Methodology and specifications guide
Metallurgical coal

Latest update: November 2018

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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 and indexes, the processes and standards Platts adheres to in collecting data, and the methods by which Platts arrives at final assessment values for publication. These guides are freely available on Platts' website for public review.

Platts discloses publicly the days of publication for its price assessments and indexes, and the times during each trading day in which Platts considers transactions in determining its assessments and index levels. This schedule of publication is available in Platts methodology guides. Where this schedule is disrupted by public holidays; a schedule of services/publications affected is available 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.

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

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 future updates, is included at the end of the methodology.

How this methodology statement is organized

This description of methodology for indexes and assessments is divided into seven major parts (I-VII) that parallel the entire process of producing price values for the specified market period.

- Part I describes what goes into Platts indexes and price values, including details on what data market participants are expected to submit, the process for submitting data and criteria for timeliness of market data submissions.
- Part II describes any security and confidentiality practices that Platts uses in handling and treating data.
- 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 indexes and assessments. It includes descriptions of the methods that Platts uses for reviewing data, and the methods used to convert raw data into indexes and assessments, including 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 how Platts addresses assessment periods where one or more reporting entities submit 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 and indexes can contact Platts for clarification of data that has been published, or to register 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 for which Platts publishes indexes or assessments in this 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: DATA QUALITY AND DATA ACQUISITION

Platts' objective is to ensure that the submission of transactional information and other data inputs 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 market 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 product being assessed.

What to report

- 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 transactions

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 information provided for publication in real-time across a wide variety of media. The following reporting methods are accepted by Platts' metals editorial staff:

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

MOC data publishing principles

Platts has progressively adopted its Market on Close (MOC) assessment process to assess the value of metallurgical coal. The 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 in markets. Under Platts MOC guidelines for collecting and publishing data, Platts publishes market information including but not limited to firm bids and offers from named companies, expressions of interest to trade and confirmed trades that are received from market participants throughout the day.

This information is published in real-time, on Platts information service, Platts Metals Alert. Platts publishes credible information received so that it can be fully tested by the market at large. Information collected and published may include the identities of buyers and sellers, brand names, 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. Toward the close of the day, Platts focuses its assessment process seeking to publish firm bids and offers, expressions of interest to trade and confirmed trades, with all relevant details. Transparent data is prioritized in the assessment process, because it is available to the entire market for testing.

Platts applies a survey assessment methodology where market conditions do not support an MOC assessment environment. Platts collects a wide variety of transactional and market information through a survey of participants, which typically includes communicating with sources via phone, email, and instant messaging, among other communication methods. Although the survey assessment methodology is in many respects similar to the MOC assessment methodology there are key distinctions between the assessment approaches.

In such environments, Platts collects as much data as possible, including bids, offers, interest to trade, transactions that have been previously concluded, and indications of value from participants in the market. Platts seeks to collect, confirm and analyse as much information as possible in survey markets, and encourages market participants to provide all relevant information. Platts publishes credible information collected that meets our methodological standards, typically through real-time information services and with as much transparency as possible. This information is considered when determining and completing a final assessment.

All Platts market reporters are trained to analyse 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.

Survey and MOC environments are linked. Survey assessment environments are a common ground for future MOC assessment environments, and Platts regularly reviews its survey environments to determine which may be suited to an MOC approach. Similarly, MOC environments are underpinned by data collected by surveying sources throughout the day, to ensure that Platts is aware of market values as the MOC process begins, and so that Platts has data to review when considering information collected through MOC, particularly if an MOC environment yields little or no data on a given day.

For analysis of the data, Platts survey methodologies will typically give priority to data collected that is confirmed and published, and which is most relevant to closing values in the markets covered.

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 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.

Platts editorial guidelines governing its assessment process require it should 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.

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.

PART II: SECURITY AND CONFIDENTIALITY

Data is stored in a secure network, in accordance with Platts' policies and procedures. Platts metallurgical coal 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 for information provided for use in metallurgical coal assessments.

PART III: CALCULATING INDEXES AND MAKING ASSESSMENTS

The following section describes how Platts uses reported transactions and any other market information it has collected, in the manner described in Part I, to formulate its price indexes and assessments.

MOC price assessment principles

As a publisher owned by S&P Global, Platts places independence and impartiality at the heart of its price assessments. Platts has no financial interest in the price of the products or commodities on which it reports. Platts' overall objective is to reflect the transactable value of the commodity assessed. Platts' indices and assessments are based on its own surveys of market participants completed by Platts market reporters each day. Platts assessments are based on as broad a cross-section of the market as possible, including distributors, traders, producers, end-users and brokers.

All transational data is factored equally for use in a particular assessment, as long as such transactions are deemed repeatable and within the established specifications for each product. Transactions are not evaluated on a weighted basis.

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.

Progressively adopting the MOC assessment process, Platts seeks to establish and publish the value of metallurgical coals that prevails at the close of the assessment process itself. Platts has aligned the timestamps reflected in its assessments with what typically is a period of high activity in the markets that Platts observes. The typical period of high activity in markets tends to be in the afternoon in every major trading location around the world. Platts believes that aligning its price assessments to typical periods of greater market activity and liquidity provides a robust basis upon which to derive a reliable assessment of market value.

Metallurgical Coal assessment timestamps

- **Asia Pacific**: 5.30 pm Singapore
- **Atlantic**: 4.30 pm London

Platts is progressively adopting MOC methodology in order to provide complete clarity over the precise point in time reflected in its market assessments. Like the quality of coal, 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 coal, 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 would be able to properly reflect outright, spread and relative values.

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.

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, repeatability and time sensitivity. Platts considers data for assessment of any market where a single company
Normalization price adjustment techniques

Platts seeks to align the standard specifications for the metallurgical coal markets it assesses and the timestamps reflected in its assessments with standard industry practice. However, physical commodity markets are generally heterogeneous in nature – not only can time of transactional activity considered for inclusion in the price assessment process vary through the day, other key attributes often vary from the base standard reflected in Platts assessments for metallurgical coal traded in the market.

