MCX
METAL & ENERGY
Trade with Trust

COPPER



Multi Commodity Exchange of India Limited (MCX) is a state-of-the-art commodity futures exchange based in India. The exchange facilitates online trading in commodity futures contracts across segments, including bullion, base metals, energy, and agricultural commodities, besides offering clearing and settlement services. The exchange thus provides an effective mechanism for price risk management. Copper Futures on MCX are being trading since 17 June 2004.

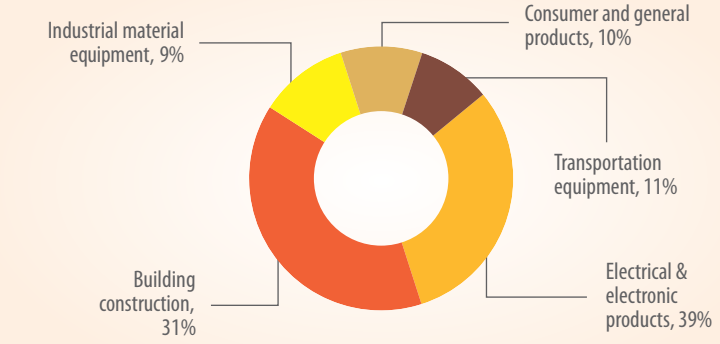
INTRODUCTION

Copper is one of the first metals used by humans and used since at least 10,000 years ago for items such as coins and ornaments. Copper is a ductile, corrosion-resistant, malleable, metallic element that is an excellent conductor of heat and electricity. It is also antimicrobial and eminently recyclable. The versatility of this beautiful metal makes it one of the world's most useful natural resources. Alloyed with other metals, it can acquire additional invaluable characteristics such as hardness, tensile strength and even greater resistance to corrosion.

APPLICATION

The world's refined copper usage has surged by nearly 300 per cent in the last 50 years, owing to the growing demand in sectors like electrical and electronic products, building construction, industrial machinery and equipment, transportation equipment, consumer and general products. Copper's chemical, physical and aesthetic properties make it a material of choice in high technology applications. Since copper is bio-static, that is, bacteria does not grow on its surface, it is also used in air conditioning systems and as an anti-germ surface in hospitals. Copper and copper-based alloys are used in a variety of applications that are necessary for a reasonable standard of living. It is an important contributor to the national economies of mature, newly developed and developing countries.

Global Copper Consumption, by End-Users



Source: Thomson Reuters, GFMS

- MCX is the leading commodity exchange in India, with a market share of 96.70% (F.Y. 2022-23)

  *In terms of the value of commodity futures contracts traded. (Source: Exchange website)

- MCX reaches out to around 700 cities and towns in India (F.Y. 2022-23)

Download MCX MOBILE APP

from PlayStore/AppStore
on your phone to view the
MCX Futures Prices, Options Prices
& Commodity Indices (iCOMDEX)



COMRIS

COMRIS is a demat platform for handling and delivery with e-receipt of commodity deposited at MCXCCL accredited warehouses (MAWs)

- A Total of 20,868 MTs of Copper Cathodes changed hands during F.Y. 2022-23 via Exchange platform.

- Only LME approved brands of Grade-A Copper Cathodes are accepted.



INDIAN SCENARIO

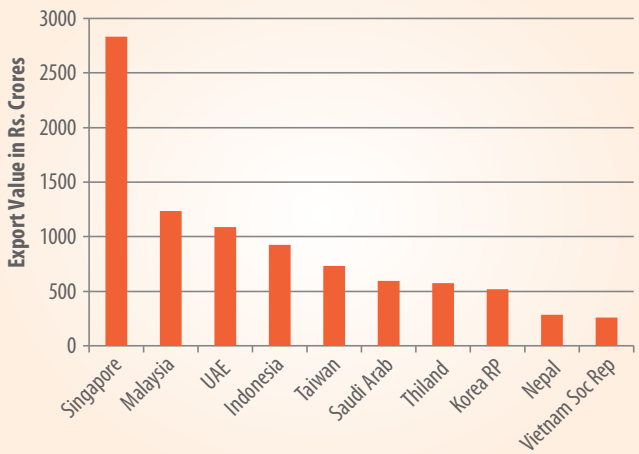
Production

- Currently three major players dominate the Indian copper industry. Hindustan Copper Limited (HCL) in public sector, Sterlite Industries (Vedanta Group) & Hindalco Industries in the private sector.
- The production of copper cathodes stood at 5,55,000 MTs during Apr 2022 - Mar 2023 (in F.Y 2022-23) as compared to 4,85,000 MTs during Apr 2021 - Mar 2022 (in F.Y. 2021-22), as per data from Ministry of Mines.
- Production of copper cathodes increased almost 14.43 per cent during the F.Y. 2022-23 as compared to the same period in F.Y. 2021-22.

