, T 2-4mm	FOB Brazilian ports	4-8 weeks	At sight	\$/mt
HRC Mexico Dom Prod Dlvd Mthly	SB01503			DIN EN 10111 DD 12 grade	1000-2000 mt	W 1080-1128 mm, T 5-7 mm	Delivered Northeast Mexico	2-3 weeks	Net 30 days after delivery	MXN/mt
HRC DDP Houston	STHRG00	STHRG03		ASTM A 1011-06a Commercial Type B	1000-2000 st	W 48-72 inches, T 0.083-0.37 inches	DDP Houston	8-14 weeks	Net 30 days after delivery	\$/st
TSI HRC US EXW Indiana	STHRI00	STHRI03		ASTM A 1011-06a Commercial Type B	min. 100 st	W 48-72 inches, T 0.083-0.37 inches	EXW Indiana	3-8 weeks	Net 30 days after delivery	\$/st
HRC CFR Southeast Asia	SB01142			SS400	3000 mt min	Width 1,200-1,500mm; Thickness 3mm	CFR Ho Chi Minh City, Vietnam	8-12 weeks	At sight	\$/mt
TSI HRC [SAE] Asean Imports CFR Asean Port	TS01041	TSMB003		SAE1006, SPHC or SPHT-1 (or equivalent)	500 mt min	W 900-2,000mm; T up to 3mm	CFR Asean Port (Singapore)	7-9 weeks	At sight	\$/mt
HRC Ex-stock Shanghai VAT-inclusive	SB01260			Q235	50-500 mt	W 1,250mm, T 5.5mm	Ex-stock Shanghai	up to 1 week	Cash before delivery	Yuan/mt
HRC India Domestic Delivered Mumbai	TS01046	TSMBT03		IS2062 E250A (or equivalent)	100 - 1,000 mt	W 1,250-1,500mm; T 2.5-10mm	Delivered Mumbai	2-21 days	Cash on delivery	Rupees/mt

**Cold-Rolled Coil**

CRC EXW Ruhr	STRRE00	STRRE03	STRRE04	European Norm EN10131:2006. Grade: DC01	min. 100 mt	W 1000-1250mm, T 0.7-2.5mm	EXW Ruhr	4-10 weeks	Prompt payment on delivery from mill	Eur/mt
CRC CIF Antwerp	STRRA00	STRRA03	STRRA04	European Norm EN10131:2006. Grade: DC01	500-5000 mt	W 1000-1250mm, T 0.7-3.0mm	CIF Antwerp	6-12 weeks	At sight	Eur/mt
CRC FOB Black Sea	STRRB00	STRRB03	STRRB04	European Norm EN10131:2006. Grade: DC01	500-5000 mt	W 1000-1250mm, T 0.7-3.0mm	FOB Black Sea	3-8 weeks	At sight	\$/mt
CRC US EXW Indiana	STRRI00	STRRI03	STRRI04	AISI grades C1005 to C1008	max 500 st	W 48-72 inches, T 0.0272-0.1000 inches	EXW Indiana	4-12 weeks	Net 30 days after delivery	\$/st
CRC DDP Houston	STRRG00	STRRG03	STRRG04	AISI grades C1005 to C1008	1000 st	W 48-72 inches, T 0.0272-0.1000 inches	DDP Houston	10-16 weeks	Net 30 days after delivery	\$/st
CRC EXW S. EU	SB01091			European Norm EN10131:2006. Grade: DC01	min. 100 mt	W 1000-1250mm, T 0.7-2.5mm	EXW South Europe	4-8 weeks	Prompt payment on delivery from mill	Eur/mt
CRC Europe Imp CIFS Euro Port Mthly	SB01085			European Norm EN10131:2006. Grade: DC01	min 500mt	W 1000-1250mm, T 3-4mm	CIF South Europe	6-12 weeks	At sight	Eur/mt
CRC Russia Black Sea Exp FOB Mthly	SB01090			European Norm EN10131:2006. Grade: DC01	min 500mt	W 1000-1250mm, T 0.7-3.0mm	FOB Russia Black Sea	6-8 weeks	At sight	\$/mt
CRC EXW Turkey Mthly	SB01092			European Norm EN10131:2006. Grade: DC01	min. 100 mt	W 1000-1250mm, T 3-4mm	EXW Turkey	2-6 weeks	Prompt payment on delivery from mill	\$/mt
CRC Turkey Imp CFR Turkish Port Mthly	SB01093			European Norm EN10131:2006. Grade: DC01	500mt	W 1000-1250mm, T 3-4mm	CIF Turkey	6-8 weeks	At sight	\$/mt
CRC CIF Antwerp US\$/Mt Dly	STRAM00	STRAM03	STRAM04	European Norm EN10131:2006. Grade: DC03	500-5000 mt	W 1000-1250mm, T 0.7-3.0mm	CIF Antwerp	6-8 weeks	At sight	\$/mt
CRC EXW Brazil Dom Prod Wkly	SB01080			NBR 6658	1000-2000 mt	W 1000-1300 mm, T 0.8-1.5 mm	EXW Southeast Brazil	3-6 weeks	Net 30 days after delivery	Real/mt
CRC Brazil Exp FOB Brazilian Port Mthly	SB01081			NBR 6658	1000-3000 mt	W 1000-1300 mm, T 0.8-1.5 mm	FOB Brazilian ports	4-8 weeks	At sight	\$/mt
CRC Mexico Dom Prod Dlvd Mthly	SB01403			ASTM A606	1000-2000 mt	W 1000-1300 mm, T 1.0-3.0 mm	Delivered Northeast Mexico	2-3 weeks	Net 30 days after delivery	MXN/mt
CRC Ex-stock Shanghai VAT-inclusive Wkly	SB01082			SPCC	50-500 mt	W 1,250mm, T 1mm	Ex-stock Shanghai	up to 1 week	Cash before delivery	Yuan/mt
CRC China Exp FOB Shanghai Wkly	SB01083			SPCC	2,000 mtmin	W 1,250mm, T 1mm	FOB Shanghai	to 12 weeks	At sight	\$/mt
CRC E Asia Imp CFR Mthly	SB01084			JIS G 3141, SPCC annealed	1000 mt min	Width 900-1250mm; Thickness 1 mm base	CFR East Asia	8-12 weeks	At sight	\$/mt

**FLAT**

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Coated</b>										
HDG N Europe Dom Prod EXW Ruhr	SB01125			DX51D or equivalent	min. 100mt	Above 1mm Thickness	EXW Ruhr	4-10 weeks	Prompt payment on delivery from mill	Eur/mt
HDG S Europe Dom Prod EXW S.EU	SB01126			DX51D or equivalent	min. 100mt	Above 1mm Thickness	EXW South Europe	4-8 weeks	Prompt payment on delivery from mill	Eur/mt
HDG Turkey EXW Mthly	SB01127			DX51D + Z70 or equivalent	min. 100mt	Below 1mm Thickness	EXW Turkey	2-6 weeks	Prompt payment on delivery from mill	\$/mt
HDG Brazil Dom Prod Ex-Works Wkly	SB01117			ASTM A653	1000-2000 mt	W 1000-1300 mm, T 0.4-2.0 mm	EXW Southeast Brazil	3-6 weeks	Net 30 days after delivery	Real/mt
HDG US EXW Indiana MW Wkly	SB01123			ASTM A 653 CS Type B 0, G 90 normal spangle	min. 100 st	16 G minimum (0.06" minimum) Width: 48-72"	EXW Midwest	4-12 weeks	Net 30 days after delivery	\$/st
HDG DDP Houston	SB01124			ASTM A 653 CS Type B 0, G 90 normal spangle		16 G minimum (0.06" minimum) Width: 48-72"	DDP Houston	12-18 weeks		\$/st
HDG Ex-stock Shanghai VAT-inclusive Mthly	SB01118			DX51D or equivalent, with 80g/sqm of Zn	50-500 mt	W 1,250mm, T 1mm	Ex-stock Shanghai	up to 1 week	Cash before delivery	Yuan/mt
HDG China Exp FOB Shanghai Mthly	SB01119			DX51D or equivalent, with 120g/sqm of Zn	2,000 mt min	W 1,250mm, T 1mm	FOB Shanghai	to 12 weeks	At sight	\$/mt
Pre-Painted 9002 0.5MM Turkey Dom Prod Ex-Works Mthly	SB01188			9002	100mt	0.5mm Thickness	EXW Turkey	6-8 weeks	At sight	\$/mt
<b>Plate</b>										
Plate CIF Antwerp	STPRA00	STPRA03		EN10025 S235 JR	500-5000 mt	15-40mm up to 2500 width and 12000mm length	CIF Antwerp	8-16 weeks	At sight	Eur/mt
Plate EXW Ruhr	STPRE00	TSMAW03		EN10025 S235 JR	min. 100 mt	15-40mm up to 2500 width and 12000mm length	EXW Ruhr	8-12 weeks	Net 30 days after delivery	Eur/mt
Plate DDP US Midwest	STPRI00	STPRI03	STPRI04	ASTM A36/A36M	min. 20 st	W to 96 inches, T 0.375-2 inches, L to 240 inches	Delivered US Midwest	4-12 weeks	Net 30 days after delivery	\$/st
Plate DDP Houston	STPRG00	STPRG03	STPRG04	ASTM A36/A36M	1000 st	W to 96 inches, T 0.375-2 inches, L to 240 inches	DDP Houston	8-14 weeks	Net 30 days after delivery	\$/st
Plate EXW S. EU	SB01185			EN10025 S235 JR	min. 100 mt	15-40mm up to 2500 width and 12000mm length	EXW South Europe	8-12 weeks	Net 30 days after delivery	Eur/mt
Plate CIS Exp FOB Mthly	SB01179			EN10025 S235 JR		15-40mm up to 2500 width and 12000mm length	FOB CIS	8-16 weeks	At sight	\$/mt
Plate Europe Imp CIF S Euro Port Mthly	SB01182			EN10025 S235 JR	500mt	15-40mm up to 2500 width and 12000mm length	CIF South Europe	6-12 weeks	At sight	Eur/mt
Plate Turkey Dom Prod Ex-Works Mthly	SB01186			EN10025 S235 JR	100mt	15-40mm up to 2500 width and 12000mm length	EXW Turkey	6-12 weeks	Prompt payment on delivery from mill	\$/mt
Plate CFR East Asia	TS01043	TSMBQ03		ASTM A36,Q235 or JIS SS400 or EN 235 JR	3,000 mt min	Width 1,200-2,500 mm; Thickness 12-25 mm.	CFR Dangjin, South Korea	8-12 weeks	At sight	\$/mt
Plate Ex-stock Shanghai VAT-inclusive Mthly	SB01178			Q235	max 500 mt	W 2,700-4,200mm, T 12-20mm	Ex-stock Shanghai	early prompt month	Cash before delivery	Yuan/mt
Plate Commercial Grd China Exp FOB Shanghai Mthly	SB01180			Q335	max 500 mt	W 2,700-4,200mm, T 12-20mm	FOB Shanghai	1-2 months	Cash	\$/mt



In 2017 Platts merged several TSI-branded indices with corresponding Platts-branded assessments. As a result of these mergers, several of Platts assessments started to be calculated as volume-weighted averages. The assessments that moved to become volume-weighted averages shared similar characteristics: they are largely priced using information on an ex-works (EXW) basis and are therefore land-transported goods originating in diverse geographic areas.

The calculation process follows the following steps: data points more than +/- 5% from the arithmetic average (mean) price of the total data set submitted are removed; the standard deviation of the remaining price data set is calculated; any remaining price data points more than +/- 1 standard deviation from the average (mean) price of the remaining data set are then also removed.

Data is weighted in the following order:

- Confirmed transactions
- Bids, offers and tradeable values

When calculating the volume-weighted index value, the percentage weighting assigned to the total submissions by any single Data Provider is capped in order to ensure that the average remains representative.

The above description is valid for all the price series described below as being calculated as a volume-weighted average.

Platts may take into account prevailing sea freight and/or logistics rates in establishing EXW, FOB, CIF/CFR values. In carbon steel Platts may use FOB transactional data for CIF/CFR assessments, accounting for ocean freight costs; and vice versa, Platts may use CIF/CFR transactional data for FOB assessments, subtracting the cost of ocean freight.

## Flat

### Hot-Rolled Coil

**STHRE00 HRC EXW Ruhr:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10025-2:2004. Grade: S235JR or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry. This value is calculated as a volume-weighted average. It is duplicated in the code TS01015.