The quality of metallurgical coal, delivery location, and other specific terms of trade may be varied in the physical commodity markets assessed by Platts. This is one reason among many why data collected from these markets may not be simply averaged to produce a representative value.

Because of the complex nature of metallurgical coal qualities, 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 coal markets with its standard assessment specifications through a process called normalization.

Normalization is an essential price adjustment technique applied by Platts, to align reported market information to reflect the economic relationship between specific reported activity and the base standard reflected in Platts price assessments.

By surveying markets and observing the economic impact of variance from the base standard reflected in Platts assessments, Platts regularly normalizes disparate information from the diverse physical commodity markets back to the standard reflected in Platts price assessments. This is done by analyzing freight rates (for locational differences), quality differentials (for quality differences), the movements of all markets through time (for time differences) and other differentials 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. This 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

Platts assessment process considers firm bids, firm offers and transactions that are transparent and open to any counterparty with the proper financial and operational resources. Bids, offers or transactions that are not transparent may not be considered in the assessment process. Data from transactional activity, adhering to our published methodology, would be considered of the highest quality for assessment purposes.

The level of each bid or offer should stand firm in the marketplace long enough for any counterparty to hit the bid or lift the offer; 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, i.e. changes that are in excess of normal market practice.

Transparency underpins Platts assessment process, just as it does Platts data publishing processes. 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, and which still stands open to the marketplace at the close of the assessment process, will establish clear parameters for Platts final published assessments.

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

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. Under such circumstances, Platts may also be able to observe direct market activity or the effect of commonly traded commodities on illiquid markets via spread differentials and/or shipping economics.

Platts also analyzes the relationships between different products, and factors these relationships into assessments for markets where transactional data falls to low levels. Finally, Platts normalizes other available data that may be relevant to the assessment during periods when low amounts or no transactional data exists, including transactional data from related markets, in the manner described above.
Platts guidelines are designed to avoid any distortion of the final price assessment and so inputs that are not verifiable tend to be eliminated and “one-off” or unrepeatable transaction data 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. Platts seeks to verify the repeatability of market value by determining the level achieved is repeatable in the wider market.

A variant on this action is price “gapping” when bids are made too high and offers are made too low through untested levels of price support or resistance. Platts may not publish such bids and offers during the MOC process. 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 somewhere between the last incremental bid and the transaction at the gapped level.

**Assessment calculations**

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

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 published exchange rates and conversion factors.

Platts reporters follow specific methodology when exercising editorial judgment during their assessment process. Platts editors apply judgment when determining (1) whether information is suitable for publication, (2) when normalizing data and (3) where to assess final value of market.

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.

All such judgment is subject to review by Platts editorial management for adherence to the standards published in Platts methodologies. The following section illustrates how these guidelines work when calculating indexes and making assessments.

To ensure the assessments are as robust as possible, Platts editorial systems are backed by a strong corporate structure that includes managerial and compliance oversight. To ensure reporters follow Platts methodological guidelines in a consistent manner, Platts ensures that reporters are trained and regularly assessed in their own and each other’s markets.

Application of professional judgment guidelines promotes consistency and transparency in judgments and is systematically applied by Platts. Where professional judgment is exercised, all information available is critically analysed and synthesised. The various possibilities are critically analysed and fully evaluated to reach a judgment. Platts manages and maintains internal training guides for each of the different products assessed which aim to assist assessors and ensure Platts’ price assessments are produced consistently. Platts’ price assessments are reviewed prior to publication and exercise of professional judgment is further discussed and verified during this process. Finally, consistent with the concept of proportionality, assessments that are referenced by derivatives contracts are supported by assessment rational, including the application of judgment, which is published together with the price assessment offering full transparency to the market.

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

Platts focuses primarily on assessing the value of metallurgical coal trading in the seaborne 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 the value at which transactions take place, or could take place, at precisely the close of the MOC 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 may use its editorial judgment to factor out such extraneous elements from the value of the commodity, or it may decide not to use the bid, offer or transaction in its assessment process. 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, volume option tolerances exercisable by the buyer or seller or quality specifications.

**Loading/Delivery Location**

Platts defines specific FOB loading or CFR delivery locations in its price assessments. Assessments at any basis point in the absence of liquid, consistent and repeatable deals or bids/offers will take into account deals or bids/offers reported on different delivery and loading ports and normalized to the assessed location, using prevailing spot market freight rates.

**Freight Differentials**

Platts takes into account prevailing seaborne freight in establishing CFR values. In the absence of liquid, consistent and repeatable CFR based deals, bids or offers, Platts may determine a CFR value from FOB values, by applying the prevailing net forward freight cost. Conversely, in the absence of liquid, consistent and repeatable FOB based deals, bids or offers, Platts may determine an FOB value from CFR values, by applying the prevailing netback freight cost.
Embedded Options

Platts 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.

Bids, offers or deals that contain excessive optionalities for either the buyer or seller may likewise be disregarded in the assessment process.

Examples include loading or delivery options held by the buyer or seller, volume tolerances exercisable by the buyer or seller, or non-standard quality specifications.

General Terms & Conditions

Platts assessments reflect trades in the metallurgical coal market concluded under normal contractual terms, including widely accepted General Terms & Conditions and INCOTERMS.

Where companies express bids or offers, these are understood to be on INCOTERMS unless otherwise stated. Platts’ use of terms such as FOB, CFR, CIF, ex-works and so on are based around definitions provided by the International Chamber of Commerce which publishes the INCOTERMS.

Definitions of such terminology are available through the following web link: http://www.iccwbo.org/incoterms/ Please note that the text of INCOTERMS in whole or in part is subject to ICC’s copyright. Other related ICC publications, in printed or electronic form, are also subject to copyright.

Credit/Payment Terms

Payment terms are as per standard commercial practice.

