

Specifications guide

Metallurgical coal

Latest update: April 2020

Definitions of the trading locations for which Platts publishes index and assessments	2
Assessed specifications	2
Seaborne hard coking coal	3
Seaborne PCI coal	6
Penalties and Premia for Seaborne HCC	7
Brand Relativities	8
Semi-Soft Coking Coal	10
Metallurgical Coke	11
Derivatives	13
Domestic Chinese	14
Revision history	17

DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES INDEX AND ASSESSMENTS

All assessments employ Platts Assessments Methodology, as published at https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/platts-assessments-methodology-guide.pdf.

The TSI index methodology can be found here <https://www.spglobal.com/platts/en/our-methodology/methodology-specifications/coal/tsi-coking-coal-index-methodology>.

These guides are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification questions.

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

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 TSI PHCC index is published at 6.30 pm Singapore, or at

ASSESSED SPECIFICATIONS

	CSR	VM	Ash	S	P	TM	Fluidity
Peak Downs Region:	74%	20.70%	10.50%	0.60%	0.03%	9.50%	400
Premium Low Vol:	71%	21.50%	9.30%	0.50%	0.045%	9.70%	500
HCC 64 Mid Vol:	62%	21.50%	8.00%	0.45%	0.06%	10.50%	100

2.00 pm Singapore on the last working day before Christmas (December 25), New Year's Day (January 1) and the Lunar New Year.

Platts publishes daily numbers for seven generic grades of coking coal globally, two for PCI coal, one for semi-soft coking coal and four for metallurgical coke, for locations of loading/delivery detailed in the table below. Platts also assesses 17 individual brand relativities daily on a CFR China basis and 11 on FOB Australia basis, as well as a range of metallurgical coal and coke grades on a weekly basis in the domestic Chinese market. Platts also publishes six weekly brand relativities on an FOB Hampton Roads basis. Sulfur, ash, volatile matter and phosphorus are specified on an air-dried basis throughout this guide, unless marked otherwise.

\$/mt	FOB	CFR	CFR	FOB	CFR
	Australia	China	India	China NW	Europe
Peak Downs Region	■	■	■		
Premium Low Vol	■	■	■		■
HCC 64 Mid Vol	■	■	■		
Low Vol PCI	■	■	■		
Mid Tier PCI	■	■	■		
Semi Soft	■	■	■		
Met Coke	-	-	■	■	
Met Coke 66/65	-	-	-	■	
Peak Downs FOB (China Netback)	■				
Premium Low Vol FOB (China Netback)	■				

	FOB USEC
Low Vol	■
High-Vol A HCC	■
High-Vol B HCC	■

Glossary

A: Ash

AD: Air-dried

AR: As received

CSN: Crucible swelling number

CSR: Coke strength after reaction

CRI: Coke reactivity index

CV: calorific value

DAF: Dry ash free basis

DDPM: Dial division per minute (maximum fluidity)

FSI: Free swelling index

GAD: Gross air dried

HGI: Hardgrove grindability index

MMR Ro Max: Mean max reflectance

S: Sulfur

TD: Total dilatation

TM: Total moisture

VM: Volatile matter

SEABORNE HARD COKING COAL

Assessment	CODE	Mavg	Wavg	Rolling month	Type	Published	Page	Quality	Quantity	Incoterms	Location	Timing	Payment UOM
Australia													
HCC Peak Downs FOB Australia	HCCGA00	HCCGA03			Assessment	Daily	205	74% CSR, 20.7% VM, 9.5% TM, 10.5% ash, 0.6% sulfur, 0.03% phosphorus, 400 ddmp max fluidity, 8.5 CSN, 71% vitrinite, 1.42% Ro Max, particle size 50 mm max	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
Premium Low Vol HCC FOB Australia	PLVHA00	PLVHA03			Assessment	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
TSI Premium Hard Coking Coal Australia Export FOB East Coast Port	TS01034	TSMBH03		TSMBV03	Index	Daily	205	71% CSR, 21% VM, 10% TM, 10% ash, 0.45% sulfur, 0.05% phosphorus, 600 ddpm fluidity, 68% vitrinite, 1.35% Rvmax, FSI 8, total dilatation 80%, particle size below 55 mm for at least 90% of the cargo	Min 15,000 mt	FOB	East Coast Port, Australia	Loading 7-60 days forward	L/C at sight \$/mt
Hard Coking Coal FOB Australia	HCCAU00	HCCAU03		HCCAU04	Assessment	Daily	205	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
TSI Hard Coking Coal Australia Export FOB East Coast Port	TS01035	TSMBI03			Calculation	Daily	205	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
HCC Peak Downs FOB Australia (China Netback)	HCCGD00				Calculation	Daily	205	74% CSR, 20.7% VM, 9.5% TM, 10.5% ash, 0.6% sulfur, 0.03% phosphorus, 400 ddmp max fluidity, 8.5 CSN, 71% vitrinite, 1.42% Ro Max, particle size 50 mm max	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
Prem Low Vol HCC FOB Australia (China Netback)	PLVHD00				Calculation	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight \$/mt
China													
Hard Coking Coal Peak Downs CFR China	HCCGC00	HCCGC03			Assessment	Daily	205	74% CSR, 20.7% VM, 9.5% TM, 10.5% ash, 0.6% sulfur, 0.03% phosphorus, 400 ddmp max fluidity, 8.5 CSN, 71% vitrinite, 1.42% Ro Max, 50 mm max	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight \$/mt
TSI Prem JM25 Coking Coal China Imports CFR Jingtang Port	TS01044	TSMBR03		TSMBW03	Calculation	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight \$/mt
Premium Low Vol HCC CFR China	PLVHC00	PLVHC03			Assessment	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight \$/mt
Hard Coking Coal CFR China	HCCCH00	HCCCH03		HCCCH04	Assessment	Daily	205	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight \$/mt
TSI Hard JM25 Coking Coal China Imports CFR Jingtang Port	TS01045	TSMB503			Calculation	Daily	205	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight \$/mt
India													
HCC Peak Downs CFR India	HCCGI00	HCCGI03			Assessment	Daily	205	74% CSR, 20.7% VM, 9.5% TM, 10.5% ash, 0.6% sulfur, 0.03% phosphorus, 400 ddmp max fluidity, 8.5 CSN, 71% vitrinite, 1.42% Ro Max, 50 mm max	Min 10,000 mt	CFR	Paradip, India	Delivered 20-65 days forward	L/C at sight \$/mt
Premium Low Vol HCC CFR India	PLVHI00	PLVHI03			Assessment	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	CFR	Paradip, India	Delivered 20-65 days forward	L/C at sight \$/mt
Hard Coking Coal CFR India	HCCIN00	HCCIN03		HCCIN04	Assessment	Daily	205	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	Min 10,000 mt	CFR	Paradip, India	Delivered 20-65 days forward	L/C at sight \$/mt