### STHRM00 Steel Hot Rolled Coil (HRC) EXW Ruhr \$/Mt:

This symbol is a US dollar conversion of the HRC EXW Ruhr (STHRE00) price assessment. The conversion is carried out using a timestamped assessment of the prevailing foreign exchange rate (EUR-USD) at 4.30pm UK time, using the latest trade, bid & offer activity on a live feed.

**SB01152 HRC EXW S.EU:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10025-2:2004. Grade: S235JR or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry. This value is calculated as a volume-weighted average. It is duplicated in the code TS01016.

**STHRA00 HRC CIF Antwerp:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10025-2:2004. Grade: S235JR, or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry.

**STHRB00 HRC FOB Black Sea:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10025-2:2004. Grade: S235JR, or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry.

**AAXJ100 HRC CPT MOSCOW:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on

Russian grade St3sp/St3ps. Other specifications are normalized back to this grade using current market extras typically applied in the industry.

**STHRI00 HRC EXW Indiana:** Chemical and dimensional tolerances are based on ASTM A 1011-06a Commercial Type B. Other specifications of HRC are normalized back to this grade based on prevailing market extras. Platts takes into consideration trades, bids and offers for orders exceeding 100 st on an EXW Indiana basis. Trade concluded in a Mid-West geographic range is considered in the calculation process. This value is calculated as a volume-weighted average. It is duplicated in the code TS01018.

**STHRG00 HRC DDP Houston:** Chemical and dimensional tolerances were based on ASTM A 1011-06a Commercial Type B. Other specifications of HRC are normalized back to this grade based on prevailing market extras. Deliveries of material from other ports may be normalized back to a DDP Houston basis.

**STHSA00 HRC FOB China SAE1006:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on SAE1006 or equivalent specifications. The assessment reflects specifications normalized to SAE1006 or equivalent coil of 2mm thickness and 1,200-1,500 mm width. Platts will consider for assessment deals, bids and offers for cargoes of other qualities and sizes normalized to the clarified specifications. Normalization for quality and size is done based on current premiums and discounts applied by the market,

**STHRZ02 HRC FOB CHINESE PORT:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on Export specifications normalized to Chinese GB/T912 grade Q235 or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry.

**STHRY00 HRC FOB China SAE1006 Premium:** This assessment reflects the premium that SAE1006 or equivalent coil 2 mm thick commands over SS400 coil of the specifications in STHRZ02.

The premium is calculated from Platts assessments of SAE1006 coil (STHSA00) and SS400 coil (STHRZ02).

**SB01142 HRC CFR E ASIA:** Prime Hot Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on SS400 or equivalent specifications. The assessment will reflect specifications normalized to SS400 or equivalent coil of 3 mm thickness and 1,200-1,500 mm width. The location specified is the port of Ho Chi Minh City, Vietnam, the main destination of cargoes traded in the spot market in Asia. Platts will consider for assessment deals, bids and offers for cargoes of other qualities and sizes, and delivered into other Northeast and Southeast Asian ports, normalized to the clarified specifications. Normalization for quality and size is done based on current premiums and discounts applied by the market, and that for location will utilize freight netback and net forward calculations. Information about known tariff and non-tariff barriers in the various jurisdictions will also be used in the normalization process.

**SYMBLXX HRC DDP West Midlands, UK:** Prime Hot Rolled Steel Coils of new manufacture, capturing imported and domestically produced materials as well as port stocks. Chemical and mechanical tolerances based on European Norm EN10025-2:2004. Grade: S275JR or equivalent. Other specifications of HRC are normalized back to this grade using current market extras typically applied in the industry. The assessment normalizes to 3 millimeter thick and up to 1.8 meter wide S275 hot rolled coil. Minimum order size is 100 mt, with a maximum 500 mt, and the delivery window is two to six weeks from the date of publication. Payment terms are normalized to net-40 days, with the assessment in GBP/mt. The weekly assessment is made on Fridays or closest business day (in the event of holidays), time stamped to 1630 London time.

For all other Assessments Specifications please refer to the Table above.

#### Cold-Rolled Coil

**STRRE00 CRC EXW Ruhr:** Prime Cold Rolled Steel coil of new manufacture, chemical and mechanical tolerances are based

on European Norm EN10131:2006. Grade: DC01 or equivalent. Other specifications of CRC are normalised back to this grade using current market extras typically applied in the industry. This value is calculated as a volume-weighted average. It is duplicated in the code TS01002.

**SB01091 CRC EXW S. Europe:** Prime Cold Rolled Steel coil of new manufacture, chemical and mechanical tolerances are based on European Norm EN10131:2006. Grade: DC01 or equivalent. Other specifications of CRC are normalised back to this grade using current market extras typically applied in the industry. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01003.

**STRRa00 CRC CIF ANTWERP:** Prime Cold Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10131:2006. Grade:DC01. Other specifications of CRC are normalized back to this grade using current market extras typically applied in the industry.

**STRRB00 CRC FOB Black Sea:** Prime Cold Rolled Steel Coils of new manufacture, chemical and mechanical tolerances are based on European Norm EN10131:2006. Grade:DC01, or equivalent, other specifications of CRC are normalized back to this grade using current market extras typically applied in the industry.

**STRRI00 CRC EXW Indiana:** Chemical and dimensional tolerances are based on AISI grades C1005 to C1008, the base-grade range of commercial-quality cold-rolled coil. Other commercial grades such as C1015 – C1030), drawing steel (DS) grades, structural steel (SS) grades such as ASTM A606, high-strength low alloy (HSLA) grades such as Gr45, Gr50, Gr55, Gr60 and Gr70, ASTM A606 grade and others are normalized to the base grade based on the prevailing market extras. Platts takes into consideration trades, bids and offers for orders exceeding 100 st on an EXW Indiana basis. Trade concluded in a Mid-West geographic range is considered in the calculation process. This value is calculated as a volume-weighted average. It is duplicated in the code TS01005.

**STRRG00 CRC DDP HOUSTON:** Chemical and dimensional tolerances are based on AISI grades C1005 to C1008, the base-grade range of commercial-quality cold-rolled coil. Other commercial grades such as C1015 – C1030), drawing steel (DS) grades, structural steel (SS) grades such as ASTM A606, high-strength low alloy (HSLA) grades such as Gr45, Gr50, Gr55, Gr60 and Gr70, ASTM A606 grade and others are normalized to the base grade based on the prevailing market extras. Deliveries of material from other ports may be normalized back to a DDP Houston basis.

For all other Assessments Specifications please refer to the Table above.

#### Hot-Dip Galvanized (HDG) Coil

**SB01125 HDG EXW Ruhr:** HDG coil of new manufacture, chemical and mechanical tolerances are based on the base grade DX51D, or equivalent. This “base grade” does not include a coating or thickness which are accounted for by individual extras lists. Other specifications of HDG are normalised back to this grade using current market extras typically applied in the industry. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01007.

**SB01126 HDG EXW S. Europe:** HDG coil of new manufacture, chemical and mechanical tolerances are based on the base grade DX51D, or equivalent. Other specifications of HDG are normalised back to this grade using current market extras typically applied in the industry. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01008.

**SB01123 HDG EXW Indiana:** HDG coil of new manufacture, chemical and mechanical tolerances are based on ASTM A 653 CS Type B (), G 90 normal spangle. Other specifications of HDG are normalised back to this grade using current market extras typically applied in the industry. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01010.

### Plate

**STPRE00 EXW Ruhr:** Prime Carbon steel plate of commercial quality equivalent to EN10025 S235 JR. All other grades to be normalized to this grade using current and prevailing market extras. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01023.

**SB01185 EXW S. Europe:** Prime Carbon steel plate of commercial quality equivalent to EN10025 S235 JR. All other grades to be normalized to this grade using current and prevailing market extras. This weekly value is calculated as a volume-weighted average. It is duplicated in the code TS01024.

**STPRI00 Plate DDP US Midwest:** Chemical and dimensional tolerances are based on ASTM A36/A36M, structural steel plate or equivalent. All other grades to be normalized to this grade using current and prevailing market extras. This daily value is calculated as a volume-weighted average.

**STPRG00 Plate DDP Houston:** Chemical and dimensional tolerances are based on ASTM A36/ A36M, structural steel plate or equivalent. All other grades to be normalized to this grade using current and prevailing market extras. Deliveries of material from other ports may be normalized back to a DDP Houston basis.

**AAXJH00 HR SHEET CPT Moscow:** Prime Hot Rolled Sheets of new manufacture, chemical and mechanical tolerances are based on Russian grade St3sp/St3ps. Other specifications are normalized back to this grade using current market extras typically applied in the industry.

For all other Assessments Specifications please refer to the Table above.

**LONG**

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Bar, Beams &amp; Sections</b>										
H-Beam CFR Southeast Asia	SB01114			EN10025 S275JR	1,000 mt min	4 inches – 24 inches (102 X 102 mm up to 610 X 305 mm) and in 12 m lengths	CFR Port Klang, Malaysia	8 to 12 weeks	At sight	\$/mt
Medium Sections Europe Dom Prod Dlvd Wkly	SB01160			S235 JR	100mt min	12 M Lengths (height 80X120mm)	DDP Europe	6-8 weeks	upon delivery	Eur/mt
Medium Sections Turkey Exp FOB Turkish Port Mthly	SB01162			S235 JR	100mt min	12 M Lengths (height 80X120mm)	EXW Turkey	6-8 weeks	upon delivery	TRY/mt
Merchant Bar Europe Dom Prod Dlvd Mthly	SB01166			S235 JR	100mt min	6 (Length) 50x5 mm	DDP Europe	6-8 weeks	upon delivery	Eur/mt
Merchant Bar Europe Imp CIF S Euro Port Mthly	SB01167			S235 JR	100mt min	6 (Length) 50x5 mm	CIF South Europe		upon delivery	Eur/mt
<b>Rebar</b>										
Rebar EXW Northwest Europe Wkly	STCBE00	STCBE03		B500B carbon content	min. 100 mt	D 12-16mm, L 12m	EXW North West Europe	4-8 weeks	Prompt payment on delivery from mill	Eur/mt
Rebar FOB Europe (Mediterranean)	AAXFB04	AAXFB03		B500C carbon content	500 mt	D 12-16mm	FOB Mediterranean Port	4-8 weeks	Prompt Payment on delivery	Eur/mt
Rebar FOB Turkey	STCBM00	STCBM03		B500C carbon content	10,000 mt	D 16-20mm, L 12m	FOB Turkey	2-8 weeks	At sight	\$/mt
Rebar CPT Moscow	AAXJG00	AAXJG03		Russian grade St3sp/St3ps and A500/A500C/A400 ductility	100 mt	T 12-16 mm, L 11,000 - 12,000mm	CPT Moscow	3-5 weeks	Prompt payment on delivery from mill	Ruble/mt
Rebar EXW Southern US Wkly	STCBC00	STCBC03		ASTM A 615/ A615M	100 st min	L 20ft, D 0.625 inches	EXW US Southeast	4-12 weeks	Net 30 days after delivery	\$/st
Rebar EXW Midwestern US	SB01202			ASTM A 615/ A615M	100 st min	L 20ft, D 0.625 inches	EXW US Midwest	4-12 weeks	Net 30 days after delivery	\$/st
Rebar DDP Houston Wkly	STCBG00	STCBG03		ASTM A 615/ A615M	1,000-2,000 st	L 20ft, D 0.750-1.41 inches	DDP Houston	8-14 weeks	Net 30 days after delivery	\$/st
Rebar FOB China	STCBZ02	STCBZ23		BS 4449: 2005 B500B	5,000 mt	D 16-20mm, L 12m	FOB Zhangjiagang, China	4-8 weeks	At sight	\$/mt
Rebar Black Sea Exp FOB Mthly	SB01193			A500(S), 35GS	60-100 mt	12mm	FOB Black Sea	6-8 weeks	At sight	\$/mt
Rebar Europe Imp CIF S Euro Port Mthly	SB01197			B500B carbon content	100 mt	D 16-20mm, L 12m	CIF Europe	6-8 weeks	At sight	Eur/mt
Rebar Mid East Dom Prod Ex-Works Mthly	SB01200			B500B carbon content	100mt	D 8-32mm, L12	EXW Egypt, KSA or UAE	3-5 weeks	At sight	\$/mt
Rebar Turkey Dom Prod Ex-Stock Incl 18%Vat Wkly	SB01206			B500B carbon content	100mt min	D 10-40mm, L12	EXW Turkey	6-8 weeks	Prompt payment on delivery from mill	TRY/mt
Rebar 10MM Brazil SE Dom Prod Ex-Works Wkly	SB01190			NBR 7480	1000-2000 mt	D 6-12 mm, L 12 m	EXW Southeast, Brazil	4-6 weeks	Net 30 days after delivery	Real/mt
Rebar Argentina Dom Prod Dlvd Mthly	SB01192			IRAM-IAS-U-500-528, Type DNA-420	200-500 mt	D 6-10 mm, L 12 m	Delivered Santa Fe, Argentina	3-6 weeks	Net 15-30 days after delivery	\$/mt
Rebar Mexico Dom Prod Dlvd Wkly	SB01603			NMX-C-407 grade 42	500-1000 mt	D 9.5-15.9 mm, L 12 m	Delivered Northeast, Mexico	2-4 weeks	Net 30 days after delivery	MXN/mt
Rebar CFR Southeast Asia	SB01195			BS4449 Grade 500	5,000 mt min	diameter range of 16-32 mm and in 12 m lengths	CFR Singapore	8-12 weeks	At sight	\$/mt
Rebar Ex-stock Beijing VAT-inclusive	SB01198			HRB 400	5-500 mt	D 18-25mm, L 12m	Ex-stock Beijing	up to 1 week	Cash before delivery	Yuan/mt
Rebar EXW Jiangsu VAT-inclusive Wkly	SB01259			HRB 400	5-500 mt	D 18-25mm, L 9m	EXW Jiangsu	up to 1 week	Cash before delivery	Yuan/mt