All credit variations are normalized to 100% Letter of Credit, payable at sight. Wherever greater credit is given, this will be factored out of the price assessment process. Where a seller is prepared to discount the price for prompter payment, this will also be factored into the assessment.

Where transactions are reported with non-standard credit terms, Platts normalizes these based on prevailing commercial interest rates and typical credit payment terms in the industry at the time of the transaction.

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 required 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. Compliance is responsible for ensuring the quality and adherence to Platts’ policies, standards, processes and procedures. The Compliance team conducts regular assessments of editorial operations, including checks for adherence to published methodologies.

S&P Global’s internal auditor, an independent group that reports directly to the parent company’s board of directors, reviews the Platts risk assessment programs.

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 index or 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 its methodologies and the approach taken in price assessments, proposed methodology changes and other editorial decisions in relation to Platts’ price assessments. Platts strongly values these interactions and encourages dialogue 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 the Platts website, at: http://www.platts.com/ContactUs/Complaints.
PART VII: DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES INDEXES OR ASSESSMENTS

Platts metallurgical coal price assessments are timestamped; the time and location are noted below unless otherwise stated in the specification:

Asia Pacific  5.30 pm Singapore

Atlantic  4.30 pm London

The following Metallurgical Coal specifications guide contains the primary specifications and methodologies for Platts Metallurgical Coal assessments throughout the world. 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 will be 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 publishes daily assessments for six grades of hard coking coal, two assessments for PCI coal, one assessment for semi-soft coking coal and three assessments for metallurgical coke, for locations of loading/delivery detailed in the table below.

<table>
<thead>
<tr>
<th>$/mt</th>
<th>FOB Australia</th>
<th>CFR China</th>
<th>CFR India</th>
<th>FOB China NW Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Downs Region</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td></td>
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<tr>
<td>Premium Low Vol</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td></td>
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<tr>
<td>HCC 64 Mid Vol</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td></td>
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<tr>
<td>Low Vol PCI</td>
<td>■</td>
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<td>■</td>
<td></td>
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<tr>
<td>Mid Tier PCI</td>
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<td>Semi Soft</td>
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<td>■</td>
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<tr>
<td>Peak Downs FOB (China Netback)</td>
<td>■</td>
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<tr>
<td>Premium Low Vol FOB (China Netback)</td>
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ASSESSED SPECIFICATIONS

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<th>CSR</th>
<th>VM</th>
<th>Ash</th>
<th>S</th>
<th>P</th>
<th>TM</th>
<th>Fluidity</th>
</tr>
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<tbody>
<tr>
<td>Peak Downs Region</td>
<td>74%</td>
<td>20.70%</td>
<td>10.50%</td>
<td>0.60%</td>
<td>0.03%</td>
<td>9.50%</td>
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<tr>
<td>Premium Low Vol</td>
<td>71%</td>
<td>21.50%</td>
<td>9.30%</td>
<td>0.50%</td>
<td>0.05%</td>
<td>9.70%</td>
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<tr>
<td>HCC 64 Mid Vol</td>
<td>62%</td>
<td>21.50%</td>
<td>8.00%</td>
<td>0.45%</td>
<td>0.06%</td>
<td>10.50%</td>
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<td>Low Vol</td>
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<td>High-Vol A HCC</td>
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<td>High-Vol B HCC</td>
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<td>HARD COKING COAL</td>
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<td><strong>Assessment</strong></td>
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<td>HCC Peak Downs FOB Australia</td>
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<td>HCCGA03</td>
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<tr>
<td><strong>Wavg</strong></td>
<td>74% CSR, 20.7% VM, 9.5% TM, 10.5% ash, 0.6% sulfur, 0.03% phosphorus, 400 ddpmp maximum fluidity, 8.5 CSN, 71% vitrinite, 1.42% Ro Max, 50 mm max</td>
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Hard coking coal

Hard Coking Coal (Peak Downs Region) FOB Australia (HCCGA00)

Platts launched on August 23, 2010, daily spot Hard Coking Coal (Peak Downs Region) price assessments basis FOB Australia.

Price Assessment: Platts publishes the transactable value for Hard Coking Coal Peak Downs® indicating the assessed price at which a cargo could be traded on FOB Australia basis at the close of the assessment period on the day of publishing. Assessed values are based on normalizing the values of a range of hard coking coals with similar properties.

Platts Peak Downs Region assessment is based on FOB Australia export inputs, provided that these meet Platts' editorial standards. Delivered indications, netted back to a FOB Australia basis, may be considered to test against FOB indications, provided that these inputs reflect sufficient price consistency and repeatability for multiple destinations. The Platts freight assessment used for the back-calculation of delivered price indications will depend on freight market dynamics.

Hard Coking Coal (Premium Low Vol) FOB Australia (PLVHA00)

Platts launched on October 1, 2010, daily spot Hard Coking Coal (Premium Low Vol) price assessments basis FOB Australia.

Price Assessment: Platts publishes the transactable value for Hard Coking Coal (Premium Low Vol), indicating the price at which a cargo could be traded on FOB Australia basis at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot cargo transactions, firm bids/offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Platts Premium Low Vol assessment is based on FOB Australia export inputs, provided that these meet Platts' editorial standards. Delivered indications, netted back to a FOB Australia basis, may be considered to test against FOB indications, provided that these inputs reflect sufficient price consistency and repeatability for multiple destinations. The Platts freight assessment used for the back-calculation of delivered price indications will depend on freight market dynamics.

Premium Low Vol, Peak Downs Region, HCC 64 Mid Vol CFR China (PLVHC00, HCCGC00, HCCCH00)


Price Assessment: Platts publishes a single assessed price for each of three different quality grades: Hard Coking Coal (HCC 64 Mid Vol), Hard Coking Coal (Premium Low Vol) and Hard Coking Coal (Peak Downs Region), indicating the price at which cargoes could be traded on a CFR China basis at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot cargo transactions, firm bids/offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

The price symbol TS01044 is generated as the same numerical value as the price assessment HCCG00 following the merger of the TSI and Platts metallurgical coal price series.