SEABORNE HARD COKING COAL

Assessment	CODE	Mavg	Wavg	Rolling month	Type	Published	Page	Quality	Quantity	Incoterms	Location	Timing	Payment UOM
US*													
Low Vol Hard Coking Coal USEC	AAWNR00	AAWNR03			Assessment	Daily	1049	58% CSR, 19.25% VM, 8% TM, 8.25% ash, 0.95% sulfur	Min 10,000 mt	FOB	Hampton Roads, US	Loading 14-60 days forward	L/C at sight \$/mt
High Vol A Coking Coal USEC	AAWNS00	AAWNS03			Assessment	Daily	1049	32.25% VM, 8% TM, 7.5% ash, 0.95% sulfur, 30,000 ddpm max fluidity, 1.05 MMR, 220% dilatation	Min 10,000 mt	FOB	Hampton Roads, US	Loading 14-60 days forward	L/C at sight \$/mt
High Vol B Coking Coal USEC	AAWNT00	AAWNT03			Assessment	Daily	1049	36% VM, 8% TM, 8% ash, 1% sulfur, 25,000 ddpm max fluidity, 0.95 MMR, 160% dilatation	Min 10,000 mt	FOB	Hampton Roads, US	Loading 14-60 days forward	L/C at sight \$/mt
* all relevant specification dry basis													
Europe													
Premium Low Vol HCC NWE	PLVHE00	PLVHE03			Calculation	Daily	205	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm max fluidity, 65% vitrinite	Min 10,000 mt	CFR	Rotterdam, Netherlands	Delivered 52-90 days forward	L/C at sight \$/mt

Seaborne Hard Coking Coal

Australia

Price assessments

PLVHA00 - Premium Low Vol HCC FOB Australia

HCCGA00 - Peak Downs Region HCC FOB Australia

Premium Low Vol and Peak Downs® assessments on an FOB Australia basis reflect the spot transactable value at the close of the assessment period on the day of publishing. These assessments are based on FOB Australia export inputs, provided that these meet Platts' editorial standards. Delivered indications, netted back to an 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.

Price index

TS01034 - TSI Premium Hard Coking Coal FOB East Coast Port Australia

TSI's Premium Hard Coking Coal reference price is calculated as a weighted-average index on an FOB East Coast Port Australia for Australian exports. Relevant ports for the FOB East Coast Port Australia reference prices include the Queensland ports of Dalrymple Bay, Hay Point, Gladstone and Abbot Point; and in New South Wales: Newcastle and Port Kembla. Market data submitted for transactions with specifications in the following ranges are considered and normalized to the standard specifications defined in this guide:

Volatile Matter (ad): 18.0% min – 25.0% max inclusive

Ash (ad): 11.0% max

Total Moisture (ar): 12.0% max

Sulphur (ad): 0.80% max

Phosphorous (ad): 0.09% max

Rvmax: 1.15% min

Fluidity: no upper limit

FSI: 7 min

CSR: 67% min

Total Dilatation: no restriction

Vitrinite: 50% min

Payment:

All payment terms are normalized to 'At sight'

Price assessments

HCCAU00 - HCC 64 mid vol FOB Australia

TS01035 - TSI Hard Coking Coal Australia Export FOB East Coast Port

These assessments are published at parity, following the merger of some of the Platts and TSI metallurgical coal price series, effective June 2018. Platts uses pricing information on FOB Australia basis, but may also consider delivered indications in key consumer markets basis CFR China, India, Europe, Japan or South Korea, Taiwan netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers, provided that these inputs reflect sufficient price consistency and repeatability for multiple destinations. 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.

Price assessments

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

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

These freight netback values are calculated by taking the HCC Premium Low Vol CFR China assessment (PLVHC00) and HCC Peak Downs Region CFR China assessment (HCCGC00), and subtracting the Platts daily Panamax spot freight rate from Hay Point, Australia, to Qingdao, China (CDBFA00).

China

Price assessments

PLVHC00 - Premium Low Vol CFR China

HCCGC00 - Peak Downs Region CFR China

HCCCH00 - HCC 64 Mid Vol CFR China

These prices are assessed on the basis of indications received on CFR China basis and reflect the spot transactable value at the close of the assessment period on the day of publishing. Loaded indications on an FOB basis netted forward to a CFR China basis may also be considered to test against CFR indications.

Price assessments

TS01044 - TSI Prem JM25 Coking Coal China Imports CFR Jingtang Port

TS01045 - TSI Hard JM25 Coking Coal China Imports CFR Jingtang Port

Following the merger of some of the TSI and Platts metallurgical coal price series effective June 2018, TSI Prem JM25 Coking Coal China Imports CFR Jingtang Port assessment is published at parity with Premium Low Vol CFR China (PLVHC00); and TSI Hard JM25 Coking Coal China Imports CFR Jingtang Port is published at parity with HCC 64 Mid Vol CFR China (HCCCH00),

India

Price assessments

PLVHI00 - Premium Low Vol CFR India

HCCGI00 - Peak Downs Region CFR India

HCCIN00 - HCC 64 Mid Vol CFR India

The Peak Downs Region, Premium Low Vol and HCC 64 Mid Vol assessments on CFR India basis are calculated as a sum of respective FOB Australia assessments and a Panamax dry bulk freight on the Australia-India route (CDBFAI0).