**LONG**

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Wire Rod</b>										
Wire Rod Mesh Quality Black Sea Exp FOB Mthly	SB01243				500mt	D 5.5-6 mm	FOB Black Sea	6-8 weeks	At sight	\$/mt
Wire Rod Mesh Quality Turkey Exp FOB Turkish Port Mthly	SB01251				500mt	D 5.5-16 mm	FOB Turkey		upon delivery	TRY/mt
Wire Rod Draw Quality 6.5MM Brazil SE Dom Prod Ex-Works Mthly	SB01241				200 mt min	D 6.5 mm	EXW Southeast Brazil	3-5 weeks	Net 30 days after delivery	Real/mt
Wire Rod Mesh Quality LatAm Exp FOB Latin Am Port Mthly	SB01248				200-1000 mt		FOB Brazilian ports	4-6 weeks	Net 30 days after delivery	\$/mt
Wire Rod Mesh Quality N Amer Dom Prod Ex-Mill US MW Wkly	SB01249				100 st min	D 0.219- 0.625 inches (7/32-5/8 inches)	EXW US Midwest	4-12 weeks	Net 30 days after delivery	\$/st
Wire Rod Mesh Quality China Exp FOB Shanghai Wkly	SB01261			SAE1008	3,000 mt min	D 6.5mm	FOB Shanghai	to 12 weeks	At sight	\$/mt
Wire Rod Ex-stock Shanghai VAT-inclusive Wkly	SB01262				5-500 mt	D 6.5mm	Ex-stock Shanghai up to 1 week		upon delivery	Yuan/mt

**Rebar**

**STCBE00 Rebar EXW NWE:** Platts will normalize its assessment to B500B carbon content which is the specification that is the most widely recognised industry benchmark. Platts will normalize other specifications such as B500C if any price differential exists. This value is calculated as a volume-weighted average. It is duplicated in the code TS01026.

**AAXFB04 Rebar FOB Europe (Mediterranean):** Platts will normalize its assessment to B500C carbon content.

**STCBM00 Rebar FOB Turkey:** Platts will normalize its assessment to B500B/C carbon content which is the grade that is the most widely recognised industry benchmark. Type C indicates that the rebar is suitable for seismically active locations in Italy, Greece, Spain. Platts will normalize to grade B, but currently there appears to be no price differential between B and C grades. Platts takes into consideration trade indications for cargo sizes between 2,000

mt and 60,000 mt, which are normalized back to the prevailing assessment volume of 10,000 mt.

**AAXJG00 Rebar CPT Moscow:** Prime Hot Rolled Sheets of new manufacture, chemical and mechanical tolerances are based on Russian grade St3sp/St3ps and A500/A500C/A400 ductility grade. Other specifications are normalised back to this grade using current market extras typically applied in the industry.

**STCBC00 Rebar EXW Southern US:** Chemical and dimensional tolerances are based on ASTM A 615 / A615M Other grades of rebar are normalized to this grade based on the prevailing market extras

**SB01202 Rebar EXW Midwestern US:** Chemical and dimensional tolerances are based on ASTM A 615 / A615M Other grades of rebar are normalized to this grade based on the prevailing market extras.

**STCBG00 Rebar DDP Houston:** Chemical and dimensional tolerances are based on ASTM A 615 / A615M. Other grades of rebar are normalized to this grade based on the prevailing market extras. Deliveries of material from other ports may be normalized back to a DDP Houston basis.

**STCBZ02 Rebar FOB Chinese Port:** Prime carbon steel reinforcing bars of new manufacture to BS 4449: 2005 B500B or equivalent specifications. All other export specifications to be normalized back to this grade. This frequency of this assessment was increased to daily from September 1, 2015, from having been published weekly, Thursdays, previously.

For all other Assessments Specifications please refer to the Table above.

## SEMI

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Steel billet / Slab</b>										
Billet LatAm Exp FOB Latin Am Port Mthly	SB01037			A36/A36M	2,000-5,000 mt	125x125 mm square, lengths 11,700 mm	FOB Vitoria port	4-6 weeks	At sight	\$/mt
Slab FOB Brazil Weekly	SB01236			A36/A36M, SAE1006	20,000-50,000 mt	W 800-2100 mm, L 5000-12.500 mm, T 200-250 mm	FOB Brazil	4-8 weeks	At sight	\$/mt
Slab CFR Southeast Asia	SB01235			SAE1008, SAE1006	10,000 mt min	200-250 mm thickness by 1250-1550mm width and 6 to 10 m length	CFR Cigading, Indonesia	8-12 weeks	At sight	\$/mt
Slab FOB Black Sea Exp Weekly	SB01233			SAE 1006	20,000-50,000 mt	1000-1850mm X 200-250mm	FOB Black Sea	4-8 weeks	At sight	\$/mt
Billet CFR Southeast Asia	SB01035			5SP, Q275 or equivalent	10,000 mt	130x130 mm square, length 12 m	CFR Manila, Philippines	6-10 weeks	At sight	\$/mt
Billet FOB Black Sea	STBLB00	STBLB03	STBLB04	grade GOST 380-94, 5sp/ps	5,000-20,000 mt	125x125 mm square, lengths 11,700 mm	FOB Black Sea	2-6 weeks	At sight	\$/mt
Billet FOB Turkey Exp Mthly	SB01039			GOST38094		125x125mm square	FOB Turkey	2-6 weeks	At sight	\$/mt
Billet CFR Turkey Imp Turkish Port Mthly	SB01040			GOST38094		125x125mm square	CIF Turkey	2-6 weeks	At sight	\$/mt
Billet Ex-stock Tangshan VAT-inclusive	SB01032			Commercial Quality or CQ		150x150mm square	Ex-Stock Tangshan	Immediate	At sight	Yuan/mt
Square Bar FOB China Daily	STSBF00	STSBF03		Q275	10,000mt	150x150mm sectional dimensions, Length 12m	FOB Tianjin, China	4-8 weeks forward	At sight	\$/mt

## Semi

## Steel Billet/Slab

**STBLB00 Billet FOB Black Sea:** Steel billet specifications are to be normalized to a base standard of 125x125 mm square, lengths 11,700 mm, grade GOST 380-94, 5sp/ps.

**SB01032 Billet Ex-stock Tangshan VAT-inclusive:** This reflects the daily price for mild carbon steel square billet sized 150mm by 150mm offered by a selection of steel mills and traders in the city of Tangshan, Hebei Province for immediate collection/delivery. The price is in Yuan/mt, cash payment.

**STSBF00 Square Bar FOB China:** This reflects exports of bars conforming to Q275 (or equivalent) specification of 150 mm square sectional dimensions and 12 m length. Location basis is FOB Tianjin for cargo shipped 4-8 weeks after the transaction date with a base lot size of 10,000 mt. Other locations, qualities, lot sizes and equivalent products are normalized back to the assessment's base specifications.

For all other Assessments Specifications please refer to the Table above.

## PIPE AND TUBE

Assessment	CODE	Mavg	Wavg	QUALITY	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
WeldPipe S235 48MM Dia 2MM Wall Turkey Exp FOB Turkish Port Mthly	SB01255			S235		48MM Dia 2MM Wall	FOB Turkey		At sight	\$/mt
WeldPipe OCTG Cbn ERW J55 4 1/2-8 5/8Inch N Amer Dom Prod Ex-Mill US Mthly	SB01253			Carbon ERW J55	200 st	4 1/2- 8 5/8	EXW US mill			\$/st
WeldPipe OCTG Cbn ERW J55 4 1/2-8 5/8Inch N Amer Imp EDDP Gulf Port Mthly	SB01254			Carbon ERW J55	200 st	4 1/2- 8 5/8	Ex-Gulf dock, duty paid			\$/st
7 inch steel OCTG FOB Tianjin China \$/Mt	AAXNI00			API 5CT J55/K55	50-300 mt	OD 7"/177.8mm, T 8.05mm, L R3 (10.36-14.63m)	FOB Tianjin	8-12 weeks	At sight	\$/mt
7 inch steel OCTG FOB Tianjin China \$/Ft	AAXNK00			API 5CT J55/K56	50-300 mt	OD 7"/177.8mm, T 8.05mm, L R3 (10.36-14.63m)	FOB Tianjin	8-12 weeks	At sight	\$/ft



## Stainless steel

### FLAT

Assessment	CODE	Mavg	Wavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS UOM	
HR304 Ex-warehouse Foshan VAT-inclusive Mthly	SB01136			min 50mt	Width 1219mm, Thickness 2mm	Ex-warehouse in Foshan	Not specified	Cash	Yuan/mt
Alloy Surchrg 304 Coil Europe Dom Prod Mthly	SB01008			Any	Sheet/strip	Europe	Monthly	Not specified	Eur/mt
Alloy Surchrg 316 Coil Europe Dom Prod Mthly	SB01011			Any	Sheet/strip	Europe	Monthly	Not specified	Eur/mt
Alloy Surchrg 430 Coil Europe Dom Prod Mthly	SB01015			Any	Sheet/strip	Europe	Monthly	Not specified	Eur/mt
CR304 2B 2MM Coil Base N Europe Dom Prod Dlvd Mthly	SB01059			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR304 2B 2MM Coil Base S Europe Dom Prod Dlvd Mthly	SB01060			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR304 2B 2MM Coil Trans N Europe Dom Prod Dlvd Mthly	SB01061			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR304 2B 2MM Coil Trans S Europe Dom Prod Dlvd Mthly	SB01062			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR316 2B 2MM Coil Base N Europe Dom Prod Dlvd Mthly	SB01067			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR316 2B 2MM Coil Base S Europe Dom Prod Dlvd Mthly	SB01068			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR316 2B 2MM Coil Trans N Europe Dom Prod Dlvd Mthly	SB01069			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR316 2B 2MM Coil Trans S Europe Dom Prod Dlvd Mthly	SB01070			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR430 BA 2MM Coil Base N Europe Dom Prod Dlvd Mthly	SB01075			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR430 BA 2MM Coil Base S Europe Dom Prod Dlvd Mthly	SB01076			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR430 BA 2MM Coil Trans N Europe Dom Prod Dlvd Mthly	SB01077			about 10 mt-plus	>1,200mm wide, 2mm thick	North Europe	Current month	Not specified	Eur/mt
CR430 BA 2MM Coil Trans S Europe Dom Prod Dlvd Mthly	SB01078			about 10 mt-plus	>1,200mm wide, 2mm thick	South Europe	Current month	Not specified	Eur/mt
CR304 Ex-warehouse Foshan VAT-inclusive Mthly	SB01058			min 50mt	1219mm wide, 2mm thick	Ex-warehouse in Foshan	Not specified	Cash	Yuan/mt
CR304 2B 2MM E Asia Imp CFR Wkly	SB01063			min 50mt	1219mm wide, 2mm thick	CFR Main East Asian and Southeast Asian ports including China, Hong Kong, Taiwan, South Korea, Malaysia, Singapore, Vietnam, Philippines and Thailand	Delivery in 1-2 months from date of transaction	Letter of credit; telegraphic transfer	\$/mt
CR430 Ex-warehouse Foshan VAT-inclusive Mthly	SB01074			min 50mt	1219mm wide, 2mm thick	Ex-warehouse in Foshan	Not specified	Cash	Yuan/mt