Export and Import

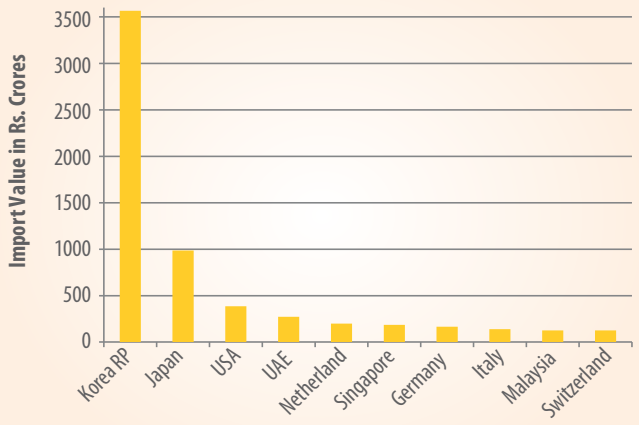
- Total Copper (HS Code-740311, 7407, 7408, 7409, 7410, 7411) exports from India during F.Y. 2022-23 increased 33.39% to Rs. 5,477.68 crores as compared to Rs. 8,223.43 crores during F.Y. 2021-22.
- Total Copper (HS Code-740311, 7407, 7408, 7409, 7410, 7411) imports from India during F.Y. 2022-23 increased 36.79% to Rs. 29,536.27 crores as compared to Rs. 24,488.98 crores during F.Y. 2021-22.
- The top 10 export destinations and top 10 import sources for India during F.Y. 2022-23 have been illustrated in the graphs given below:

Top Export Destinations for India (F.Y. 2022-2023)



*- Data for period Apr 2022 - Mar 2023 | Source: Ministry of Commerce, GoI

Top Import Sources for India (F.Y. 2022-2023)



*- Data for period Apr 2022 - Mar 2023 | Source: Ministry of Commerce, GoI

Fundamentals and Balance Sheet (Quantity)

Indian Scenario In MT's	2020-21	2021-22	2022-23
Production	3,63,638	5,94,000	5,55,000
Import	7,44,651	3,56,459	4,21,078
Export	2,09,444	1,21,721	71,572
Consumption	8,98,845	8,37,738	9,04,506

Source: Ministry of Mines; Ministry of commerce

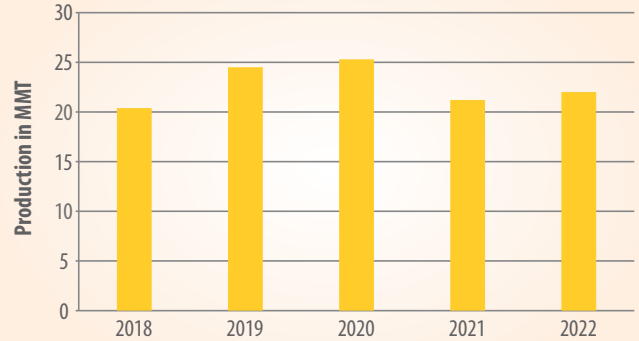
GLOBAL SCENARIO

Demand and Supply

- In 2022, the global refined copper production was around 26 million metric tonnes (MMT), as compared to 25.3 million metric tonnes (MMT) in 2021.