US

Price assessments

AAWWR00 - Low Vol Hard Coking Coal FOB US East Coast

AAWWS00 - High Vol A Hard Coking Coal FOB US East Coast

AAWWT00 - High Vol B Hard Coking Coal FOB US East Coast

US Low Vol, US High Vol A and US High Vol B Coking Coal indicate 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. 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. Platts assessments also take into account Hard Coking Coal demand/supply fundamentals in the US, Australia and key consumer markets.

Europe

Price assessments

PLVHE00 - Prem Low Vol HCC CFR NWE

Premium Low Vol Hard Coking Coal CFR NW Europe represents a delivered spot price for Australian Premium Low Vol (PLVHA00) in Northwest Europe, calculated by adding daily Platts Capesize freight assessment between Hay Point, Queensland and Rotterdam (CDBUR00) to the Australian benchmark.

SEABORNE PCI COAL

Assessment	CODE	Mavg	Type	Published	Page	Quality	Quantity	Incoterms	Location	Timing	Payment	UOM
Australia												
Low Vol PCI FOB Australia	MCLVA00	MCLVA03	Assessment	Daily	205	13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Mid Tier PCI FOB Australia	MCLAA00	MCLAA03	Assessment	Daily	205	15% VM, 12% ash, 0.55% sulfur, 80 HGI, 10% TM, 1 CSN	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight	\$/mt
China												
Low Vol PCI CFR China	MCLVC00	MCLVC03	Assessment	Daily	205	13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Mid Tier PCI CFR China	MCLAC00	MCLAC03	Assessment	Daily	205	15% VM, 12% ash, 0.55% sulfur, 80 HGI, 10% TM, 1 CSN	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
India												
Low Vol PCI CFR India	MCLVI00	MCLVI03	Assessment	Daily	205	13% VM, 8.5% ash, 0.55% sulfur, 7,800 kcal/kg (GAD), 78 HGI, 10% TM, 90.5% total carbon (DAF)	Min 10,000 mt	CFR	Paradip, India	Delivered 20-65 days forward	L/C at sight	\$/mt
Mid Tier PCI CFR India	MCVAI00	MCVAI03	Assessment	Daily	205	15% VM, 12% ash, 0.55% sulfur, 80 HGI, 10% TM, 1 CSN	Min 10,000 mt	CFR	Paradip, India	Delivered 20-65 days forward	L/C at sight	\$/mt

Seaborne PCI Coal**Australia**Price assessments

MCLVA00 - Low Vol PCI FOB Australia

MCLAA00 - Mid-Tier PCI FOB Australia

These prices are assessed on the basis of indications received on FOB Australia basis and reflect the spot transactable value at the close of the assessment period on the day of publishing. Platts uses pricing information on FOB Australia basis, but may also consider delivered indications in key consumer markets basis CFR China, India, Europe, Japan or South Korea, Taiwan netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers, provided that these inputs

reflect sufficient price consistency and repeatability for multiple destinations. Platts also monitors the opportunity cost of high quality Australian PCI, which may be derived by observing spot trades of run-of-mine material and through energy-adjusted calculations relating to thermal coal prices.

ChinaPrice assessments:

MCLVC00 - Low Vol PCI CFR China

MCLAC00 - Mid-Tier PCI CFR China

These prices are assessed on the basis of indications received on CFR China basis and reflect the spot transactable value at the close of the assessment period on the day of publishing. Loaded indications on an FOB basis netted forward to a CFR

China basis may also be considered to test against CFR indications. Besides price points for PCI, Platts may also take into consideration daily price movements in the thermal coal markets.

IndiaPrice assessments:

MCLVI00 - Low Vol PCI CFR India

MCVAI00 - Mid-Tier PCI CFR India

The CFR India price are net forwards, calculated as a sum of respective FOB Australia assessments and a Panamax dry bulk freight on the Australia-India route (CDBFAI0).