### LONG

Assessment	CODE	Mavg	Wavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS UOM	
Alloy Surchrg 304L Brt Bar Europe Dom Prod Mthly	SB01010			Any	Cold finished bar	Europe	Monthly	Not specified	Eur/mt
Alloy Surchrg 316L Brt Bar Europe Dom Prod Mthly	SB01013			Any	Cold finished bar	Europe	Monthly	Not specified	Eur/mt
Alloy Surchrg 420 Brt Bar Europe Dom Prod Mthly	SB01014			Any	Cold finished bar	Europe	Monthly	Not specified	Eur/mt
304L Brt Bar 25-80MM Dia Base Europe Dom Prod Dlvd Mthly	SB01002			Mill into stockist, tonnage unknown	25-80 mm	Europe	Current, and usually the next month	Not specified	Eur/mt
304L Brt Bar 25-80MM Dia Trans Europe Dom Prod Dlvd Mthly	SB01003			Mill into stockist, tonnage unknown	25-80 mm	Europe	Current, and usually the next month	Not specified	Eur/mt
430F Drawn Bar 8-25MM Dia Base Europe Dom Prod Dlvd Mthly	SB01005			Mill into stockist, tonnage unknown	8-25 mm	Europe	Current, and usually the next month	Not specified	Eur/mt
430F Drawn Bar 8-25MM Dia Trans Europe Dom Prod Dlvd Mthly	SB01006			Mill into stockist, tonnage unknown	8-25 mm	Europe	Current, and usually the next month	Not specified	Eur/mt

### SCRAP

Assessment	CODE	Mavg	Wavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS UOM	
18-8 Stainless Steel Scrap	AALDQ00	AALDS00		AALDS16 1,000 st min	NA	NA	NA	Not specified	\$/lt

For all stainless steel assessment specifications please refer to the table above.

## Raw materials

## FERROALLOYS

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
Silicomanganese 65:16 DDP NWE	AAITQ00	MMAZF03			Not specified	NA	DDP Northwest Europe	4 weeks	NA	Eur/mt
Silicomanganese 65% Mn in-warehouse US	MMAGR00	MMAGR03		MMAGR16	Four truckload minimum	2.5x0.5 inch lumps	All major US warehouse hubs	60 days from transaction date	Net 30 days	cents/lb Mn contained
Silicomanganese 65% CIF Japan	MMAJG00				min 100 mt	10-55 mm	main ports Japan	loading within 60 days of transaction	cash against documents	\$/mt Mn contained
Ferrosilicon 75% Std DDP NWE	AAIUR00				Not specified	NA	DDP Northwest Europe	4 weeks	NA	Eur/mt
Ferrosilicon 75% Si in-warehouse US	MMAFT00	MMAFT03		MMAFT16	Four truckload minimum	2.5x0.5 inch lumps	All major US warehouse hubs	60 days from transaction date	Net 30 days	cents/lb Si contained
Ferrosilicon 75% CIF Japan	MMAJP00				100 mt min	10-100 mm	main ports Japan	loading within 60 days of transaction	cash against documents	\$/mt Si contained
Ferrosilicon 75% FOB China Wkly	MMAKB00				min 18-24mt	10-50mm lumps	FOB main Chinese ports	Within 30 days of date of transaction	Telegraphic transfer, cash against documents, irrevocable letter of credit drawn against approved bank at sight or equivalent	\$/mt
Ferromolybdenum CIF Jap Wkly	MMAFM00				min 18-24mt	Not specified	main ports Japan	loading within 60 days of transaction	cash against documents, LC at sight	\$/kg Mo contained
Ferromolybdenum Europe Daily	MMAFO00	MMAFO03		MMAFO16	20 mt minimum	5-50 mm	i/w Rotterdam	NA	Net cash	\$/kg Mo contained
Ferromolybdenum FOB China Wkly	MMAFP00				100/250kg drums or 1mt bags	Not specified	FOB main Chinese ports	within 1 month after date of purchase agreement	cash against documents, LC at sight	\$/kg
Ferromolybdenum US Wkly	MMAFQ00	MMAFQ03		MMAFQ16	Single truckload - 40,000 lb (20 mt)	NA	Delivered, buyer's works	within 30 days	Net 30 days	\$/lb Mo contained
Molybdenum Oxide Daily Dealer (Global) \$/lb	MMAVQ00	MMAVQ03	MMAGQ00	MMAVQ16	18-24 mt	NA	EXW Europe, CIF Japan, del US, del S Korea, CIF Nhava Sheva, in-warehouse Tianjin	3-30 days	NA	\$/lb Mo contained
Molybdenum Oxide Daily Dealer (Global) \$/mt	MMBYQ00	MMBYQ03			18-24 mt		EXW Europe, CIF Japan, del US, del S Korea, CIF Nhava Sheva, in-warehouse Tianjin	3-30 days		
Manganese Ore 44% CIF China \$/dmtu	AAWER00	AAWER03		AAWER16	min 5,000 mt or full hatch	5mm to 80mm	CIF Tianjin	2-8 weeks	Cash	\$/dmtu
Manganese Ore 37% CIF China \$/dmtu	AAXRX00	AAXRX03		AAXRX16	min 5,000 mt or full hatch	5mm to 75 mm	CIF Tianjin	2-8 weeks	Cash	\$/dmtu
Electrolytic Manganese 99.7% Mn FOB China	MMAIX00				250 kg drums	10mm x 150mm x 1.5mm	FOB main Chinese ports	30 days	Cash	\$/mt
Ferromanganese High-Carbon 76% Mn in-warehouse US	MMAFH00	MMAFH03		MMAFH16	Four truckload minimum	4 inch x 0.50 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	\$/lt Mn contained
Ferromanganese Medium Carbon 85% Mn in-warehouse US	MMAFK00	MMAFK03		MMAFK16	Four truckload minimum	2.5 inch x 0.50 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Mn contained
Charge Chrome 48-52% CIF China	CCXIC04	CCXIC03			Min 500mt	10-100mm lumps	CIF main Chinese ports	Delivered CIF China within 90 days from the date of transaction	Cash against documents or payment terms letter of credit At sight	cents/lb Cr contained
Charge Chrome 48-52% in-warehouse US	MMAEX00				One truckload minimum	2.5 x 1 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Cr contained

## FERROALLOYS

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
Charge Chrome 52% DDP NWE	MMAIP00				200-500 mt	NA	DDP Northwest Europe	Within 4 weeks	Net 30 days	cents/lb Cr contained
Ferrochrome Low Carbon 0.15% in-warehouse US	MMANR00				One truckload minimum	2.5 x 0.5 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Cr contained
High-carbon Ferrochrome 60-65% CIF Japan	MMAEW00	MMAEW03			min 100 mt	10-100 mm	main ports Japan	loading within 60 days of transaction	cash against documents	cents/lb Cr contained
Ferrochrome 65% High-Carbon in-warehouse US	MMAFA00	MMAFA03		MMAFA16	Four truckload minimums	2.5 x 0.5 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Cr contained
Ferrochrome Low Carbon 0.05% in-warehouse US	MMAFC00	MMAFC03		MMAFC16	One truckload minimum	2.5 x 0.5 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Cr contained
Ferrochrome Low-Carbon 0.10% DDP NWE	MMAIL00				200-500 mt	NA	DDP Northwest Europe	Within 4 weeks	Net 30 days	cents/lb Cr contained
Ferrochrome Low Carbon 0.10% in-warehouse US	MMAIM00	MMAIM03		MMAIM16	One truckload minimum	2.5 x 0.5 inch lumps	All major US warehouse hubs	Within 30 days	Net 30 days	cents/lb Cr contained
Ferrochrome 65% 6-8% High-Carbon DDP NWE	MMAIQ00				200-500 mt	NA	DDP Northwest Europe	within 4 weeks	Net 30 days	cents/lb Cr contained
Ferrotungsten Wk	MMAHK00				Not specified	NA	delivered	Within 30 days	Net 30 days	\$/kg
US Ferrovandium 80% \$/Lb Wk	MMAFY00	MMAFY03		MMAFY16	One truckload minimum	NA	delivered	Within 30 days	Net 30 days	\$/lb V contained
Ferrovandium 80% Spot Europe Wkly Cl	MMAYY04		MMAYY04		Not specified	NA	EXW Europe	NA	NA	\$/kg V contained
Ferrotitanium 70%Ti delivered US Weekly	MMAJX00	MMAJX03		MMAJX16	One truckload minimum	lump form	delivered US	within 30 days Net-30 days		\$/lb Ti contained
Europe Ferrotitanium 70% Ti Weekly	MMAJW00				One truckload minimum	lump form	DDP Northwest Europe	within 30 days	Net-30 days	\$/kg Ti contained

### Bulk Ferroalloys

#### Manganese

**44% Manganese Ore CIF China:** Platts launched on January 3, 2012, a spot market price assessment of 44% manganese ore. The price was assessed daily until December 5, 2014, when it became a weekly assessment. The assessment reflects high-grade manganese ore lumps, normalized to a standard specification of 44% Mn contained content. All values deemed typical; specifications with Mn content ranging from 41% to 46% are to be normalized to a standard where Fe content is 6.00%, SiO<sub>2</sub> is 8.00%, Al<sub>2</sub>O<sub>3</sub> is 7.99%, P is 0.11%, moisture is 3.00% and sizing at 5 mm to 80 mm, 90% passing. Minimum cargoes of 5,000 mt or one full hatch. Normalized to payment cash at sight. Reflects the price at which a cargo could be traded on a CIF North China basis, Tianjin, at

the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot cargo transactions, or the tradable price falling between firm cargo bids/offers, or in the absence of liquidity, where spot market transactions would have been concluded for the benchmark grade, based on information from producers, consumers, traders, shippers and other active market participants. Spot price bids/offers or trades basis FOB or CIF in other locations may be netted back to CIF North China using prevailing spot freight rates for dry bulk carriers on the day of assessment. For netback/netforward calculations, the appropriate vessel class freight costs are taken into consideration.

**37% Manganese Ore CIF China:** Platts launched on December 5, 2014, a spot market price assessment of 37% manganese ore. The assessment reflects manganese ore lumps, normalized to a

standard specification of 37% Mn contained content. All values deemed typical; specifications with Mn content ranging from 35% to 39% are to be normalized to a standard where Fe content is 6.00%, SiO<sub>2</sub> 4-6%, Al<sub>2</sub>O<sub>3</sub> 0.5% P 0.04%, moisture is 1.00% and sizing at 5mm to 75mm, 90% passing. Timing of cargoes assessed are for delivery two to eight weeks from date of publication, minimum 5,000 mt or full hatch, Handysize/max class vessel. Container shipment is normalized to this standard using prevailing freight rates. Payment terms are deemed 100% payment at sight with all variations normalized to this standard. Reflects the price at which a cargo could be traded on a CIF North China basis, Tianjin, at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot cargo transactions, or the tradable price falling between firm cargo bids/offers, or in the absence of liquidity, where spot market transactions would have

been concluded for the benchmark grade, based on information from producers, consumers, traders, shippers and other active market participants. Spot price bids/offers or trades basis FOB or CIF in other locations may be netted back to CIF North China using prevailing spot freight rates for dry bulk carriers on the day of assessment. For netback/netforward calculations, the appropriate vessel class freight costs are taken into consideration.

**Electrolytic Manganese 99.7% Mn FOB China:** Weekly assessment of the repeatable, tradeable, spot price for 99.7-99.9% Mn flakes, size 10mm x 150mm x 1.5 mm, normalized to 99.7%; silicon 0.05%, sulfur 0.04%, carbon 0.04%, iron 0.03%, phosphorous 0.004%, lead 0.001%; Chinese-origin and imported material, free market, \$/mt, packaging in 250 kg drums, in Customs-sealed, 20 ft containers, export duty paid; shipment loading within 30 days from date of transaction, payment cash against documents, including original bill of lading. Reported CIF and CFR transactions normalized back to FOB China specification, using prevailing freight rates. Special packaging and payment terms normalized back to stated specification. Assessment made Fridays, or closest business day, from survey of producers, traders and consumers of electrolytic manganese metal flake.