The price symbol TS01045 is generated as the same numerical value as the price assessment HCCCH00 following the merger of the TSI and Platts metallurgical coal price series.

Hard Coking Coal (Premium Low Vol) FOB China Netback (PLVHD00)

Platts launched on April 1, 2016, daily spot Hard Coking Coal (Premium Low Vol) price assessments basis FOB China Netback.

Price assessment: The freight netback value is calculated by taking the HCC Premium Low Vol CFR China assessment (code: PLVHC00), less the Platts daily Panamax spot freight rate from Hay Point, Australia, to Qingdao, China (code: CDBFA00).

Hard Coking Coal (Peak Downs Region) FOB China Netback (HCCGD00)

Platts launched on April 1, 2016, daily spot Hard Coking Coal (Premium Low Vol) price assessments basis FOB China Netback.

Price assessment: The freight netback value is calculated by taking the HCC Peak Downs Region CFR China assessment (code: HCCGA00), less the Platts daily Panamax spot freight rate from Hay Point, Australia, to Qingdao, China (code: CDBFA00).

Premium Low Vol, Peak Downs Region, HCC 64 Mid Vol CFR India (PLVHI00, HCCGI00, HCCIN00)


Price Assessment: Platts publishes a single assessed price for each of three different quality grades: Hard Coking Coal (HCC 64 Mid Vol), Hard Coking Coal (Premium Low Vol) and Hard Coking Coal (Peak Downs Region), indicating the price at which cargoes could be traded on a CFR India basis at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot cargo transactions, firm bids/offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

The price symbol TS01044 is generated as the same numerical value as the price assessment HCCG00 following the merger of the TSI and Platts metallurgical coal price series.

The price symbol TS01045 is generated as the same numerical value as the price assessment HCCCH00 following the merger of the TSI and Platts metallurgical coal price series.
offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Spot prices bid/offered or traded on FOB basis may be netted forward to CFR India basis using assessed spot freight rates for dry bulk carriers on the day of assessment, for comparison with spot prices basis CFR India. For net-forward calculations from FOB origins, differing Capesize, Panamax or Handymax freight rates are taken into consideration. Platts publishes daily Panamax spot freight rates between Hay Point port in East Australia and Paradip port in East India.

Assessments also take into consideration daily Asia-Pacific price movements in associated commodity markets: thermal coal (FOB Indonesia and FOB Richard’s Bay, South Africa), coke (FOB China), iron ore (benchmark IODEX 82% Fe basis CFR Qingdao, China) and steel (domestic Indian and global steel price benchmarks) as published by Platts.

**Hard Coking Coal (HCC 64 mid vol) FOB Australia (HCCA00)**

Platts launched on March 15, 2010, daily spot Hard Coking Coal (HCC 64 Mid Vol) price assessments basis FOB Australia.

**Price Assessment:** Platts publishes the transactable value for Hard Coking Coal (HCC 64 Mid Vol), indicating the price at which a cargo could be traded on FOB Australia basis at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot transactions, firm bids / offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

When deals, bids/offers are observed to be illiquid, inconsistent and non-repeatable, spot price bids/offers or trades in key consumer markets basis CFR China, India, Europe, Japan or South Korea Taiwan may be netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers on the day of assessment. Platts publishes daily Panamax spot freight rates between Hay Point port in East Australia and Qingdao port in North China, and from Hay Point port in East Australia to Paradip port in East India.

The price symbol TS01035 is generated as the same numerical value as the price assessment HCCA00 following the merger of the TSI and Platts metallurgical coal price series.

**Low Vol Hard Coking Coal FOB United States East Coast (AAWWR00)**


**Price Assessment:** Platts publishes the transactable value for US Low Vol Hard Coking Coal (US LV HCC), indicating the price at which a spot cargo could be traded on a FOB US Atlantic Coast basis at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot transactions, firm bids / offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Spot price bids/offers or trades in key consumer markets basis CFR Europe, Brazil, China, India or Japan/Korea/Taiwan may be netted back to FOB US East Coast basis using assessed spot freight rates for dry bulk carriers on the day of assessment, for comparison with spot prices basis FOB US East Coast.

For netback calculations from CFR destinations, differing Capesize, Panamax and Handymax freight rates are taken into consideration.

**High Vol B Hard Coking Coal FOB United States East Coast (AAWWT00)**

Platts launched on August 1, 2012, daily spot US High Vol B Coking Coal price assessments basis FOB US East Coast.

**Price Assessment:** Platts publishes the transactable value for US High Vol B Coking Coal Hard Coking Coal (US HV B HCC), indicating the price at which a spot cargo could be traded on a FOB US East Coast basis at the close of the assessment period on the day of publishing. These assessed values are based on confirmed spot transactions, firm bids / offers, or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Spot price bids/offers or trades in key consumer markets basis CFR Europe, Brazil, China, India or Japan/Korea/Taiwan may be netted back to FOB US East Coast basis using assessed spot freight rates for dry bulk carriers on the day of assessment, for comparison with spot prices basis FOB US East Coast.
For netback calculations from CFR destinations, differing Capesize, Panamax and Handymax freight rates are taken into consideration.

**Premium Low Vol ex-stock Jingtang, North China (AAWZN00)**


**Price Assessment:** Platts publishes the transactable value for Premium Low Vol hard coking coal, reflecting the price at which a parcel could be traded at the close of the assessment period on the day of publishing, for prompt delivery. Assessed values are based on confirmed spot transactions, firm bids / offers of premium coking coals normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade. The assessment reflects the value of both Chinese domestic and imported coking coal sold for prompt and typical delivery in North China and at North Chinese ports in Yuan per metric ton inclusive of VAT.