PENALTIES AND PREMIA FOR SEABORNE HCC

Assessment	CODE	Mavg	Type	Published	Page	Quality	Quantity	Incoterms	Location	Payment	UOM
Asia-Pacific											
CSR per 1% as % PLV FOB Australia	CPCSA00		Assessment	Daily	205	Penalty/premia applied for 60-71% Coal Strength After Reaction	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	%
CSR per 1% PLV \$/Mt	CPCSP00		Assessment	Daily	205	Penalty/premia applied for 60-71% Coal Strength After Reaction	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	\$/mt
Sulfur per 0.1% PLV \$/Mt FOB Australia	CPSPA00		Assessment	Daily	205	Penalty/premia applied for 0.3-1% Sulfur	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	%
Sulfur per 0.1% PLV \$/Mt	CPSPV00		Assessment	Daily	205	Penalty/premia applied for 0.3-1% Sulfur	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	\$/mt
VM per 1% as % PLV FOB Australia	CPVPA00		Assessment	Daily	205	Penalty/premia applied for 18-27% Volatile Matter	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	%
VM per 1% PLV \$/Mt	CPVMP00		Assessment	Daily	205	Penalty/premia applied for 18-27% Volatile Matter	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	\$/mt
TM per 1% as % PLV FOB Australia	CPTPA00		Assessment	Daily	205	Penalty/premia applied for 8-11% Total Moisture	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	%
TM per 1% PLV \$/Mt	CPTMP00		Assessment	Daily	205	Penalty/premia applied for 8-11% Total Moisture	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	\$/mt
Ash per 1% as % PLV FOB Australia	CPAPA00		Assessment	Daily	205	Penalty/premia applied for 7-10.5% Ash	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	%
Ash per 1% PLV \$/Mt	CPPAP00		Assessment	Daily	205	Penalty/premia applied for 7-10.5% Ash	min 10,000 mt	FOB	Hay Point, Australia	L/C at sight	\$/mt
Atlantic											
CSR per 1% as % US LV FOB USEC	CPPBA00		Assessment	Daily	1049	Penalty/premia applied for 50-64% Coal Strength After Reaction	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
CSR per 1% US LV FOB USEC \$/mt	CPPBB00	CBBBB03	Assessment	Daily	1049	Penalty/premia applied for 50-64% Coal Strength After Reaction	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt
CSR per 1% as % US LV FOB USEC	CPPBC00		Assessment	Daily	1049	Penalty premia applied for 40-49% Coal Strength After Reaction	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
CSR per 1% US LV FOB USEC \$/mt	CPPBD00	CPPBD03	Assessment	Daily	1049	Penalty premia applied for 40-49% Coal Strength After Reaction	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt
Sulfur per 0.1% as % US LV FOB USEC	CPPBE00		Assessment	Daily	1049	Penalty premia applied for 0.7-1.05% Sulfur	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
Sulfur per 0.1% US LV FOB USEC \$/mt	CPPBF00	CPPBF03	Assessment	Daily	1049	Penalty premia applied for 0.7-1.05% Sulfur	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt
Sulfur per 0.1% as % US LV FOB USEC	CPPBG00		Assessment	Daily	1049	Penalty premia applied for 1.06-1.25% Sulfur	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
Sulfur per 0.1% US LV FOB USEC \$/mt	CPPBH00	CPPBH03	Assessment	Daily	1049	Penalty premia applied for 1.06-1.25% Sulfur	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt
TM per 1% as % US LV FOB USEC	CPPBK00		Assessment	Daily	1049	Penalty premia applied for 6-11% Total Moisture	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
TM per 1% US LV FOB USEC \$/mt	CPPBL00	CPPBL03	Assessment	Daily	1049	Penalty premia applied for 6-11% Total Moisture	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt
Ash per 1% as % US LV FOB USEC	CPPBI00		Assessment	Daily	1049	Penalty premia applied for 5-10% Ash	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	%
Ash per 1% US LV FOB USEC \$/mt	CPPBJ00	CPPBJ03	Assessment	Daily	1049	Penalty premia applied for 5-10% Ash	min 10,000 mt	FOB	Hampton Roads, US	L/C at sight	\$/mt

BRAND RELATIVITIES

Assessment	Code	Mavg	Type	Published	Page	Quality	Quantity	Incoterms	Location	Timing	Payment	UOM
China												
Carborough Downs	MCBA000	MCBA003	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
German Creek	MCBAC00	MCBAC03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Goonyella C	MCBAI00	MCBAI03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Goonyella	MCBAE00	MCBAE03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
GLV	MCBAF00	MCBAF03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Illawarra	MCBAH00	MCBAH03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Lake Vermont	MCBAN00	MCBAN03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Middlemount Coking	MCBAP00	MCBAP03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Moranbah North	MCBAG00	MCBAG03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Oaky North	MCBAR00	MCBAR03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Peak Downs	MCBAA00	MCBAA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Peak Downs North	MCBAJ00	MCBAJ03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Poitrel Semi Hard	MCBAQ00	MCBAQ03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Riverside	MCRVR00	MCRVR03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Saraji	MCBAB00	MCBAB03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Australia												
German Creek	HCGCA00	HCGCA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Goonyella C	HCGNA00	HCGNA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Goonyella	HCGOA00	HCGOA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
GLV	HCHCA00	HCHCA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Illawarra	HCIWA00	HCIWA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Moranbah North	HCMOA00	HCMOA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Oaky North	HCOKA00	HCOKA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Peak Downs	HCPDA00	HCPDA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Peak Downs North	HCPNA00	HCPNA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Riverside	HCRVA00	HCRVA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Saraji	HCSAA00	HCSAA03	Assessment	Daily	1064	as per typical specifications	Min 10,000 mt	FOB	Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Atlantic												
Blue Creek No. 7	MCAPB04	MCAPB03	Assessment	Weekly	1065	as per typical specifications	Min 10,000 mt	FOB	Mobile, US Gulf	Loading 14-60 days forward	L/C at sight	\$/mt
Blue Creek No. 4	MCAPC04	MCAPC03	Assessment	Weekly	1065	as per typical specifications	Min 10,000 mt	FOB	Mobile, US Gulf	Loading 14-60 days forward	L/C at sight	\$/mt
Beckley	MCAPD04	MCAPD03	Assessment	Weekly	1065	as per typical specifications	Min 10,000 mt	FOB	Hampton Roads, USEC	Loading 14-60 days forward	L/C at sight	\$/mt
Windber	MCAPE04	MCAPE03	Assessment	Weekly	1065	as per typical specifications	Min 10,000 mt	FOB	Hampton Roads, USEC	Loading 14-60 days forward	L/C at sight	\$/mt
Buchanan	MCAPF04	MCAPF03	Assessment	Weekly	1065	as per typical specifications	Min 10,000 mt	FOB	Hampton Roads, USEC	Loading 14-60 days forward	L/C at sight	\$/mt

*Brand specifications available upon request

Platts Metallurgical Coal Relativities

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.

APAC

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 assesses VIU penalties and premia to help 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. Platts may also apply other penalties and premia on an ad-hoc basis to account for additional quality or commercial factors.

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.

US

Platts publishes values for Beckley, Buchanan and Windber brands on FOB Hampton Roads basis; and Blue Creek No.7 and

Blue Creek No. 4 on FOB Mobile, Alabama basis. The US brand relativities reflect a laycan period of 14-60 days forward. Sulfur, ash, volatile matter and phosphorus for US brands are specified on a dry basis.