#### Ferromanganese

**High-Carbon 76% Mn in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for high-carbon ferromanganese 74-78% Mn, normalized to 76% Mn, carbon 7.5% max, silicon 1.2%, phosphorous 0.5%, sulfur 0.02%; lumps 0.5- x 4.00 inch; US-origin and imported material, \$/long ton Mn contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The specification is for a minimum of four truckload quantities and greater. The assessment will reflect pricing for

minimum quantities of four truckloads and greater. Assessment made Wednesdays, or closest business day, from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time.

**Medium Carbon 85% Mn in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for medium-carbon ferromanganese 80-85% Mn, carbon 1.5% max, silicon 1.5% max, phosphorous 0.40% max, sulfur 0.2%; lumps size 0.50 x 2.5 inch; US-origin and imported material; cents/lb Mn contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment is for minimum quantities of four truckloads and greater. Assessment made Wednesdays, or closest business day, from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time.

#### Silicomanganese

**65% Mn, in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 65-72% Mn, normalized to 65% Mn, silicon 16-18%, carbon 2% max, phosphorous 0.35% max, sulfur 0.04% max; lumps size 2.5x0.50 inch; in-bulk or 2,000-3,000 lb supersacks; US-origin and imported material; cents/lb Mn contained, duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California, and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment

will reflect pricing for minimum quantities of four truckloads and greater. Assessment made Wednesdays or closest business day from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time.

**65:16 DDP NWE:** Weekly assessment for grades are normalized to a specification with P content 0.25% and C content 1.5%. The assessment is for volumes of 300-1,000 mt delivered, duty-paid Northwest Europe basis for delivery within four weeks. Assessment is in Eur/mt Mn contained and conducted on Thursdays (or the closest business day in the case of holidays) through a survey of producers, traders and steel mill buyers.

**Silicomanganese 65% CIF Japan (MMAJG00):** Weekly assessment of the repeatable, tradable, spot price for 65-70% Mn, normalized to 65% Mn; silicon 14-20%, carbon maximum 2-2.5%, phosphorous maximum 0.3%, sulfur maximum 0.02%, boron maximum 0.02%, lump size 10-55 mm, in bulk or super sacks, all origins. Price is assessed in \$/mt Mn contained, reflecting the narrow price range where the majority of business is occurring, basis CIF main Japanese ports of Yokohama, Nagoya and Osaka, loading within 60 days from the date of transaction, net 30-days payment terms from date of delivery. The assessment will reflect minimum quantities of 100 mt or greater. Assessment made Thursdays or closest business day from survey of producers, traders and end-users in the steel sector. Includes all origins meeting the specification. Started July 1, 1993.

#### Ferrosilicon

**75% Si, in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 73-79% Si, normalized to 75% Si, aluminum 0.5% min-1.5% max, calcium 1.5% max; carbon 0.10% max, lumps 2x0.50 inch, 2x1 inch, or 4x1 inch; US-origin and imported material; in cents/lb Si contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California, and Portland, Oregon; delivery within 60

days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis are normalized to an in-warehouse basis. Fines normalized to stated lump specifications. The assessment is for a minimum of four truckload quantities and greater. Special packaging and payment terms normalized to meet stated specifications. Assessment made Wednesdays or closest business day from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time.

**75% Std DDP NWE:** Weekly assessment for 75% ferrosilicon; grades are normalized to a specification with Al content of 1.5%, S 0.02% and P 0.04%. The assessment is for volumes of 200-800 mt, delivered, duty-paid Northwest Europe basis for delivery within four weeks, net-30 days payment terms. Assessment is in Eur/mt Si contained and conducted on Thursdays (or the closest business day in the case of holidays) through a survey of producers, traders and steel mill buyers.

**Ferrosilicon 75% CIF Japan (MMAJP00):** Weekly assessment of the repeatable, tradable spot price ferrosilicon imported into Japan, with 75-79% silicon, normalized to 75% Si, maximum 2% aluminum, 0.02% sulfur, 0.2% carbon, 0.05% phosphorous, lumps 10-100 mm, packed in 1mt big bags in seagoing 20-foot (18-24-mt) containers, CIF main port Japan. Assessed in dollars / mt, reflecting the narrow range where the majority of business is occurring. Payment cash against documents or LC at sight, loading less than 60 days after the date of transaction. Minimum volume 100 mt / transaction. Assessment made Thursdays or closest business day from survey of producers, traders and end-users in the steel and other metal sectors. The Platts assessment will only consider bids, offers or deals complying with the legal documentation and taxation requirements of the exporting country. This includes all origins meeting the specification. Started July 1, 1993.

**Ferrosilicon 75% FOB China (MMAKB00):** Weekly assessment of the repeatable, tradable, spot price for Chinese-origin ferrosilicon with 73-79% silicon, normalized to 75% Si; maximum 1.5% aluminum, maximum 0.02% sulfur, maximum 0.04% phosphorous, maximum

0.2% carbon; lumps 10-50 mm; FOB main Chinese sea ports, packed in 1 mt big bags loaded on oceangoing vessel or packed in seagoing 20-foot (18-24-mt) containers and customs sealed, export tariff-paid, within 30 days of date of transaction. Assessment is made in dollars / mt reflecting the narrow range where the majority of business is occurring. Payment by telegraphic transfer, cash against documents, irrevocable letter of credit drawn against approved bank at sight or equivalent. Assessment quantities are 18 mt and greater. Assessment made Thursdays or closest business day from a survey of producers, traders and consumers.

### Ferrochrome

**Charge Chrome 48-52% Cr, in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 48-52%Cr charge chrome, carbon 8% max, silicon 4% max, phosphorous 0.03% max, sulfur 0.04% max, lumps size 1 x 2.5 inch; US origin and imported material, free market, cents/lb Cr contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California.

**Charge Chrome 52% DDP NWE:** Weekly assessment for 48-52% grades normalized to a Si content of maximum 6-8% and P content 0.030%. The specification is for volumes of 200-500 mt, delivered, duty-paid Northwest Europe basis, for delivery within 4 weeks from date of transaction, net-30 days payment. Assessment is in \$/lb Cr contained and conducted on Thursdays (or the closest business day in the case of holidays) through a survey of producers, traders and steel mill buyers. Started July 8, 1992.

**Charge Chrome 48-52% CIF China:** Weekly assessment of the repeatable, tradeable spot price for charge chrome CIF main Chinese ports, with chrome content of 48-52%, normalized to a maximum 9% carbon, max 0.05% sulfur, max 0.04% phosphorus and max 6% silicon, lump size 10-100 mm, all origins. The assessment will reflect a typical order quantity of minimum 500 mt, delivered CIF China within 90 days from the date of transaction, cash against documents or payment terms letter

of credit at sight, packed in 1 mt big bags, or in bulk, and/or in ocean-going, customs-sealed containers at point of export. Assessment made Fridays (or closest business day in the case of holidays), from a survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, reflecting the narrow low-high price range of the majority of spot deals, bids and offers on a cents/lb Cr contained basis.

**65% High-Carbon, in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 60-65% Cr, high-carbon ferrochrome, normalized to 65% Cr, 6-8% carbon, 2% max silicon, 0.03% max phosphorous, 0.04% max sulfur, lumps size 0.50 x 2.5 inch; US origin and imported material, free market, cents/lb Cr contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction; net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment will reflect pricing for quantities of four truckloads and greater. Assessment made Wednesdays, or closest business day, from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time. Started December 15, 1971.

**65% 6-8% High Carbon DDP Northwest Europe:** Weekly assessment for 60-70% chrome, normalized to 65% Cr, with Si content of 1.5%; P content 0.030%. The specification is for volumes of 200-500 mt, delivered, duty-paid Northwest Europe, basis for delivery within four weeks from date of transaction, net-30 days payment terms. Assessment is in \$/lb Cr contained and conducted on Thursdays (or closest business day in the case of holidays) through a survey of producers, traders and steel mill buyers. Started July 8, 1992.

**High-carbon 60-65% CIF Japan:** Weekly assessment of the



repeatable, tradeable spot price for 60-65% high-carbon ferrochrome, with silicon content of 2-4%, maximum 8% carbon, 0.02-0.05% phosphorous, 0.05% max sulfur, lump size 10-100 mm, all origins. The assessment will reflect a typical order quantity of a minimum 100 mt, loading from the port of origins for shipping to Japan within 60 days from the date of transaction, CIF main Japanese port basis, payment cash against documents, or payment terms letter of credit at sight. Packed in 1 mt big bags, or in bulk, and/or in ocean-going, customs-sealed containers at point of export. Assessment to be made Fridays (or closest business day in the case of holidays), from a survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, reflecting the narrow low-high price range of the majority of spot deals, bids and offers on a cents/lb Cr contained basis.

**High-carbon 58-60% CIF China:** Weekly price assessment of the repeatable, tradeable spot price for 58-60% Cr high-carbon ferrochrome, with a maximum silicon content of 5%, maximum 8% carbon, 0.04% max phosphorous, 0.05% max sulfur, in lumps, lump size 10-150 mm, all origins. The assessment will reflect a typical order quantity of a minimum 500 mt, delivered CIF main Chinese ports within 60 days from date of transaction, payment terms cash against documents or payment terms letter of credit at sight, packed in 1 mt big bags, or in bulk, and/or in ocean-going, customs-sealed containers at point of export. Assessment made Fridays (or closest business day in the case of holidays), from a survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, reflecting the narrow low-high price range of the majority of spot deals, bids and offers on a cents/lb Cr contained basis.

**Low Carbon 0.10% in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 0.10% carbon, 65-74% Cr, ferrochrome, normalized to 68% Cr, carbon 0.10% max, silicon 1% max, phosphorous 0.3% max, sulfur 0.02% max, lumps size 0.50 x 2.5 inch. The assessment covers US origin and imported material, free market, cents/lb Cr contained, in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems

and other key port warehousing locations, including Baltimore, Maryland; Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment will reflect pricing for full-truckload quantities and greater. Assessment made Wednesdays, or closest business day, from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time. Started September 1, 1992.

**Low-Carbon 0.10% DDP Northwest Europe:** Weekly assessment for 60-70% chrome, normalized to an assessed grade with a Si content of 0.05% and P content 0.05%. The specification is for volumes of 200-500 mt, delivered, duty-paid Northwest Europe basis for delivery within 4 weeks from date of transaction, net-30 days payment terms. Assessment is in \$/lbCr contained and conducted on Thursdays (or the closest business day in the case of holidays) through a survey of producers, traders and steel mill buyers. Started July 8, 1992.

**Low Carbon 0.15% in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 0.15% carbon, 68-74% Cr, ferrochrome, carbon 0.15% max, silicon 1% max, phosphorous 0.3% max, sulfur 0.02% max, lumps size 0.50 x 2.5 inch; US origin and imported material, free market; cents/lb Cr contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment will reflect pricing for full truckload quantities and greater. Assessment made Wednesdays, or closest business day, from

survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time. Started October 4, 1995.

**Low Carbon 0.05% in-warehouse US:** Weekly assessment of the repeatable, tradeable, spot price for 0.05% carbon, 65-74% chrome, normalized to 68% Cr, carbon 0.05% max, silicon 1% max, phosphorous 0.3% max, sulfur 0.02% max; lumps 0.50 x 2.5 inch; US-origin and imported material, free market; cents/lb Cr contained; in-bulk or 2,000-3,000 lb supersacks; duty-paid in-warehouse in key locations along the Mississippi, Chicago, Ohio and Columbia River systems and other key port warehousing locations, including Baltimore, Maryland, Long Beach, California and Portland, Oregon; delivery within 60 days from date of transaction, net-30 days payment terms from date of delivery. Transactions reported on a delivered basis normalized to an in-warehouse basis. Fines normalized to stated lump specifications. Special packaging and payment terms normalized to meet stated specifications. The assessment will reflect pricing for full-truckload quantities and greater. Assessment made Wednesdays, or closest business day, from survey of producers, traders and end users in the carbon, stainless and specialty steel sectors, closing at 4pm New York time. Started January 3, 1973.