Global Primary Copper Production



#Source - USGS Mineral Commodities Summaries

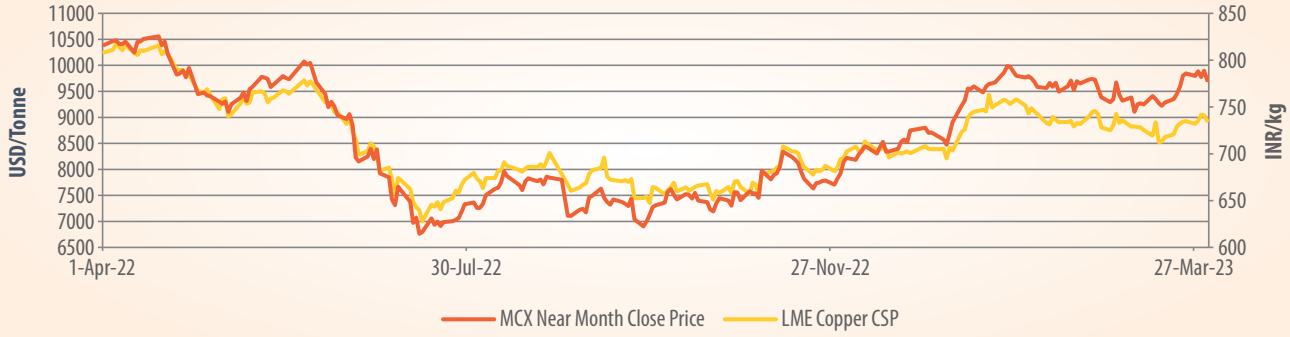
IMPORTS AND EXPORTS

- China, Chile and Congo were the top three copper producing countries in 2022 accounting for 11 million MTs, 2.1 million MTs and 1.7 million MTs respectively.
- Chile, Germany, Japan were the top three exporting countries in 2022 accounting for 18,209 million, 10,013 million and 8,898 million USD of copper exports respectively.
- China, USA and Germany were the top three importing countries in 2022 accounting for 68,705 million, 15,562 million and 14,831 million USD of copper imports respectively.

FACTORS INFLUENCING THE MARKET

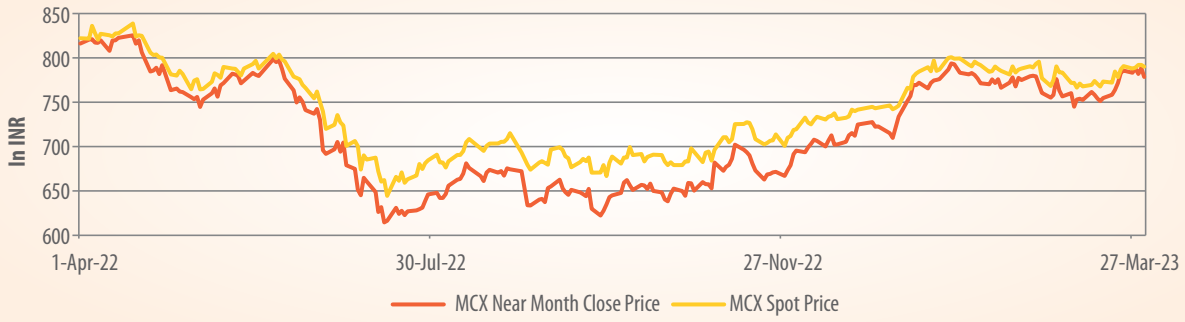
- Copper prices in India depend on the domestic and international sectors prices, freight rates, custom duties, trade agreements and the USD-INR exchange rate.
- Economic events, such as industrial growth, recession and inflation, affect metal prices.
- Commodity-specific events, such as the construction of new production facilities or processes, new uses or the discontinuance of historical uses, unexpected mine or plant closures (natural disaster, supply disruption, accident, strike, and so forth), or industry restructuring, affect metal prices.
- Trade policies set by the government (implementation or suspension of taxes, penalties, and quotas) affect supply as they regulate (restricting or encouraging) material flow.
- Geopolitical events involving governments or economic paradigms and armed conflict can cause major changes.
- As societies develop, their demand for metal increases based on their current economic position, which could also be referred to as the 'national economic growth factor'.