Platts will monitor inland spot trade flowing from mines directly to end-users without going through ports for pricing consistency, including for domestic Chinese coal, Mongolian and Russian material. Platts will also monitor prices of seaborne metallurgical coal for pricing consistency.

**HCC 64 mid vol ex-stock Jingtang, North China (AAWZP00)**

Platts launched on December 3, 2012, weekly spot HCC 64 Mid Vol assessments basis ex-stock Jingtang, North China.

**Price Assessment:** Platts publishes the transactable value for standard-quality hard coking coal, reflecting the price at which a parcel could be traded at the close of the assessment period on the day of publishing, for prompt delivery, normalized to HCC 64 Mid Vol specifications. Assessed values are based on confirmed spot transactions, firm bids / offers of premium coking coals normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade. The assessment reflects the value of both Chinese domestic and imported coking coal sold for prompt and typical delivery in North China and at North Chinese ports in Yuan per metric ton inclusive of VAT.

Platts will monitor inland spot trade flowing from mines directly to end-users without going through ports for pricing consistency, including for domestic Chinese coal, Mongolian and Russian material. Platts will also monitor prices of seaborne metallurgical coal for pricing consistency.
# PENALTIES & PREMIA

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</tbody>
</table>
## PCI Coal

### Low Vol PCI FOB Australia (MCLVA00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis FOB Australia.

**Price Assessment:** Platts publishes the transactable value for Low Vol PCI, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade. Platts also considers on normalized basis, bids / offers or trades of comparable PCI traded FOB Canada, FOB Russia, FOB Indonesia or FOB China.

Platts will also monitor the opportunity cost of high quality Australian PCI. Opportunity cost may be derived by observing spot trades of run-of-mine material and of by-product thermal coal.

When deals, bids/offers are observed to be illiquid, inconsistent and non-repeatable, spot price bids/offers or trades in key consumer markets basis CFR China, India, Europe, Japan or South Korea Taiwan may be netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers on the day of assessment. Platts publishes daily Panamax spot freight rates between Hay Point port in East Australia and Qingdao port in North China, and from Hay Point port in East Australia to Paradip port in East India.

**Low Vol PCI CFR China (MCLVC00)**

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis, CFR China.

**Price Assessment:** Platts publishes the transactable value for Low Vol PCI, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

### Low Vol PCI CFR India (MCLVI00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR India.

**Price Assessment:** Platts publishes the transactable value for Low Vol PCI , indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

### Mid Tier PCI FOB Australia (MCLAA00)

Platts launched on October 3, 2011, daily spot Low Vol 12% Ash PCI (Pulverized Coal Injection) price assessments basis FOB Australia.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR China (MCLVC00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR China.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR India (MCLVI00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR India.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI FOB Australia (MCLA00)

Platts launched on October 3, 2011, daily spot Low Vol 12% Ash PCI (Pulverized Coal Injection) price assessments basis FOB Australia.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR China (MCLVC00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR China.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR India (MCLVI00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR India.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI FOB Australia (MCLA00)

Platts launched on October 3, 2011, daily spot Low Vol 12% Ash PCI (Pulverized Coal Injection) price assessments basis FOB Australia.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR China (MCLVC00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR China.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

### Mid Tier PCI CFR India (MCLVI00)

Platts launched on October 3, 2011, daily spot Low Vol PCI (Pulverized Coal Injection) price assessments basis CFR India.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI , indicating the price at which a cargo could be traded

<table>
<thead>
<tr>
<th>PCI COAL Assessment</th>
<th>CODE</th>
<th>Mavg</th>
<th>Wavg</th>
<th>QUALITY</th>
<th>QUANTITY</th>
<th>DIMENSIONS LOCATION</th>
<th>TIMING</th>
<th>PAYMENT TERMS</th>
<th>UOM</th>
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<tbody>
<tr>
<td>Low Vol PCI FOB Australia</td>
<td>MCLVA00</td>
<td>MCLVA03</td>
<td>13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)</td>
<td>Minimum 10,000 mt NA</td>
<td>FOB Hay Point, Australia</td>
<td>Loading in 7-45 days</td>
<td>Letter of Credit, payable at sight</td>
<td>USD/MT</td>
<td></td>
</tr>
<tr>
<td>Low Vol PCI CFR China $/Mt</td>
<td>MCLVC00</td>
<td>MCLVC03</td>
<td>13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)</td>
<td>Minimum 10,000 mt NA</td>
<td>CFR Qingdao, China</td>
<td>Delivered in 20-65 days</td>
<td>Letter of Credit, payable at sight</td>
<td>USD/MT</td>
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<tr>
<td>Low Vol PCI CFR India $/Mt</td>
<td>MCLVI00</td>
<td>MCLVI03</td>
<td>13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)</td>
<td>Minimum 10,000 mt NA</td>
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<tr>
<td>Mid Tier PCI FOB Australia</td>
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<td>MCLA03</td>
<td>15% VM, 12% ash, 0.55% sulfur, 80 HGI, 10% TM, 1 CSN</td>
<td>Minimum 10,000 mt NA</td>
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<td>Loading in 7-45 days</td>
<td>Letter of Credit, payable at sight</td>
<td>USD/MT</td>
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<tr>
<td>Mid Tier PCI CFR China $/Mt</td>
<td>MCLAC00</td>
<td>MCLAC03</td>
<td>15% VM, 12% ash, 0.55% sulfur, 80 HGI, 10% TM, 1 CSN</td>
<td>Minimum 10,000 mt NA</td>
<td>CFR Qingdao, China</td>
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<td>Letter of Credit, payable at sight</td>
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<td>MCLA103</td>
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<td>Minimum 10,000 mt NA</td>
<td>CFR Paradip, India</td>
<td>Delivered in 22-65 days</td>
<td>Letter of Credit, payable at sight</td>
<td>USD/MT</td>
<td></td>
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</tbody>
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at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade. Platts also considers on normalized basis, bids / offers or trades of comparable PCI traded FOB Canada, FOB Russia, FOB Indonesia or FOB China.