## Noble alloys

### Molybdenum

#### **Molybdenum Oxide Daily Dealer (Global) \$/lb (MMAYQ00):**

Platts launched a daily Molybdenum Oxide assessment on October 10, 2011. The assessment is for "repeatable" dealer to consumer, producer-to-consumer, producer-to-dealer and/or dealer-to-dealer spot sales, technical-grade moly oxide (roasted molybdenum concentrates), min 57% Mo, max 0.5% Cu, 0.05% lead, drummed material, order quantities 18-24 mt for delivery 3-30 days forward from the date of publication. Platts takes into account transactional information on the following bases: CIF Japan, in-warehouse European ports, delivered US, delivered duty-unpaid South Korean ports, CIF Nhava Sheva/Mumbai, India and in bonded warehouses in Tianjin. Reported sales of powdered

material packed in big bags or cans, and of oxide briquettes, are normalized to an equivalent price for powdered material in drums. The daily assessment takes into account all transactions, bids and offers reported to Platts in the 24-hour period up to 4:30 pm London time each day, except on the last business day of the calendar month, when the cut-off point for transactions to be included is 1:00 pm London time. The price is assessed as a range in US dollars / pound, reflecting the narrow price band where the majority of transactions took place or, in the absence of business, where most typical buyers and sellers would be likely to conclude a deal. The Daily Dealer Oxide price assessment is published in Platts' real-time service Platts Metals Alert (PMA) on page PMA398, in Platts Metals Daily and in the Platts Metals Week supplement. Weekly and monthly averages of the high, low and mean of the daily assessment ranges are published on PMA and in Platts Metals Daily on the last business day of the week and the month, respectively, after close of business US East Coast time. Platts publishes weekly volume figures to show total tonnage by region for concluded deals accounted for in the assessment. Before January 3, 2012, the assessment only reflected dealer-to-consumer sales, CIF Japan, in-warehouse European ports and delivered US.

**Molybdenum Oxide Daily Dealer (Global) \$/mt (MMBYQ00):** Platts launched on September 3, 2018 a \$/mt conversion for its molybdenum oxide daily dealer assessment as a simple conversion from the \$/lb (MMAYQ00) assessment.

**MW Dealer Oxide (MMAGQ00):** A weekly assessment for “repeatable” dealer-to-consumer, producer-to-consumer, producer-to-dealer and/or dealer-to-dealer spot sales, technical-grade moly oxide (roasted molybdenum concentrates), min 57% Mo, max 0.5% Cu, 0.05% lead, drummed material, order quantities 18-24 mt for delivery 3-30 days forward from the date of publication, CIF Japan, in-warehouse European ports, delivered US, delivered duty-unpaid South Korean ports and CIF Nhava Sheva/Mumbai, India. Price history begins in April 1971. Before January 3, 2012, the assessment only reflected dealer-to-consumer sales, CIF Japan, in-warehouse European ports and delivered US. Consolidated with the Daily Dealer Oxide assessment

effective January 2, 2013, when the methodology changed to become the weekly average of the Daily Dealer Oxide assessment.

**MW Oxide Transaction:** A weekly assessment for “repeatable” dealer-to-consumer, producer-to-consumer, producer-to-dealer and/or dealer-to-dealer spot sales, technical-grade moly oxide (roasted molybdenum concentrates), min 57% Mo, max 0.5% Cu, 0.05% lead, drummed material, order quantities 18-24 mt for delivery 3-30 days forward from the date of publication, CIF Japan, in-warehouse European ports, delivered US, delivered duty-unpaid South Korean ports and CIF Nhava Sheva/Mumbai, India. Molybdenum is assessed every week on Thursdays or closest prior business day. Discontinued July 2, 2012.

#### Ferromolybdenum

Prices based on moly content.

**US Free Market ferromoly:** weekly spot sales, 60% min Mo, 0.5% Cu, delivered, \$ / lb/Mo, minimum 2,400 lb lot.

**MW European 65% Ferromolybdenum (MMAF000):** Daily assessment of the repeatable, tradable spot physical price of ferromolybdenum with 65% minimum Mo contained, 0.50% Cu, 1.50 Si, 0.05 P, 0.10 S and 0.10 C, duty-paid, net-cash terms, in-warehouse Rotterdam. Sizing 5-50 mm, 90% passing, packed in 1 mt bags on pallets, 20 mt minimum volume. The assessment reflects the transactable value in a narrow price range, expressed in \$/kg, based on a survey of ferromolybdenum producers, traders and steel mill consumers. Assessed weekly prior to May 1, 2014, when it increased to daily.

**Ferromolybdenum 60% FOB China (MMAFP00):** Weekly assessment of the repeatable, tradable spot price ferromolybdenum exported from Chinese ports for 60-65% molybdenum contained, normalized to 60% molybdenum, maximum 0.1% carbon, maximum 1.5% silicon, maximum 0.06% phosphorous, maximum 0.1% sulfur, and maximum 0.5% copper; packed in drums 100 kg/250 kg) or bags (1 mt/bag), normalized to 1mt bags; FOB Chinese ports; payment cash against

documents or LC at site. Deliveries to customers within one month after the date of purchase agreement. Standard volume is a container, or 20 mt. Assessed in dollars / kilogram, in a narrow price range reflecting the majority of business. Assessment made weekly on Thursdays or closest business day from a survey of producers, traders and consumers.

**Ferromolybdenum 60% CIF Japan (MMAFM00):** Weekly assessment of the repeatable, tradable spot price ferromolybdenum imported into Japan, with 60-65% molybdenum and normalized to 60% molybdenum, maximum 0.1% At sight carbon, maximum 2.0% silicon, maximum 0.06% phosphorous, maximum 0.1% sulfur, and maximum 0.5% copper; packed in 1mt big bags, 25-kg paper boxes, steel drums or other packaging, normalized to 1 mt big bags; CIF main port Japan; payment cash against documents or LC at sight, loading less than 60 days after the date of transaction. Minimum volume 18 mt / transaction. Assessed in dollars / kilogram in a narrow price range that reflects the majority of business. Assessment made Thursdays or closest business day from survey of producers, traders and endusers in steel and other metal sectors.

#### Ferrovandium

**US Free Market Ferrovandium 80%:** Weekly spot assessment of ferrovandium normalized to 80% V content, \$/lb/V contained; 2% max Si, 2% max Al, delivered.

**US Free Market V205, (vanadium pentoxide):** Weekly spot assessment of 98% minimum, delivered, price / lb/V205.

**Europe- 80% V Ferrovandium:** weekly spot market assessment for ferrovandium normalized to 80% V, on an in-warehouse Europe basis. Based on a survey of producers, traders and consumers of ferrovandium. Assessed in Europe on Thursdays.

#### Ferrotitanium

**MW US 70% Ferrotitanium:** Weekly assessment of the spot market price for 70% Ti ferrotitanium, lump form, max. 5% Al, 2-3% V, 0.5% tin, duty paid, delivered, / lb of Ti contained.



**European 70% Ferrotitanium:** Weekly spot market assessment for European standard grade 70% Ti ferrotitanium, max. 5% Al, 2-3% V, 0.5% tin, max. 0.5% N, duty paid, delivered, assessed in \$ / kg Ti contained. Note: Prior to January 2000, the assessment was made in GBP / kg Ti contained.

#### Ferrotungsten

MW US Free Market Ferrotungsten – weekly spot market assessment of min 75% W, max 0.5% Cu, \$/lb W, delivered.

**FERROUS SCRAP**

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
HMS 1/2 75:25 FOB Rotterdam	FERDD00	FERDD03	FERDD04		min. 10,000 mt		FOB Rotterdam	N/A	At sight	\$/mt
A3 CFR Turkey	FEBS00	FEBS03	FEBS04		max. 10,000 mt		CFR Turkey	1-4 weeks	At sight	\$/mt
HMS 1/2 80:20 CFR Turkey	TS01011	TSMK03			min. 10,000 mt		CFR Turkey	3-8 weeks	At sight	\$/mt
HMS 1/2 75:25 CFR Turkey	FERED00	FERED03			min. 10,000 mt		CFR Turkey	3-8 weeks	At sight	\$/mt
Shredded Scrap Delivered US Midwest	FEMWD00	FEMWD03	FEMWD04		min. 1,000 lt	ISRI 210-212 inclusive	Delivered US Midwest mill	0-30 days	Net 30 days after delivery	\$/lt
Shredded Scrap 10-day Average Dlvd US Midwest	TS11003				min. 1,000 lt	ISRI 210-212 inclusive	Delivered US Midwest mill	0-30 days	At sight	\$/lt
HMS 1/2 N Amer Dom Prod Dlvd Mill Wkly	SB01135				min. 1,000 lt		Delivered US Midwest mill	0-30 days	Net 30 days after delivery	\$/lt
Plate and Structural N Amer Dom Prod Dlvd Mill Wkly	SB01174				min. 1,000 lt		Delivered US Midwest mill	0-30 days	Net 30 days after delivery	\$/lt
#1 Busheling Scrap N Amer Dom Prod Dlvd Mill Wkly	SB01001				min. 1,000 lt		US Midwest mill	30 days	Net 30 days after delivery	\$/lt
Shredded FOB US East Coast	FEECD00	FEECD03	FEECD04		10,000-20,000 mt		FOB US East Coast	5-45 days	100% on delivery, LOC	\$/mt
HMS FOB US East Coast	FEECH00	FEECH03	FEECH04		10,000-20,000 mt		FOB US East Coast	5-45 days	100% on delivery, LOC	\$/mt
3B Shredded Scrap UK Dom Prod Dlvd Mill Wkly	SB01004				2,000 mt		Delivered mill	60 days	At sight	GBP/mt
4A New Steel Bales UK Dom Prod Dlvd Mill Wkly	SB01007				2,000 mt		Delivered mill	60 days	At sight	GBP/mt
Clean Steel Scrap Brazil SE Dom Prod Dlvd Mill Wkly	SB01046				500-2,000 mt		Delivered Southeast Brazil	2-4 weeks	At sight	
TSI HMS 1/2 80:20 Containerized CFR Taiwan Port Wkly	TS01037	TSMBK03			min. 200 mt	ISRI 200-206 inclusive	CFR Taiwan	Loading 0-30 days	Cash/At sight	\$/mt
H2 Scrap Tokyo Steel Purchase Prc Dom Prod Dlvd Okayama Mthly	SB01109				10-20kg to maximum loading capacity/truck	thickness over 3mm, width below 700mm, length 1,200mm	Okayama works gate		Bank transfer 90 days from mid- or end-month	Yen/mt
H2 Scrap Tokyo Steel Purchase Prc Dom Prod Dlvd Utsunomiya Mthly	SB01110				10-20kg to maximum loading capacity/truck	thickness over 3mm, width below 700mm, length 1,200mm	Utsunomiya works gate		Bank transfer 90 days from mid- or end-month	Yen/mt
H2 Ferrous Scrap FOB Japan Scrap Weekly Assessment	AAXWB04	AAXWB03			5,000 mt	thickness: minimum 3mm to maximum less than 6mm, width and length maximum 500mm and 1,200mm respectively, and weight, maximum 1,000kg.	FOB Tokyo Bay	30-60 days	At sight	Yen/mt
HMS 1/2 80:20 CFR East Asia	SB01130	SBMAG03			30,000-35,000 mt	Heavy Melting Scrap, Grade I and II in mix 80:20. All other grades will be normalized back to this grade based on prevailing market extras.	CFR Dangjin, South Korea	8-12 weeks	At sight	\$/mt
HMS DDP Jiangsu steel mill VAT-inclusive Wkly	SB01129	SBMAF03				thickness over 6mm	DDP Zhangjiagang	Prompt		Yuan/mt
HMS 1/2 Brazil SE Dom Prod Dlvd Mill Wkly	SB01133				500-1,000 mt		Delivered Southeast Brazil	2-4 weeks	At sight	
Grade OA Plate and Structural UK Dom Prod Dlvd Mill Wkly	SB01170				2,000 mt		Delivered mill	60 days	At sight	GBP/mt