Platts assesses US metallurgical coal relativities based on the information gathered from the market. In the absence of confirmed bids, offers and transactions, Platts calculates prices for Beckley, Buchanan and Windber brands by applying the published penalty and premia for CSR, moisture, ash and sulfur to the US East Coast Low-Vol HCC (AAWWR00). For the Blue Creek No. 7 and Blue Creek No. 4 brands, in line with the common trading terms for these coals, Platts may use FOB Australia premium coking coal indices (PLVHA00 and TS01035) and take into account the forward curve values for typical laycans,.

The US relativities table is published on Friday or the closest prior business day of the week in the event of a UK public holiday.

SEMI-SOFT COKING COAL

Assessment	CODE	Mavg	Type	Published	Page	Quality	Quantity	Incoterms	Location	Timing	Payment	UOM
Semi Soft FOB Australia	MCSSA00	MCSSA03	Assessment	Daily	205	34% VM, 9.5% TM, 9.25% ash, 0.58% sulfur, 0.025% phosphorus, 53% fixed carbon, 200 ddpm max fluidity, 5.5 CSN	Min 10,000 mt	FOB	Hay Point, Australia	Loading 7-45 days forward	L/C at sight	\$/mt
Semi Soft CFR China	MCSSC00	MCSSC03	Assessment	Daily	205	34% VM, 9.5% TM, 9.25% ash, 0.58% sulfur, 0.025% phosphorus, 53% fixed carbon, 200 ddpm max fluidity, 5.5 CSN	Min 10,000 mt	CFR	Qingdao, China	Delivered 20-65 days forward	L/C at sight	\$/mt
Semi Soft CFR India	MCSSI00	MCSSI03	Assessment	Daily	205	34% VM, 9.5% TM, 9.25% ash, 0.58% sulfur, 0.025% phosphorus, 53% fixed carbon, 200 ddpm max fluidity, 5.5 CSN	Min 10,000 mt	CFR	Paradip, India	Delivered 22-65 days forward	L/C at sight	\$/mt

Semi-Soft Coking Coal

Australia

Price assessments

MCSSA00 – Semi-Soft Coking Coal FOB Australia

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. Platts uses pricing information on FOB Australia basis, but may also consider delivered indications in key consumer markets basis CFR China, India, Europe, Japan or South Korea, Taiwan netted back to FOB Australia basis using assessed Panamax spot freight rates for dry bulk carriers, provided that these inputs

reflect sufficient price consistency and repeatability for multiple destinations. Besides price points for semi-soft coking coal, Platts may also take into consideration daily price movements in the thermal coal markets.

China

Price assessments

MCSSC00 – Semi-Soft Coking Coal CFR China

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. Platts uses pricing information on CFR China basis, but loaded indications on an FOB basis netted forward to a CFR China basis

may also be considered to test against CFR indications. Besides price points for semi-soft coking coal, Platts may also take into consideration daily price movements in the thermal coal markets.

India

Price assessments

MCSSI00 – Semi-Soft Coking Coal CFR India

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. The CFR India price are net forwards, calculated as a sum of respective FOB Australia assessments and a Panamax dry bulk freight on the Australia-India route (CDBFAI0).

METALLURGICAL COKE

Assessment	CODE	Mavg	Wavg	Type	Frequency	Page	Quality	Quantity	Incoterms	Location	Timing	Payment	UOM
China (Seaborne)													
Coke 12.5% Ash FOB Tianjin China	AAWVL00	AAWVL03	AAWVL04	Assessment	Daily	205	64/62% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25-26% CRI, 5% TM	Min 10,000 mt	FOB	Tianjin, China	Loading 7-45 days forward	L/C at sight	\$/mt
Met Coke 66/65 CSR FOB North China	MCCNC00	MCCNC03		Assessment	Daily	205	66/65% CSR, 12.5% ash, 0.65% sulfur, 84% min Micum 40, 7% max Micum 10, 30-90 mm size, 25% CRI, 5% TM	Min 10,000 mt	FOB	Tianjin, China	Loading 7-45 days forward	L/C at sight	\$/mt
Met Coke 65/63 CSR FOB North China	MCCHB00	MCCHB03		Assessment	Daily	205	65/63% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25%-26% CRI, 5% TM	Min 10,000 mt	FOB	Tianjin, China	Loading 7-45 days forward	L/C at sight	\$/mt
Met Coke 62/60 CSR FOB North China	MCCHA00	MCCHA03		Assessment	Daily	205	62/60% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25%-26% CRI, 5% TM	Min 10,000 mt	FOB	Tianjin, China	Loading 7-45 days forward	L/C at sight	\$/mt
China (Domestic)													
Coke 12.5% Ash DDP North China Yuan/mt	AAWVJ00	AAWVJ03	AAWVJ04	Assessment	Weekly	1052	62% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25-26% CRI, 5% TM	Min 300 mt	DDP	Tangshan, China	Dispatched within 30 days	L/C 90 days	Yuan/mt
Coke 12.5% Ash DDP North China	AAWVK00	AAWVK03	AAWVK04	Calculation	Weekly	1052	62% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25-26% CRI, 5% TM	Min 300 mt	DDP	Tangshan, China	Dispatched within 30 days	L/C 90 days	\$/mt
Met Coke 62% CSR FOB North China Equivalent	PLVHM04	PLVHM03		Assessment	Weekly	1052	62% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25-26% CRI, 5% TM	NA	FOB	North China	NA	NA	\$/mt
Met Coke 62% CSR Export-Domestic FOB North China Differential	PLVHN04	PLVHN03		Calculation	Weekly	1052	NA	NA	NA	NA	NA	NA	\$/mt
India (Seaborne)													
Met Coke CFR East India	MCCEI00	MCCEI03		Assessment	Daily	205	64/62% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25-26% CRI, 5% TM	Min 5,000 mt	CFR	Paradip, India	Delivered 22-65 days forward	L/C at sight	\$/mt
Met Coke 66/65 CSR CFR India	MCCNI00	MCCNI03		Assessment	Daily	205	66/65% CSR, 12.5% ash, 0.65% sulfur, 84% min Micum 40, 7% max Micum 10, 30-90 mm size, 25% CRI, 5% TM	Min 10,000 mt	CFR	Paradip, India	Delivered 22-65 days forward	L/C at sight	\$/mt
Met Coke 65/63 CSR CFR India	MCINB00	MCINB03		Assessment	Daily	205	65/63% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25%-26% CRI, 5% TM	Min 10,000 mt	CFR	Paradip, India	Delivered 22-65 days forward	L/C at sight	\$/mt
Met Coke 62/60 CSR CFR India	MCINA00	MCINA03		Assessment	Daily	205	62/60% CSR, 12.5% ash, 0.65% sulfur, 82% min Micum 40, 8% max Micum 10, 30-80 mm size, 25%-26% CRI, 5% TM	Min 10,000 mt	CFR	Paradip, India	Delivered 22-65 days forward	L/C at sight	\$/mt