MCX vs LME Correlation*



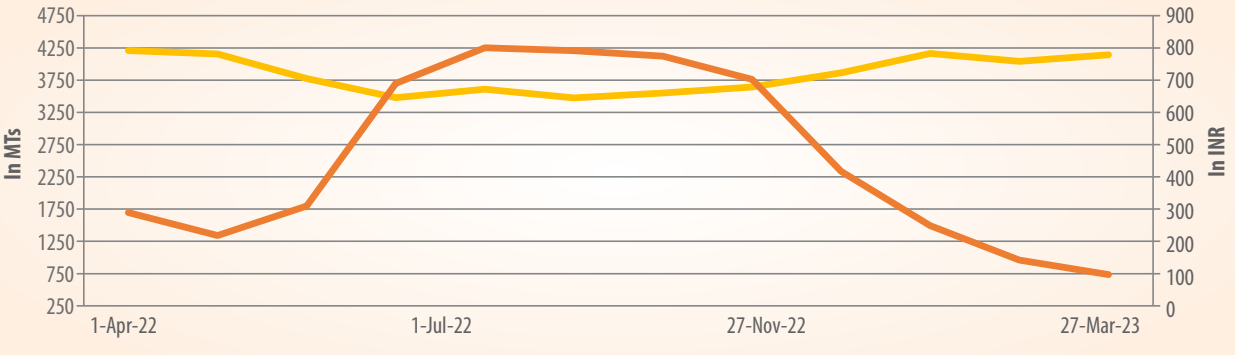
Correlation between MCX near month closing prices and LME Cash Settlement Price (CSP) stood at 98.34% for the period Apr 2022 - Mar 2023. #Source: MCX Website & Westmetall

MCX Copper - Spot Vs Futures Price



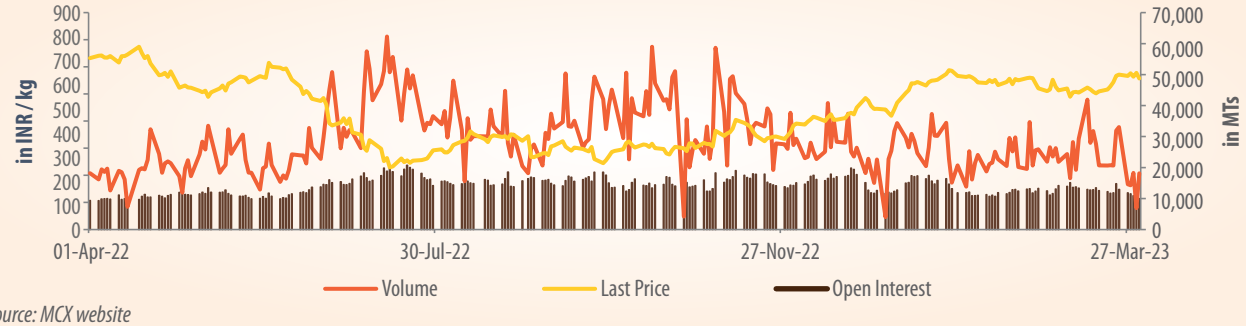
Correlation between MCX futures prices and MCX Spot prices stood at 99.36% for the period Apr 2022 - Mar 2023. #Source: MCX Website

MAW Stocks (in MTs) vs MCX FSP (in Rs.)



Source: MCX website

MCX Copper Price, Volumes & Open Interest



Source: MCX website

Salient Features of MCX Copper Futures Contract

Symbol	COPPER
Description	COPPERMMMYY
Contract Listing	Contracts are available as per the Contract Launch Calendar.
Contract Start Day	1st day of contract launch month. If 1st day is a holiday then the following working day.
Last Trading Day	Last calendar day of the contract expiry month. If last calendar day is a holiday then preceding working day.
Trading Unit	2500 Kilograms (2.5 MT)
Quotation/Base Value	1 Kg
Price Quote	Ex-Warehouse Thane district (excludes only GST)
Maximum Order Size	70,000 Kilograms (70 MT)
Tick Size	5 Paisa per kg
Daily Price Limits	The Exchange has implemented a narrower slab of 4%. Whenever the narrower slab is breached, the relaxation will be allowed up to 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed up to 9%. In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3%.
Initial Margin*	Minimum 8% or based on SPAN whichever is higher
Extreme Loss Margin	Minimum 1%
Additional and/or Special Margin	In case of additional volatility, an additional margin (on both buy & sell side) and/ or special margin (on either buy or sell side) at such percentage, as deemed fit; will be imposed in respect of all outstanding positions.
Maximum Allowable Open Position	For individual clients: 7000 MT or 5% of the market wide open position, whichever is higher for all Copper contracts combined together. For a member collectively for all clients: 70,000 MT or 20% of the market wide open position, whichever is higher for all Copper contracts combined together.
Delivery Unit	2500 Kilograms (2.5 MT) with tolerance limit of + / - 10%
Delivery Period Margin**	Delivery period margins shall be higher of: a.3%+5 day 99% VaR of spot price volatility Or b. 25%
Delivery Centre	Ex-Warehouse at Thane district in Maharashtra As per SEBI circular SEBI/HO/CDMRD/DMP/P/CIR/2021/551 dated April 16, 2021, the exchanges may accredit warehouses of a WSP within 100 kms radius of the delivery centers.
Additional Delivery Centre (s)	1. National Capital Region (NCR) 2. Chennai district in Tamil Nadu 3. Kolkata district in West Bengal As per SEBI circular SEBI/HO/CDMRD/DMP/P/CIR/2021/551dated April 16, 2021, the exchanges may accredit warehouses of a WSP within 100 kms radius of the delivery centers.
Quality Specifications & Shape	Grade A Copper Cathodes Only LME approved brands will be accepted #. For the purpose of quality assessment, reliance shall be placed by the WSP on the Certificate of Analysis (CoA) issued by the producer. # List available on https://www.mcxccl.com/warehousing-logistics/lme-approved-brands
Additional Deliverable Grade	Any other Copper producer brand as approved by MCX
Delivery Pay-in	The seller will have to do the delivery pay-in through ComRIS Account by earmarking his existing valid commodity balance in the ComRIS Account towards the pay-in obligation. On Tender Days: On tender days by 5.00 p.m. except Saturday, Sunday and Public holiday. Marking of delivery will be done on the tender days based on the intentions received from the sellers after the trading hours. On Expiry: On expiry all the open positions shall be marked for delivery. Delivery pay-in will be on E+1 working day (E- Expiry day) by 2.00 p.m. except Saturday, Sunday and Public holiday. The electronic holdings of Copper in ComRIS Account shall be eligible for delivery in the Copper contracts.