**FERROUS SCRAP**

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
Shredded Scrap Auto Tokyo Steel Purchase Prc Dom Prod Dlvd Okayama Mthly	SB01223				10-20kg to maximum loading capacity/truck		Okayama works gate		Bank transfer 90 days from mid- or end-month	
Shredded Scrap Auto Tokyo Steel Purchase Prc Dom Prod Dlvd Utsunomiya Mthly	SB01224				10-20kg to maximum loading capacity/truck		Utsunomiya works gate		Bank transfer 90 days from mid- or end-month	
Shredded Scrap USA Exp CFR E Asia Port Mthly	SB01230				25,000 mt		CFR East Asia	2-6 weeks	At sight	\$/mt
Shredded Scrap CFR Nhava Sheva	AAXRQ04	AAXRQ03			min. 200 mt	average density of 70 lb/square foot	CFR Nhava Sheva, India	2-8 weeks	At sight	\$/mt
Turnings Brazil SE Dom Prod Dlvd Mill Wkly	SB01238				500-1,000 mt		Delivered Southeast Brazil	2-4 weeks	At sight	
H2 Scrap Tokyo Steel Purchase Prc Dom Prod Dlvd Okayama Mthly \$/Ton	SBMAD03				10-20kg to maximum loading capacity/truck	Thickness over 3mm, width below 700mm, length 1,200mm	Okayama works gate		Bank transfer 90 days from mid- or end-month	
H2 Scrap Tokyo Steel Purchase Prc Dom Prod Dlvd Utsunomiya Mthly \$/Ton	SBMAE03				10-20kg to maximum loading capacity/truck	Thickness over 3mm, width below 700mm, length 1,200mm	Utsunomiya works gate		Bank transfer 90 days from mid- or end-month	
Shredded Scrap Auto Tokyo Steel Purchase Prc Dom Prod Dlvd Okayama Mthly \$/Ton	SBMAP03				10-20kg to maximum loading capacity/truck				Bank transfer 90 days from mid- or end-month	
Shredded Scrap Auto Tokyo Steel Purchase Prc Dom Prod Dlvd Utsunomiya Mthly \$/Ton	SBMAQ03				10-20kg to maximum loading capacity/truck				Bank transfer 90 days from mid- or end-month	
Shindachi Bara New Cut Unpressed Tokyo Steel Purchase Prc Dom Prod Dlvd Okayama Mthly	SB01221	SBMAN03			10-20kg to maximum loading capacity/truck	No thickness specified. Width below 700mm, length below 1,200mm			Bank transfer 90 days from mid- or end-month	
Shindachi Bara New Cut Unpressed Tokyo Steel Purchase Prc Dom Prod Dlvd Utsunomiya Mthly	SB01222	SBMA003			10-20kg to maximum loading capacity/truck	No thickness specified. Width below 700mm, length below 1,200mm			Bank transfer 90 days from mid- or end-month	

**Ferrous Scrap**

**TS01011 HMS 1/2 80:20 CFR Turkey:** Heavy Melting Scrap, Grade I and II in a mix of 80/20.

This assessment uses “premium” HMS 1/2 80:20 as its base specification. All other grades are normalized back to this grade based on prevailing market differentials.

Platts normalizes transactional data to a premium HMS 1&2 (80:20) standard. This normalization process is carried out using observed market trade differentials between HMS 1&2 blends from various supply regions, such as the US East Coast, Baltic ports or Benelux and UK terminals.

Other grades, such as shredded or bonus scrap, are normalized back to a premium HMS 1&2 (80:20) standard. Platts publishes the price series on a CFR Turkey basis, rather than CFR Iskenderun port, in light of the consistency in demand between the three large scrap-melting regions in Turkey; Platts reflects material for delivery three-eight weeks forward, and take into account cargoes whose tonnage exceeds 10,000 mt. These cargoes may be a mixture of grades. The assessment is published to the nearest \$0.25/mt.

**FERDD00 HMS 1/2 75:25 FOB Rotterdam:** Heavy Melting Scrap, Grade I and II in mix 70/30. All other grades are normalized back to this grade based on prevailing market extras. This value is calculated as a freight netback from the HMS 1&2 75:25 CFR Turkey (FERED00) assessment, using the Rotterdam-Aliaga

freight assessment (MSRAT00).

**FERBSD00 A3 CFR Turkey:** Heavy Melting Scrap according to GOST A3 2787-75 or equivalent. All other grades to be normalized back to this grade.

**FEMWD00 Shredded Delivered US Midwest:** Shredded steel scrap according to ISRI 211 classification or equivalent, specifying homogeneous and magnetically separated iron and steel scrap originating from automobiles, unprepared No. 1 and No. 2 steel, and miscellaneous baling and sheet scrap, with an average density of 70 lb/square foot. Other grades of steel scrap can be normalized to ISRI 211 where appropriate.

The US scrap market trades using a “buy-week” period that can

take place towards the end of the month of delivery minus one (M-1) or at the start of the delivery month (M). These periods are in any case the times that tend to see the highest degree of trade activity.

As a consequence, Platts values the market every day in the last week of M-1 and the first week of M. The M-1 week is defined as the last week that begins (on a Monday) with a date in M-1; the M week is defined as the first week that starts (on a Monday) with a date in M.

Prices are then assessed weekly (on Fridays) in M until the last week begins, when daily publication would resume. This value is calculated as a volume-weighted average.

**TS11003 Shredded Scrap 10-day average Dlvd US Midwest:**

This assessment publishes the average value over the first 10 days of a month for Shredded steel scrap according to ISRI 210-212 classification or equivalent, specifying homogeneous and magnetically separated iron and steel scrap originating from automobiles, unprepared No. 1 and No. 2 steel, and miscellaneous baling and sheet scrap, with an average density of 70 lb/square foot. Other grades of steel scrap can be normalized to ISRI 211 where appropriate. The assessment takes into account transactions, bids or offers for material designated for shipment in that respective month. Transactions, bids and

offers are collected through close of business on the tenth day of the month, or the following business day if the tenth is not a business day. A single value is published. If the data points are applicable for that respective month, timing of transactions, bids and offers do not impact weighting.

**FEECD00 Shredded FOB US East Coast:** Shredded scrap (homogeneous iron and steel scrap, magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 50-70 pounds / cubic feet) as specified by ISRI classification 210-211. Other grades of steel scrap can be normalized back where appropriate based on prevailing market fundamentals.

**FEECH00 HMS FOB US East Coast:** Heavy Melting Scrap, ISRI 201 classification or equivalent, specifying wrought iron and/or steel scrap ¼ inch and over in thickness. Individual pieces not over 36 x 18 inches (charging box size) prepared in a manner to insure compact charging.

**AAXWB04 H2 FOB Japan:** Thickness: minimum 3mm to maximum less than 6mm, width and length maximum 500mm and 1,200mm respectively, and weight, maximum 1,000kg.

Shindachi grade scrap trades are normalized to H2 grade scrap.

**AAXRQ04 Shredded CFR Nhava Sheva:** Containerized shredded ferrous scrap price assessment for scrap complying with ISRI 211 classification or equivalent, specifying homogeneous and magnetically separated iron and steel scrap originating from automobiles, unprepared No. 1 and No. 2 steel, and miscellaneous baling and sheet scrap, with an average density of 70 lb/square foot. Other grades of steel scrap can be normalized to ISRI 211 where appropriate. Weekly assessment made in \$ / mt, on a CFR Nhava Sheva, India basis, reflecting cargoes for delivery 2-8 weeks from date of publication, with minimum 200 mt shipment. Payment terms are deemed 100% payment at sight with all variations normalized to this standard.

SB01130 HMS 80:20 CFR East Asia: Heavy Melting Scrap, Grade I and II in mix 80:20. All other grades are normalized back to this grade based on prevailing market extras. Typical 'deep sea' seaborne bulk quantities of 30,000-35,000 mt. Lead time 8-12 weeks; Assessment done weekly, by the end of Wednesday.

For all other Assessments Specifications please refer to the Table above.

TS01037 HMS 1/2 80:20 Containerized CFR Taiwan Port: this assessment reflects deliveries into Taiwan ports. Information is collected until 5.30pm Singapore time each Friday.

## FERROUS SCRAP FORWARD CURVE

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
HMS 1/2 80:20 CFR Turkey Swap Current Month	ACTAB00				NA	NA	CFR Turkey	Month of prevailing assessment date	NA	\$/mt
HMS 1/2 80:20 CFR Turkey Swap Mo01	ACTAM01				NA	NA	CFR Turkey	First month after month of prevailing assessment date	NA	\$/mt
HMS 1/2 80:20 CFR Turkey Swap Mo02	ACTAM02				NA	NA	CFR Turkey	Second month after month of prevailing assessment date	NA	\$/mt
HMS 1/2 80:20 CFR Turkey Swap Mo03	ACTAM03				NA	NA	CFR Turkey	Third month after month of prevailing assessment date	NA	\$/mt

### Ferrous Scrap Forward Curve

Platts publishes daily assessments for monthly HMS 1/2 80:20 CFR Turkey scrap swaps. These swaps are traded on a \$/mt basis or in intermonth spreads.

Swaps are derivatives which settle off the average value of the underlying physical benchmark price, Platts TSI HMS 1/2 80:20 CFR Turkey, as published on each day during the month of trade (e.g. November). Platts publishes swaps assessments for current month (M0), month one (M1), second month (M2) and third month (M3) strips. Monthly assessments are rolled on the first day of the month. For example, during October 2018 the M1 swap will be November 2018 and M2 will be December 2018. On November 1 the M1 swap will roll to December and M2 will roll to January. For the current month swap, the value is assessed as long as there is sufficient liquidity on the relevant strip to do so.

**Timing:** Swaps assessments reflect a market-on-close value at 16:30hrs London time. The assessments reflect the tradable level at this time. Swaps bids/offers and trades are reported in real-time throughout the day on Platts' electronic information service, Platts Metals Alert (PMA).

General reporting principles applicable to all derivatives markets: Platts only publishes and evaluates information from sources considered credible and creditworthy. Bids/offers of paper swaps received by Platts after published timing cut-off guidelines are disregarded and not published.

#### Brief explanation of derivatives terminology:

**Swap:** Swaps or 'paper' are risk management tools which allow users to lock in values by transforming floating price risk to fixed or fixed to floating. Swaps are also used as a speculative tool.. Paper markets are very reactive and provide players with instant feedback of market conditions. Platts reflects the immediate changes in swaps market values as market hears on Platts Metals Alert page 700.

**Financial settlement:** Unlike physically-settled forward cargo trades, paper swaps are financially-settled derivative contracts. For example, the difference between buying an "April scrap cargo" and an "April scrap swap" is this: in the first case the buyer would take delivery of a cargo of the product, while in the second case the buyer would pay (or be paid) the difference between the swap price and the average of Platts TSI' scrap assessments in April.

**Month:** A calendar monthly swap is quoted for the full month calendar month, i.e. from the first to the last business working day in the month. Then the monthly swap assessment is rolled over.

#### **Metallics**

**SB01171 Pig iron FOB Black sea export price:** Basic pig iron, GOST 805-95 standard, or PL-1 & PL-2 grades. Other grades are normalized back to this grade based on prevailing market extras.

**MMPN004 Pig Iron CIF New Orleans Wkly:** Basic pig iron from all origins delivered to CIF New Orleans. Material with up to 0.12% phosphorus content is considered. Platts normalizes cargoes to a 30,000 mt lot size. Trade for other grades and delivery ports may be normalized back to the base specifications.

For all other Assessments Specifications please refer to the Table above.

**METALLICS**

Assessment	CODE	Mavg	Wavg	Yavg	QUANTITY	DIMENSIONS	LOCATION	TIMING	PAYMENT TERMS	UOM
<b>Pig iron</b>										
Pig Iron FOB Black Sea Export Price	SB01171				10,000-20,000 mt		FOB Mariupol	2-8 weeks	At sight	\$/mt
Pig Iron Brazil Exp FOB Southeastern ports Wkly	SB01172	SB01172			25,000-35,000 mt		FOB Southeastern ports (Brazil)	4-8 weeks	At sight	\$/mt
HBI Venezuela Exp FOB Venezuelan Ports Wkly	SB01116				10,000-30,000 mt	Dimensions: (90-140) x (48-58) x (32-34) mm. Properties: metallization 94%; Fe (Total) 88.3% - 94%; Fe (Metallic) 83% - 88.4%	FOB Puerto Ordaz	4-6 weeks	Cash before delivery	\$/mt
Pig Iron CIF New Orleans Wkly	MMPN004	MMPN003			30,000 mt	Maximum phosphorus content 0.12	CIF New Orleans	5-10 weeks	At sight	\$/mt

**Steel Mill Economics**

Platts Steel Mill Economics consists of a series of indicative margin price spreads aimed at assisting modelling, cost, procurement and marketing trends, and arbitrage analysis.

The spreads are generated using Platts price assessments and TSI indices.

The suite of spreads captures the indicative costs of raw material inputs and finished products for blast furnace and electric arc furnace (scrap-based) steelmaking operations in Asia, Turkey and the US.

Typically, the spreads represent the differences between the prices of intermediate or downstream steel products and the prices of upstream raw materials needed to produce them.

The Steel Mill Economics price spreads are published daily or weekly as specified, with all of the series available as monthly and quarterly averages.