Metallurgical Coke

China

Price assessments

MCCNC00 - Met Coke 66/65 CSR FOB North China

MCCHB00 - Met Coke 65/63 CSR FOB North China

AAWVL00 - Met Coke FOB North China

MCCHA00 - Met Coke 62/60 CSR FOB North China

These prices reflect transactable values on an FOB North China basis at the close of the assessment period on the day of publishing. The CSR range for each assessment refers to the “minimum guaranteed/rejection” range, for example, met coke with a 66%/65% CSR refers to a minimum 66% CSR guaranteed, with rejection for CSR below 65%. Met Coke FOB North China (AAWVL00) assessment specifies a minimum 64% CSR guaranteed, with rejection for CSR below 62%.

Domestic Chinese

Price assessments

AAWVJ00 - Met Coke DDP North China Yuan/mt

AAWVK00 - Met Coke DDP North China \$/mt

PLVHM04 - Met Coke 62% CSR FOB North China Equivalent Weekly

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

Platts publishes the transactable value for Met Coke on a DDP North China basis at the close of the assessment period on Friday. The price is assessed in Yuan/mt and is also converted into \$/mt.

The Met Coke 62% CSR FOB North China Equivalent is a calculation from the domestic DDP China coke assessment (AAWVJ00), normalized for payment terms, logistics cost and exchange rate to FOB North China basis. In addition to the

outright price, Platts also publishes its differential to Platts 64/62% CSR Met Coke FOB North China assessment (AAWVL00).

India

Price assessments:

MCCNI00 - Met Coke 66/65 CSR CFR India

MCINB00 - Met Coke 65/63 CSR CFR India

MCCEI00 - Met Coke CFR East India

MCINA00 - Met Coke 62/60 CSR CFR India

These prices reflect the transactable value of Met Coke on a CFR East India basis at the close of the assessment period on the day of publishing. The CSR range for each assessment refers to the “minimum guaranteed/rejection” range, for example, met coke with a 66%/65% CSR refers to a minimum 66% CSR guaranteed, with rejection for CSR below 65%. Met Coke CFR East India (MCCEI00) assessment specifies a minimum 64% CSR guaranteed, with rejection for CSR below 62%.

DERIVATIVES

Assessment	CODE	Mavg	Type	Frequency	Page	Quality	Quantity	Location	Timing	UOM
TSI Premium Hard Coking Coal FOB Australia Derivative Mo01	MCPLM01	MCPLM13	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	First month after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Mo02	MCPLM02	MCPLM23	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	Second month after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Mo03	MCPLM03	MCPLM33	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	Third month after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Qr01	MCPLQ01	MCPLQ13	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	First quarter after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Qr02	MCPLQ02	MCPLQ23	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	Second quarter after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Qr03	MCPLQ03	MCPLQ33	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	Third quarter after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Yr01	MCPLY01	MCPLY13	Assessment	Daily	1113	Basis TSI PHCC FOB Australia index	NA	NA	First calendar year after month of prevailing index date	\$/mt
TSI Premium Hard Coking Coal FOB Australia Derivative Yr02	MCPLY02		Assessment	Daily	1113	Basis TSI PHCC FOB Australia index			Second calendar year after month of prevailing index date	\$/mt

Derivatives

Platts publishes daily assessments for monthly, quarterly and calendar year TSI PHCC derivatives. These financial instruments are traded at a fixed price or in intermonth spreads. These derivatives 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. Platts publishes derivatives assessments for three months ahead, called month one (Mo01), second month (Mo02) and third month (Mo03). Platts also publishes assessments for the next three calendar quarterly derivatives, and for the next two calendar years. Monthly assessments roll on the first day of the month. Quarters

are defined as calendar quarters, for example Q3 refers to July, August and September. Quarterly derivatives assessments roll four times a year on the first business days of January, April, July and October. A year is defined as a calendar year, for example 2020, i.e. from the first to the last business working day in that year.

For example, during October 2019 the Mo01 coking coal derivative is November 2019, Mo02 is December 2019, Mo03 is January 2020, while the first published quarterly derivative is Q1 2020. On November 1, the Mo01 coking coal derivative rolls to December, Mo02 rolls to January, Mo03 rolls to February and the quarterly derivative remains Q1 2020.