Salient Features of MCX Copper Futures Contract

Staggered Delivery Tender Period	The staggered delivery tender period would be the last 5 trading days (including expiry day) of the contracts. The seller/buyer having open position shall have an option, of submitting an intention of giving/taking delivery, on any day during the staggered delivery period. On expiry of the contract, all the open positions shall be marked for compulsory delivery.
Staggered Tender Period Margin	5% incremental margin for last 5 trading days (including expiry day) of the contract on all outstanding positions in addition to the Initial, Special and/ or any other additional margin, if any.
Delivery order rate	On Staggered Delivery Tender Days: The delivery order rate (the rate at which delivery will be allocated) shall be the closing price (weighted average price of last half an hour) on the respective tender day except on the expiry date. On Expiry: On expiry date, the delivery order rate or final settlement price shall be the Due Date Rate (DDR) and not the closing price.
Due Date Rate (Final Settlement Price)	The Final Settlement Price (FSP) shall be arrived at by taking the simple average of the last polled spot prices of the last three trading days viz.,E0 (expiry day), E-1 and E-2. In the event the spot price for any one or both of E-1 and E-2 is not available; the simple average of the last polled spot price of E0, E-1, E-2 and E-3, whichever available, shall be taken as FSP. Thus, the FSP under various scenarios of non-availability of polled spot prices shall be as under:

Scenario	Polled spot price availability on				FSP shall be simple Average of last polled spot prices on		
	E-0	E-1	E-2	E-3			
1	Yes	Yes	Yes	Yes/No	E0,	E1,	E2
2	Yes	Yes	No	Yes	E0,	E-1,	E3
3	Yes	No	Yes	Yes	E-0,	E-2,	E-3
4	Yes	No	No	Yes	E-0,	E-3	
5	Yes	Yes	No	No	E-0,	E-1	
6	Yes	No	Yes	No	E-0,	E-2	
7	Yes	No	No	No	E-0		

In case of non-availability of polled spot price on expiry day (E0)/predetermined number of days due to sudden closure of physical market under any emergency situations noticed, Clearing Corporation shall decide further course of action for determining FSP and which shall be in accordance with MCXCCL circular no. MCXCCL/SPOT/077/2020 dated April 13, 2020. On the day of expiry the trading shall be allowed up to 5pm.

Delivery Logic	Compulsory Delivery

* *A) The Margin Period of Risk (MPOR) shall be in accordance with SEBI Circular no. SEBI/HO/CDMRD/DRMP/CIR/P/2020/15 dated January 27, 2020. For applicable minimum MPOR, refer latest circulars issued by MCXCCL from time to time.*

B) For all the applicable margins, refer the latest circulars issued by the Exchange or Multi Commodity Exchange Clearing Corporation Limited (MCXCCL) from time to time.