**Daily series****HRC ASEAN Spread (\$/mt):**

TSI HRC Asean Imports\* CFR Asean Port \*HRC basis SAE1006 – (1.6\* TSI Iron Ore Fines 62% Fe China Imports CFR Tianjin Port + 0.6\* TSI Prem JM25 Coking Coal China Imports CFR Jingtang Port)

AOPFE00 = TS01041 – (1.6\* TS01021 + 0.6\* TS01044)

**HRC China Export Spread (\$/mt):**

HRC FOB China \$/mt – (1.6\* IODEX CFR CHINA 62% Fe \$/Dmt+0.6\* Prem Low Vol HCC CFR China

AOPKE00 = STHRZ02 – (1.6\* IODBZ00 + 0.6\* PLVHC00)

**Rebar China Export Spread (\$/mt):**

Rebar FOB China \$/M – (1.6\* IODEX CFR CHINA 62% Fe \$/Dmt+0.6\* Prem Low Vol HCC CFR China

AOPLE00 = STCBZ02 – (1.6\* IODBZ00 + 0.6\*PLVHC00)

**Rebar Scrap Turkey Spread (\$/mt):**

Steel Rebar FOB Turkey \$/mt – TSI HMS 1/2 80:20 Deep-sea Turkey Imports CFR Iskenderun Port

AOPGE00 = STCBM00 – TS01011

**Rebar Black Sea Billet Spread (\$/mt):**

Steel Rebar FOB Turkey \$/mt – Steel Billet FOB Black Sea \$/Mt

AOPHE00 = STCBM00 – STBLB00

**Weekly series****HRC Scrap US Spread (\$/st):**

US HRC EXW Indiana \$/short ton (weekly average value) – (Platts TSI Shredded Scrap Delivered US Midwest \$/long ton/1.12)

AOPIE00 = TS01018 – (FEMWD00/1.12)

**Rebar Scrap US Spread (\$/st):**

Rebar EXW US SE \$/St (weekly average value) – (Platts TSI Shredded Scrap Delivered US Midwest long tons/1.12)

AOPJE00 = STCBC00 – (FEMWD00/1.12)

The weekly series are dated each Friday.

## Platts MVS China Steel Mill Margins

Platts MVS China HRC Domestic Steel Mill Margin and Platts MVS China Rebar Domestic Steel Mill Margin provide an indication of the spread of raw material and other costs against finished steel prices using MVS's proprietary modelling.

The daily spreads use Chinese domestic hot-rolled coil and reinforcing bar prices against a variety of input costs.

These include several different grades of metallurgical coal, Chinese domestic met coke, ferrous scrap, and various iron ore products including fines, concentrate, lump and pellets.

They use assumptions arrived at by market survey around operating costs and logistics, providing an indication of underlying mill margins.

The Platts MVS spreads represent the difference between ex-VAT prices of finished steel products with VAT-inclusive raw material prices.

The spreads are published using the daily USD/CNY exchange rate.

The spreads reflect those from a typical large northern China coastal steel mill.

Underlying steel mill operations and markets related to calculating the spreads are tracked by Platts Analytics on an ongoing basis, with changes to the model reviewed on a quarterly basis.

## The Platts Turkey ARC Steel Tracker

The Platts Turkey ARC Steel Tracker (Turkey ARC) has been designed to analyze price relationships of inputs and outputs to regional electric arc furnaces and rolling mills, and daily index and monetary values are given for each commodity and the market.

Turkey ARC uses relative proportional analysis, based on prices, to help track interrelated commodity price relationships compared to 30-day and 60-day moving averages.

This is an analysis tool based on the spreads between STCBM00: Turkey Rebar FOB; STBLB00: Black Sea Billet FOB (given an adjustment factor based on freight rates to allow for a net

forward CFR Turkey billet value to be created); and (TS01011) TSI HMS 1/2 80:20 Deep-sea Turkey Imports CFR Iskenderun Port reference price, TS01011 replaced use of FETKD00: Platts Turkey Ferrous Scrap HMS 80:20: CFR reference effective March 1, 2016.

Platts launched on December 1, 2014, a new series of daily data analysis identifying price trends and price direction in the Turkish rebar, billet and scrap markets.

From January 4, 2016, the Turkey ARC indexes are generated using a dynamic weighting system to better align with shorter term trends. Platts stopped using a longer term fixed weighting as part of the calculation process for the individual index weightings for scrap, billet and rebar indexes.

The market direction metric indicates daily overall price movement in the steel industry's relevant supply chain. A composite index for the industry based on the total value of the three ARC commodity prices is published with a base value is of July 6, 2012, is available.

Back data through July 2012 for the ARC indices is available.



## REVISION HISTORY

**May 2019:** Clarified the TS11003 Shredded Scrap 10-day average Dlv'd US Midwest assessment.

**April 2019:** Updated to reflect frequency changes and discontinuations of some US and Latin American steel assessments. Updates specifications of CFR Southeast Asia billet assessment (SB01035).

**November 2018:** Changed Turkey rebar FOB assessment volume from 2,000- 3,000 mt to 10,000 mt. Clarified lead times for North-European coil assessments.

**September 2018:** Completed annual methodology review and clarified or updated where necessary. Updated sections I-VI of the methodology guide. Updated US import assessments based on incoterm change to DDP from CIF. Updated to reflect the discontinuation of eight European steel assessments.

**May 2018:** Updated to reflect change in China's VAT rate.

**April 2018:** Updated to reflect launch of daily HRC FOB China SAE1006 assessment (STHSA00) and the calculation of HRC FOB China SAE1006 Premium (STHRY00). Updated to reflect changes to FOB Black Sea slab assessment and FOB Venezuela HBI assessment.

**March 2018:** Updated to reflect changes to Turkish steel methodology and clarification of EMEA HDG EXW assessments.

**February 2018:** Updated to reflect launch of weekly US CIF NOLA pig iron assessment (MMPN004).

**January 2018:** Updated to reflect change in incoterm to US Plate price series (STPRI00).

**December 2017:** Updated to reflect launch of Turkey scrap swaps, CFR Taiwan scrap methodology change, amended typos.

Updated to reflect changes to India HRC assessment.

**November 2017:** Updated to reflect changes to US Plate and Ferrous Scrap coverage. Updated to add TSI codes to methodology guide.

**October 2017:** Completed annual methodology review and clarified or updated where necessary. Updated to reflect alignment and elimination of duplications for various Asia Platts and TSI steel indices and assessments

**August 2017:** Updated to reflect methodology changes to the European flat-rolled steel assessments.

**July 2017:** Updated Platts MVS China Steel Mills Margins model.

**April 2017:** Removed DDP NW European HRC & CRC specs, as assessment discontinued.

**March 2017:** Added "in-warehouse Tianjin" as a basis point for the daily dealer molybdenum oxide (MMAYQ00) assessment.

**January 2017:** Discontinued Japanese charge chrome list price from NSSC.

**November 2016:** Changed basis of Rebar Shanghai domestic ex-stock assessment to ex-works Jiangsu. Clarifies specifications of HDG China domestic and FOB China assessments.

**October 2016:** Clarified specification for "HDG Turkey Dom Prod Ex-Works Mthly" assessment.

**September 2016:** Annual Review: Platts updated this guide to house style. All references to metric tons are now 'mt', short tons are 'st', Hundredweight are 'CWT', Euros are 'EUR', US dollars are '\$', and cents are 'cents'. On P.2, 'Platts' was updated to 'S&P Global Platts'. All references to 'steel and ferrous scrap' have been updated to 'steel, ferrous scrap and ferroalloys'. On p.21,

the last sentence under the entry for '44% Manganese Ore CIF China' has been removed. On p.21, 'CIF North China basis, basis Tianjin' has been corrected to 'CIF North China basis, Tianjin'. 'LC at site' has been amended to 'LC at sight' throughout the document. On p.24, for 'High-carbon 6—65% CIF Japan', the minimum order has been corrected from 200mt to 100mt. On p.25, 'Europe- 80% V Ferrovandium' has been amended to 'weekly spot market assessment'. Also on p.25, 'MW US Free Market Ferrotungsten' has been updated to 'weekly spot market assessment'. In relation to tables on pages 8-15, 18-21, 26-29, quantity, location, payment terms, and UOM have been standardized in line with house style and Incoterms. On p.9, 'HRC Brazil Dom Prod Ex-Works Mthly' has been amended to 'HRC Brazil Dom Prod Ex-Works Wkly'. On p.14, 'Rebar 10MM Brazil SE Dom Prod Ex-Works mthly' has been amended to 'Rebar 10MM Brazil SE Dom Prod Ex-Works Wkly'. On p. 26, 'Shredded DEL US East Coast Dockside' has been amended to 'Shredded FOB US East Coast'. On p.20 the quantity for Ferrosilicon 75% FOB China Wkly and Ferromolybdenum CIF Jap Wkly has been amended to 'min 18-24mt'. Also, on 20, the quantity for Manganese Ore 44% CIF China \$/dmtu and Manganese Ore 37% CIF China \$/dmtu has been amended to 'min 5,000 mt or full hatch'.

**September 2016:** Added Square Bar FOB China assessment details. Clarified HMS I/II 80:20 CFR Turkey ferrous scrap assessment process.

**July 2016:** Updated the assessment name in the table for Ferrosilicon CIF Japan to include 75% grade content. Updated the assessment name in the table for Silicomanganese CIF Japan to include 65% grade content. Removed the discontinued domestic China ferrochrome price (SB01104) from the table in the guide.

**July 2016:** Changed the specifications of northwest European ex-works steel rebar assessment (STCBE00) to 12-16mm from 16-20mm.

**May 2016:** Added Platts MVS China Steel Mill Margins with

details.

**April 2016:** Updated Steel Mill Economics with new spreads launched April 1, 2016, and further details. Removes reference to taxes earlier specified on steel products from Brazil. Adds monthly scrap codes for H2 Ferrous Scrap FOB Japan Scrap Weekly Assessment and HMS 1/2 80:20 CFR East Asia.

**March 2016:** Amended this guide to add TSI Turkey Scrap import reference price added to Turkey ARC index, replacing Platts Turkey Scrap import assessment.

**January 2016:** Amended this guide to add details on Turkey ARC index weighting change. Added updated methodology and specifications for heavy melting scrap, CFR East Asia and H2 ferrous scrap, FOB Japan

**November 2015:** Amended this guide to remove duplicative HRC descriptions for HRC Ex-works Indiana and CIF US Gulf Coast, and to remove a listing for an Ex-works Indiana hot-dipped galvanized price assessment that was never developed. Added missing specifications for the North American stainless steel series to include not just surcharges but also the corresponding transaction and base prices.

**November 2015:** Deleted assessments discontinued on October 30, 2015, for FOB China ferromanganese and silicomanganese. Deleted duplicative listing in the table of US Ferrovandium price assessment. Added missing Ferrotitanium descriptions to the table. Fixed typo under Steel Mill Economics Spreads, correcting symbol for China Flat Steel Spread (CFSS using TSI) weekly.

**October 2015:** Revised FOB Turkey rebar delivery timing and payment terms. Fixed typos on Black Sea slab and ferrovandium descriptions.

**September 2015:** Updates frequency and specifications of Rebar FOB China assessment and added SBB1032 Billet ex-Tangshan. Added a sentence to reference Assessment descriptions not listed in the text to refer to the tables.

**May 2015:** Changes frequency of Hot Rolled Coil FOB China assessment to daily and adds specifications of new HRC FOB China SAE1006 Premium assessment. Clarifies FOB China Wire Rod assessment to be reflective of Mesh Quality.

**February 2015:** This methodology guide was updated to include further description of Platts' processes and practices in survey

assessment environments.

**February 2015:** Changed frequency of Wire Rod Mesh Quality N Amer Dom Prod Ex-Mill US MW from monthly to weekly.

**December 2014:** Platts added HRC DDP West Midlands, UK, under Carbon Steel, hot-rolled coil. Platts added 37% Manganese ore CIF China under raw materials. Platts added Indian containerized shredded scrap CFR Nhava Sheva, India, under Ferrous Scrap.

**December 2014:** Platts added methodology for Turkey ARC Steel Tracker under steel mill economics.

**July 2014:** Platts revamped all Metals Methodology and Specification guides, including its Steel & Ferrous Scrap guide, in July 2014. This revamp was completed to enhance the clarity and usefulness of all guides, and to introduce greater consistency of layout and structure across all published methodology guides. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.