DOMESTIC CHINESE

Assessment	CODE	Mavg	Wavg	Type	Frequency	Page	QUALITY	QUANTITY	INCOTERMS	LOCATION	TIMING	PAYMENT	UOM
Ex-Washing Plant													
PCC Met Shanxi Premium Low Vol Ex-washing plant	PCCMA04	PCCMA03		Assessment	Weekly	1050	68% CSR, 16.9% VM (ad), 9.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 85 G-value	Min 1,000 mt	Ex-washing plant	Lvliang, Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shanxi High Sulfur Premium Low Vol Ex-washing plant	PCCMD04	PCCMD03		Assessment	Weekly	1050	68% CSR, 19.5% VM (ad), 10.8% ash (ad), 8% TM (ar), 1.6% sulfur (ad), 85 G-value	Min 1,000 mt	Ex-washing plant	Lvliang, Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shanxi PCI Ex-washing plant	PCCMH04	PCCMH03		Assessment	Weekly	1050	9.3% VM (ad), 10.8% ash (ad), 8% TM (ar), 0.5% sulfur (ad)	Min 1,000 mt	Ex-washing plant	Changzhi, Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shandong Semi Soft Ex-washing plant	PCCMK04	PCCMK03		Assessment	Weekly	1050	29.6% VM (ad), 8.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 70 G-value	Min 1,000 mt	Ex-washing plant	Jining, Shandong, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
Free-on-Rail													
PCC Met Shanxi Premium Low Vol Free-on-Rail	PCCMB04	PCCMB03		Assessment	Weekly	1050	68% CSR, 16.9% VM (ad), 9.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 85 G-value	Min 1,000 mt	Free-on-rail	Lvliang, Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shanxi High Sulfur Premium Low Vol Free-on-Rail	PCCME04	PCCME03		Assessment	Weekly	1050	68% CSR, 19.5% VM (ad), 10.8% ash (ad), 8% TM (ar), 1.6% sulfur (ad), 85 G-value	Min 1,000 mt	Free-on-rail	Lvliang, Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shanxi PCI Free-on-Rail	PCCMI04	PCCMI03		Assessment	Weekly	1050	9.3% VM (ad), 10.8% ash (ad), 8% TM (ar), 0.5% sulfur (ad)	Min 1,000 mt	Free-on-rail	Changzhi Shanxi, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shandong Semi Soft Free-on-Rail	PCCML04	PCCML03		Assessment	Weekly	1050	29.6% VM (ad), 8.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 70 G-value	Min 1,000 mt	Free-on-rail	Jining, Shandong, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
DDP Tangshan													
PCC Met Shanxi Premium Low Vol DDP Tangshan	PCCMC04	PCCMC03		Assessment	Weekly	1050	68% CSR, 16.9% VM (ad), 9.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 85 G-value	Min 1,000 mt	DDP	Tangshan, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
Met Coal Prem Low Vol Shanxi CFR China Equivalent	PLVHJ04	PLVHJ03		Calculation	Weekly	1050	68% CSR, 16.9% VM (ad), 9.3% ash (ad), 8% TM (ar), 0.6% sulfur (ad), 85 G-value	NA	CFR	China	NA	NA	\$/mt
Met Coal Prem Low Vol Import-Shanxi CFR China Differential	PLVHK04	PLVHK03		Calculation	Weekly		NA	NA	NA	NA	NA	NA	\$/mt
PCC Met Shanxi High Sulfur Premium Low Vol DDP Tangshan	PCCMF04	PCCMF03		Assessment	Weekly	1050	68% CSR, 19.5% VM (ad), 10.8% ash (ad), 8% TM (ar), 1.6% sulfur (ad), 85 G-value	Min 1,000 mt	DDP	Tangshan, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met North China Fat Coal DDP Tangshan	PCCMG04	PCCMG03		Assessment	Weekly	1050	55% CSR, 25.4% VM (ad), 9.8% ash (ad), 8% TM (ar), 1.2% sulfur (ad), 90 G-value	Min 1,000 mt	DDP	Tangshan, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Shanxi PCI DDP Tangshan	PCCMJ04	PCCMJ03		Assessment	Weekly	1050	9.3% VM (ad), 10.8% ash (ad), 8% TM (ar), 0.5% sulfur (ad)	Min 1,000 mt	DDP	Tangshan, China	Loading in 3-30 days	L/C 180 days	Yuan/mt
Ex-Stock Jingtang													
Prem Low Vol Ex-Stock Jingtang	AAWZN00	AAWZN03	AAWZN04	Assessment	Weekly	1062	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm maximum fluidity, 65% vitrinite	10,000-20,000 mt	Ex-stock	Jingtang port, China	Delivered 20 days forward	Cash	Yuan/mt
HCC 64 Mid Vol Ex-Stock Jingtang	AAWZP00	AAWZP03		Assessment	Weekly	1062	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	10,000-20,000 mt	Ex-stock	Jingtang port, China	Delivered 20 days forward	Cash	Yuan/mt
CFR Jintang Equivalents													
Prem Low Vol CFR Jingtang Equivalent	AAWZ000	AAWZ003		Calculation	Weekly	1062	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm maximum fluidity, 65% vitrinite	10,000-20,000 mt	CFR	Jingtang port, China	Delivered 20 days forward	Cash	\$/mt

DOMESTIC CHINESE

Assessment	CODE	Mavg	Wavg	Type	Frequency	Page	QUALITY	QUANTITY	INCOTERMS	LOCATION	TIMING	PAYMENT	UOM
Met Coal Prem Low Vol Import-Port Stock CFR China Differential	PLVHL04	PLVHL03		Calculation	Weekly	1062	71% CSR, 21.5% VM, 9.7% TM, 9.3% ash, 0.5% sulfur, 0.045% phosphorus, 500 ddpm maximum fluidity, 65% vitrinite	NA	NA	NA	NA	NA	\$/mt
HCC 64 Mid Vol CFR Jingtang Equivalent	AAWZQ00	AAWZQ03		Calculation	Weekly	1062	62% CSR, 21.5% VM, 10.5% TM, 8% ash, 0.45% sulfur, 0.06% phosphorus, 100 ddpm max fluidity, 52% vitrinite	10,000-20,000 mt	CFR	Jingtang port, China	Delivered 20 days forward	Cash	\$/mt
Rail and Truck Freight													
PCC Met Rail Freight Shanxi - Tangshan	PCCMM04	PCCMM03		Assessment	Weekly	1050	NA	Min 1,000 mt	NA	Shanxi - Tangshan	Loading in 3-30 days	L/C 180 days	Yuan/mt
PCC Met Truck Freight Shanxi - Tangshan	PCCM004	PCCM003		Assessment	Weekly	1050	NA	Min 1,000 mt	NA	Shanxi - Tangshan	Loading in 3-30 days	L/C 180 days	Yuan/mt