Platts will also monitor the opportunity cost of PCI, as a guideline for its assessments of spot market value. Opportunity cost may be derived by observing spot trades of run-of-mine material and of by-product thermal coal. When deals, bids/offers are observed to be illiquid, inconsistent and non-repeatable, spot price bids/ offers or trades in key consumer markets basis CFR China, India, Europe, Japan or South Korea Taiwan may be netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers on the day of assessment. Platts publishes daily Panamax spot freight rates between Hay Point port in East Australia and Qingdao port in North China, and from Hay Point port in East Australia to Paradip port in East India.

**Mid Tier PCI CFR China (MCLAC00)**

Platts launched on October 3, 2011, daily spot Low Vol 12% Ash PCI (Pulverized Coal Injection) price assessments basis CFR China. On April 2015, it was renamed Mid Tier PCI.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Platts will also monitor the opportunity cost of PCI, as a guideline for its assessments of spot market value. Opportunity cost may be derived by observing spot trades of run-of-mine material and of by-product thermal coal.

**Mid Tier PCI CFR India (MCVAI00)**

Platts launched on October 3, 2011, daily spot Low Vol 12% Ash PCI (Pulverized Coal Injection) price assessments CFR India. On April 2015, it was renamed Mid Tier PCI.

**Price Assessment:** Platts publishes the transactable value for Mid Tier PCI, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of PCI normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Platts will also monitor the opportunity cost of PCI, as a guideline for its assessments of spot market value. Opportunity cost may be derived by observing spot trades of run-of-mine material and of by-product thermal coal.
## METALLURGICAL COAL RELATIVITIES

<table>
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<tr>
<th>Assessment</th>
<th>CODE</th>
<th>Mavg</th>
<th>Wavg</th>
<th>Qavg</th>
<th>QUALITY*</th>
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<th>DIMENSIONS</th>
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<th>TIMING</th>
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<td>Letter of Credit, payable at sight</td>
<td>USD/MT</td>
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</table>

*brand specifications available upon request
Platts Metallurgical Coal Relativities

Platts launched on December 14, 2015 daily spot metallurgical coal brand relativities on a CFR China basis. Between May 2013 to November 2015, this was assessed on a monthly basis.

Platts daily metallurgical coal assessments and relativities table provides daily price assessments for various qualities of coking coal including Platts benchmark grades, Premium Low Vol and the Mid Vol marker HCC 64 Mid Vol. The price information provided is determined mostly from transactional data and spot market assessments, but also where applicable from theoretical calculations using value-in-use (VIU).

Platts has developed a normalization tool based on VIU data to track the relative values of several coal qualities. In calculating a theoretical value-in-use, Platts may apply linear penalties and premia within a certain range for coke strength after reaction (CSR), volatile matter, total moisture, ash and sulphur and non-linear adjustments for phosphorus, maximum fluidity and vitrinite percentage.

However, market observations have a stronger bearing on the relativities than VIU calculations, and theoretical VIU-based relativities are recalibrated by observing spot market data including bids, offers and trades for specific brands, and by observing the tradable or traded spreads between these brands.

The final assessed value is a combination of the observed market activity, the editorial evaluation of the coal attributes and the results offered by the calculations. Particular market events and specific circumstances may also have an influence on the market for coking coal or individual grades. Platts observes and monitors all relevant market information for consideration in its assessments.

Platts has been publishing a monthly relativity table on a monthly basis since May 2013. Since the July 2014 analysis, the table represents relativities at the end of the last working day of each month, rather than an average of relativities through the month.

Since the January 2014 analysis, the table represents relativities on a CFR China basis, rather than theoretical FOB Queensland basis. Relativities discovered on a CFR China basis are directly comparable regardless of origin due to the fact that seaborne suppliers compete on a delivered basis. For the US relativities assessments, the table represents relativities against the US Low Vol HCC FOB US East Coast. The US relativities table is assessed on a weekly basis since January 2016, on a Friday or the closest prior business day of the week in the event of a UK public holiday.

The published metallurgical coal brands values are assessed by Platts and are not affiliated with or sponsored by the brand owners. The brand specifications Platts uses are typical based on information gathered from various sources, including but not limited to; brand owners public documents, market participant feedback and engagement. The specifications are constantly monitored and updated as changes become apparent.
Semi Soft Coking Coal

Semi Soft Coking Coal FOB Australia (MCSSA00)

Platts launched on October 3, 2011, daily spot Semi Soft Coking Coal price assessments basis FOB Australia

**Price Assessment:** Platts publishes the transactable value for Semi Soft Coking Coal, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of Semi Soft coking coals normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

When deals, bids/offers are observed to be illiquid, inconsistent and non-repeatable, spot price bids/offers or trades in key consumer markets basis CFR China, India, Europe, Japan or South Korea Taiwan may be netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers on the day of assessment. Platts publishes daily Panamax spot freight rates between Hay Point port in East Australia and Qingdao port in North China, and from Hay Point port in East Australia to Paradip port in East India.

Semi Soft Coking Coal CFR China (MCSSC00)


**Price Assessment:** Platts publishes the transactable value for Semi Soft Coking Coal, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of Semi Soft coking coals normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Semi Soft Coking Coal CFR India (MCSSI00)

Platts launched on October 3, 2011, daily spot Semi Soft Coking Coal price assessments basis CFR India.

**Price Assessment:** Platts publishes the transactable value for Semi Soft Coking Coal, indicating the price at which a cargo could be traded at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of Semi Soft coking coals normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.
Metallurgical Coke

Met Coke FOB North China (AAWVL00)
Platts launched on October 1, 2014, daily spot Chinese Met Coke export price assessments basis FOB North China. Between July 5, 2012 and September 31, 2014, this price was assessed on a weekly basis.

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on an FOB North China basis at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Met Coke DDP North China (AAWVK00)
Platts launched on July 5, 2012, weekly spot domestic Chinese Met Coke price assessments basis DDP North China

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on a DDP North China basis at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Met Coke CFR East India (MCCEI00)
Platts launched on August 1, 2011, daily spot Met Coke price assessments basis CFR East India.

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on CFR East India basis at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Met Coke 65/66 CSR FOB North China (MCCNC00)
Platts launched on April 27, 2015, daily spot Chinese Met Coke export assessments for 65/66% CSR basis FOB North China.

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on a FOB North China basis at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Met Coke 65/66 CSR CFR India (MCCNI00)
Platts launched on March 1, 2018, daily spot Met Coke price assessments basis CFR India.

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on CFR India basis, normalized to CFR Paradip, at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.

Price Assessment: Platts publishes the transactable value for Met Coke indicating the price at which a cargo could be traded on CFR India basis, normalized to CFR Paradip, at the close of the assessment period on the day of publishing. Assessed values are based on confirmed spot transactions, firm bids / offers of metallurgical coke normalized to the published specification; or in the absence of liquidity, where spot transactions would have been concluded for the benchmark grade.
Swaps

**Platts Coking Coal Forward Curve**

Platts publishes daily assessments for monthly, quarterly and next calendar year TSI PHCC swaps. These financial instruments are traded fixed price or in intermonth spreads. Swaps are derivatives which settle off the average value of the underlying physical price TSI index for PHCC FOB Australia (TS01034), as published on each day during the month of trade (e.g. November). Platts publishes swaps assessments for three months ahead, called month one (M1), second month (M2) and third month (M3). Platts also publishes assessments for the next three calendar quarterly swaps, and for the next calendar year. Monthly assessments will be rolled on the first day of the month.

For example, during October 2014 the M1 coking coal swap will be November 2014, M2 will be December 2014, M3 will be January 2015, while the first published quarterly swap will be Q1 2015. On November 1, the M1 coking coal swap will roll to December, M2 will roll to January, M3 will roll to February and the quarterly swap will still be Q1 2015.

Platts may consider extending the forward curve to include further tenors, as and when market liquidity in these instruments develops.
Platts launched the PCC Met domestic price series on August 3, 2015. It includes five weekly metallurgical coal assessments. The PCC Met series follow the same assessment process as that listed in Part III: Calculating indexes and making assessments.

**Price Assessments:** PCC Met price assessments reflect the transactable value for the specification indicated at the close of the assessment period on the day of publishing, which is every Wednesday. Confirmed spot transactions and firm bids/offers, normalized to the standard specification form the basis of the assessment process. In the absence of verified market information, adjacent market information may be used to determine where spot transactions would have been concluded for the standard grade.

When deals, bids/offers are observed to be illiquid, inconsistent and non-repeatable at a specific location, spot price bids/offers or trades from other related locations may be netted back or forward to normalize to the specified location basis, using prevailing rail and truck freight.

**Basis and Location:** PCC Met Shanxi Premium Low Vol and PCC Met Shanxi High Sulfur Premium Low Vol are assessed on an ex-wash plant (Shanxi), free-on-rail (Shanxi) and delivered, duty paid Tangshan basis in Yuan/mt.

PCC Met North China Fat Coal is assessed on a delivered, duty paid Tangshan basis in Yuan/mt.
PCC Met Shanxi PCI is assessed on an ex-wash plant Changzhi (Shanxi), free-on-rail Changzhi (Shanxi) and delivered, duty paid Tangshan basis in Yuan/mt.

PCC Met Shandong Semi Soft is assessed on an ex-wash plant Jining (Shandong) and free-on-rail Jining (Shandong) basis in Yuan/mt.

Volume: The minimum-sized cargo considered for all PCC Met assessments is 1,000 mt.

Timing: PCC Met assessments consider lots loading in 3-30 days. The assessments reflect the midpoint of the loading period, and cargoes traded with more prompt or further forward timings are normalized to the middle of the loading period.

Unit: All PCC Met assessments will be published on a Yuan/mt basis including VAT.

Payment terms: All PCC Met assessments include six months' credit.

Assessment Time: The PCC Met assessments reflect the transactable value prevailing at 16:30 Singapore local time. The assessment methodology reflects values on a market on close basis. Trading activity, including bids/offers and transactions, is covered during the typical operating day with data cut off for inclusion in the assessment at 16:30 Singapore local time.

Freight routes: Two freight routes are also assessed weekly, one rail route and the other is a truck route. They are PCC Met Rail Freight Shanxi – Tangshan, and PCC Met Truck Freight Shanxi – Tangshan. They are assessed in Yuan/mt. Freight from Shanxi is normalized to Lviang.
### FREIGHT & NETBACKS