Domestic Chinese Price Assessments

“PCC Met” series

Price assessments:

PCC Met Shanxi Premium Low Vol

PCC Met Shanxi High Sulfur Premium Low Vol

PCC Met Shanxi PCI

PCC Met Shandong Semi Soft

PCC Met North China Fat Coal

PCC Met price assessments, published Wednesday, reflect the value of five grades of metallurgical coal in the domestic Chinese market on ex-wash plant Lvliang (Shanxi), free-on-rail Lvliang (Shanxi) and delivered, duty paid Tangshan basis in Yuan/mt. In the absence of more specific market information, data from other related locations may be netted back or forward to normalize to the specified location basis, using prevailing rail and truck freight.

Price assessments:

PLVHJ04 - Met Coal Prem Low Vol Shanxi CFR China Equivalent

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

Met Coal Prem Low Vol Shanxi CFR China Equivalent (PLVHJ04) is calculated on the basis of Shanxi Premium Low Vol DDP Tangshan (PCCMC04), normalized for payment terms, transportation and logistics costs and exchange rate to reach a CFR equivalent value. In addition to the outright value, Platts publishes a differential (PLVHK04) to PLV HCC CFR China daily price (PLVHC00).

Price assessments:

PCCMM04 - PCC Met Rail Freight Shanxi - Tangshan

PCCM004 - PCC Met Truck Freight Shanxi - Tangshan

Platts publishes two freight assessments in the domestic Chinese market, reflecting rail and truck transportation costs on Shanxi-Tangshan route in Yuan/mt. Freight from Shanxi is normalized to Lvliang.

Jingtang port

Price assessments:

AAWZN00 - Premium Low Vol ex-stock Jingtang, North China

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

These assessments reflect 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/mt, inclusive of VAT. Platts monitors inland spot trade flowing from mines directly to end-users without going through ports for pricing consistency, including for domestic Chinese, Mongolian and Russian metallurgical coal. Platts also monitors prices of seaborne metallurgical coal for pricing consistency.

Price assessments:

AAWZ000 - Prem Low Vol CFR Jingtang Equivalent

AAWZQ00 - HCC 64 Mid Vol CFR Jingtang Equivalent

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

CFR Jingtang Equivalents are calculated net forwards from corresponding ex-stock Jingtang assessments, normalized for payment terms, additional transportation and logistics costs and exchange rate to reach a port-equivalent value. These assessments are published on Fridays. In addition to the outright price of the Premium Low Vol CFR Jingtang Equivalent, Platts also publishes its weekly differential to the PLV HCC CFR China assessment (PLVHC00).

Dry Bulk Freight

Platts assesses freight rates for dry bulk cargoes on a variety of routes. Please refer to the Freight specifications guide for details of these assessments https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/freight-methodology.pdf.

REVISION HISTORY

April 2020: Platts changed US coking coal specifications, extended laycan period for US brand assessments and discontinued Oak Grove brand relativity assessment. Platts updated US coking coal brand methodology to include a combination of market survey, VIU and reference to benchmark indices.

February 2020: Updated to reflect the discontinuation of Standard and Premium CFR China, reflect the name change from Hail Creek to GLV. Updated the specifications for HCC 64 Mid Vol Ex-Stock Jingtang and HCC 64 Mid Vol CFR Jingtang Equivalent.

November 2019: Platts launched 11 FOB Australia met coal brand relativities and Riverside CFR China brand assessment. Specifications Guide Annual Review was conducted and clarifications made. Platts clarified its approach to calculating netbacks, combined description of assessments with similar methodological approach, replaced the description of swaps with “derivatives”; updated links, clarified calculations of differentials, added missing and removed discontinued symbols, and made minor stylistic changes throughout. Moved dry bulk freight assessments into the freight guide. Added TSI PHCC assessment with the associated revision history, and a description of the European HCC assessment. Added a list of commonly used acronyms.

July 2019: Platts updated the guide to include the new daily met coke 65%/63% CSR, 62%/60% CSR assessments launched on January 2, 2019.

June 2019: Updated High Vol A, High Vol B and Low Vol HCC US East Coast price assessments’ spot loading period to 14-60 days. Platts completed an annual update to sections 1 to 6 of Platts Methodology and Specifications Guides in April 2019, and moved these sections into a standalone Methodology Guide.

April 2019: Updated to remove Pinnacle US brand relativity after

discontinuation.

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 derivatives assessments to reflect the TSI PHCC FOB Australia derivatives 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.

March 2018: Platts launches Met Coke 66/65 CSR CFR India daily assessment.

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.

May 2016: Platts adds Premium Low Vol CFR North West Europe net forward.

April 2016: Platts launches Peak Downs Region and Premium Low Vol FOB China Netback series. Platts changes methodology process for Peak Downs Region and Premium Low Vol FOB Australia assessments.

March 2016: Updated to remove the upper limit for permissible fluidity for TSI Premium Hard Coking Coal index - FOB East Coast port, Australia. US brand relativities data updated.

January, 2016: US brand relativities weekly series published.

February 2016: Teck’s Standard and Premium specifications revised.

December 2015: Platts launches daily metallurgical coal relativities.

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

July 2015: Platts discontinues CCI 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.

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

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

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.

July 2014: Platts started publishing relativities table at the end of the last working day of each month. Previously, since May 2013, the table showed an average of relativities through the month. Since January 2014 the table represents relativities on a CFR China basis, rather than theoretical FOB Queensland basis.