<table>
<thead>
<tr>
<th>Assessment</th>
<th>CODE</th>
<th>Mavg</th>
<th>Wavg</th>
<th>QUALITY</th>
<th>QUANTITY DIMENSIONS</th>
<th>LOCATION</th>
<th>TIMING</th>
<th>PAYMENT TERMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met Coal Dry Bulk Freight US-Brazil $/MT</td>
<td>CDBUB00</td>
<td>CDBUB03</td>
<td>Panamax class: 72-77,000 dwt, gearless vessels. Well approved modern tonnage only, not exceeding 10 years of age.</td>
<td>72,000-77,000 dwt</td>
<td>Hampton Roads - Praia Mole</td>
<td>Platts assesses spot market freight rates for vessels loading FOB US from 14-45 days. Letter of Credit, payable at sight. Close-of-market data for assessments is 4.30 pm London time, coinciding with Platts other daily Atlantic coking coal and dry bulk freight assessments. 14 to 45 days forward from the date of publication.</td>
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<tr>
<td>Met Coal Dry Bulk Freight US-China $/MT</td>
<td>CDBUC00</td>
<td>CDBUC03</td>
<td>Panamax class: 72-77,000 dwt, gearless vessels. Well approved modern tonnage only, not exceeding 10 years of age.</td>
<td>72,000-77,000 dwt</td>
<td>Hampton Roads - Qingdao</td>
<td>Platts assesses spot market freight rates for vessels loading FOB US from 14-45 days. Letter of Credit, payable at sight. Close-of-market data for assessments is 4.30 pm London time, coinciding with Platts other daily Atlantic coking coal and dry bulk freight assessments. 14 to 45 days forward from the date of publication.</td>
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<tr>
<td>Met Coal Dry Bulk Freight US-India $/MT</td>
<td>CDBUI00</td>
<td>CDBUI03</td>
<td>Panamax class: 72-77,000 dwt, gearless vessels. Well approved modern tonnage only, not exceeding 10 years of age.</td>
<td>72,000-77,000 dwt</td>
<td>Hampton Roads - Paradip</td>
<td>Platts assesses spot market freight rates for vessels loading FOB US from 14-45 days. Letter of Credit, payable at sight. Close-of-market data for assessments is 4.30 pm London time, coinciding with Platts other daily Atlantic coking coal and dry bulk freight assessments. 14 to 45 days forward from the date of publication.</td>
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<tr>
<td>Met Coal Dry Bulk Freight US-Rotterdam $/MT</td>
<td>CDBUR00</td>
<td>CDBUR03</td>
<td>Panamax class: 72-77,000 dwt, gearless vessels. Well approved modern tonnage only, not exceeding 10 years of age.</td>
<td>72,000-77,000 dwt</td>
<td>Hampton Roads - Rotterdam</td>
<td>Platts assesses spot market freight rates for vessels loading FOB US from 14-45 days. Letter of Credit, payable at sight. Close-of-market data for assessments is 4.30 pm London time, coinciding with Platts other daily Atlantic coking coal and dry bulk freight assessments. 14 to 45 days forward from the date of publication.</td>
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Platts China PLV, Met Coke Price Differentials

Platts launched the China PLV, Met Coke Price Differentials series on September 21-23, 2016. It includes five weekly metallurgical coal assessments. The China PLV, Met Coke Price Differentials series follow the same assessment process as that listed in Part III: Calculating indexes and making assessments.

Met Coal Prem Low Vol Import-Shanxi CFR China Differential Wkly (PLVHK04)


Shanxi Premium Low Vol DDP Tangshan assessment is normalized to CFR China basis, normalizing for payment terms, additional transportation and logistics costs, exchange rate and specifications to reach a port-equivalent value.

The price spread will be difference between the Premium Low Vol Shanxi CFR China equivalent price and the PLV HCC CFR China daily price on Wednesday.

Met Coke 62% CSR Export-Domestic FOB North China Differential Wkly (PLVHN04)

Platts launched on September 22, 2016, a weekly price differential between the metallurgical coke Platts FOB North China (equivalent) assessment and the Platts 64/62% CSR Metallurgical Coke FOB North China assessment.

The metallurgical coke Platts FOB North China (equivalent) assessment would be a net-forward from the existing domestic DDP China coke assessment, normalized for payment terms, logistics cost, exchange rate and specifications to FOB North China basis.

The price spread, published on Fridays, will be difference between the metallurgical coke Platts FOB North China (equivalent) and the daily Platts 64/62% CSR Metallurgical Coke FOB North China assessment.

Met Coal Prem Low Vol Import-Port Stock CFR China Differential Wkly (PLVHL04)

Platts launched on September 23, 2016, a weekly differential, on Fridays, between the metallurgical coke Platts FOB North China (equivalent) port stocks assessment and the PLV HCC CFR China daily price assessment. The port stock (CFR Jingtang) assessment is published on Fridays, while the seaborne PLV CFR China price assessment is published daily.
REVISION HISTORY

November 2018: Methodology & Specifications Guide Annual Review was conducted and clarifications made. Removed specifications for Asia-Pacific brand relativities and US HCC brand relativities which remain available upon request.

July 2018: Updated to reflect basis change of Platts swaps assessments to reflect the TSI PHCC FOB Australia swaps contracts. Updated to reflect discontinuations of Oaky Creek and Mavis Downs CFR China relativities, and the launch of Oaky North CFR China relativity.

June 2018: Updated to reflect merger of various TSI metallurgical coal indices with Platts equivalent price series.

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


February 2018: Platts updates its assessment for Blue Creek No.7 and No.4 cited in the US brand relativities weekly series.

October 2017: Methodology & Specifications Guide Annual Review was conducted.

August 2017: Updates and amending unit of measurement.

May 2017: Platts updates its assessment for Blue Creek No.4 cited in the US brand relativities weekly series.

November 2016: Methodology & Specifications Guide Annual Review was conducted and clarifications made.

September 2016: Platts adds the China PLV, Met Coke Price Differentials series.

June 2016: Platts clarifies 64/62% CSR quality for Met Coke FOB North China (AAWVL00) & Met Coke CFR East India (MCCEI00). Platts updates South 32’s Illawarra specification.


February 2015: This methodology guide was updated to include further description of Platts’ processes and practices in survey assessment environments.

October 2014: Platts increased the frequency of its Met Coke FOB North China (AAWVL00) to daily, from weekly, starting October 1, 2014.

July 2014: Platts revamped all Metals Methodology and Specification guides, including its Metallurgical Coal Methodology 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.


April 2015: Platts launches Met Coke 66/65 CSR FOB North China daily assessments.

April 2015: Platts adds methodology for CCI Met china domestic metallurgical coal price assessments.

April 2015: Platts renames Low Vol 12 Ash PCI to Mid Tier PCI.

March 2015: Platts adds details on monthly met coal relativities.

August 2015: Platts launches PCC Met Chinese domestic metallurgical coal price series.


April 2015: Platts launches Met Coke 66/65 CSR FOB North China daily assessments.

April 2015: Platts adds methodology for CCI Met china domestic metallurgical coal price assessments.

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