***Delivery Period Margin-As per SEBI directive SEBI/HO/CDMRD/DRMP/CIR/P/2016/77 dated September 01, 2016.*

Salient Features of MCX Copper Options Contract

Symbol	**COPPER**
Underlying	Underlying shall be Copper Futures contract traded on MCX
Expiry Day (Last Trading Day)	Three business days prior to the first business day of Tender Period of the underlying futures contract.
Trading Unit	One MCX Copper futures contract
Underlying Quotation/ Base Value	Rs. Per Kg
Underlying Price Quote Strikes	Ex-Warehouse Thane district (excludes only GST) 7 In-the-money, 7 Out-of-the-money and 1 Near-the-money. (15 CE and 15 PE). The Exchange, at its discretion, may introduce additional strikes, if required.
Strike Price Intervals	Rs. 5.00
Tick Size (Minimum Price Movement)	Rs. 0.01
Daily Price Limit	The upper and lower price band shall be determined based on statistical method using Black76 option pricing model and relaxed considering the movement in the underlying futures contract. In the event of freezing of price ranges even without a corresponding price relaxation in underlying futures, if deemed necessary, considering the volatility and other factors in the option contract, the Daily Price Limit shall be relaxed by the Exchange.
Margins	The Initial Margin shall be computed using SPAN (Standard Portfolio Analysis of Risk) software, which is a portfolio based margining system. To begin with, the various risk parameters shall be as under:

Salient Features of MCX Copper Options Contract

	A. Price Scan Range – 3.5 Standard Deviation (3.5 sigma) B. Volatility Scan Range – Minimum 5% or as decided by MCXCCL from time to time. For applicable VSR refer latest circulars issued by MCXCCL. C. The Short Option Minimum Margin (SOMM) and Margin Period of Risk (MPOR) shall be in accordance with SEBI Circular no. SEBI/HO/CDMRD/DRMP/CIR/P/2020/15 dated January 27, 2020. For applicable SOMM and MPOR refer latest circulars issued by MCXCCL from time to time. D. Extreme Loss Margin – Minimum 1% (to be levied only on short option positions). E. Premium of buyer shall be blocked upfront on real time basis.
Mark to Market	The option positions shall be marked to market by deducting / adding the current market value of options positions (positive for long options and negative for short options) times the number of long / short options in the portfolio from / to the margin requirement. Mark to Market gains and losses would not be settled in Cash for Options Positions.
Risks pertaining to option that devolve into futures on expiry	a) In the initial phase, a sensitivity report shall be provided to members of the impending increase in margins at least 2 days in advance. The mechanism shall be reviewed and if deemed necessary, pre-expiry option margins shall be levied on the buy / sell / both positions during last few days before the expiry of option contract. b) The penalty for short collection / non collection due to increase in initial margins resulting from devolvement of options into futures shall not be levied for the first day.
Maximum Allowable Open Position	Position limits for options would be separate from the position limits applicable on futures contracts. For client level: 14,000 MT or 5% of the market wide open position, whichever is higher - For all Copper Options contracts combined together. For a member level: 1,40,000 MT or 20% of the market wide open position, whichever is higher - For all Copper Options contracts combined together. Upon expiry of the options contract, after devolvement of options position into corresponding futures positions, open positions may exceed their permissible position limits applicable for future contracts. Such excess positions shall have to be reduced to the permissible position limits of futures contracts within two trading days.
Exercise Mechanism at expiry	All In the money (ITM)# option contracts shall be exercised automatically, unless 'contrary instruction' has been given by long position holders of such contracts for not doing so. The ITM option contract holders who have not submitted contrary instructions shall receive the difference between the Settlement Price and Strike Price in Cash as per the settlement schedule. In the event contrary instruction are given by ITM option position holders, the positions shall expire worthless. All Out of the money (OTM) option contracts shall expire worthless. All devolved futures positions shall be considered to be opened at the strike price of the exercised options. All exercised contracts within an option series shall be assigned to short positions in that series in a fair and non-preferential manner. #ITM for call option = Strike Price < Settlement Price ITM for put option = Strike Price > Settlement Price
Due Date Rate (Final Settlement Price)	Daily settlement price of underlying futures contract on the expiry day of options contract.

IMPORTANT WEB SITES

www.metalbulletin.com | www.basemetals.com | www.futuresource.com | www.metalsmarket.net | www.metalsplace.com | www.metalprices.com | www.crugroup.com | www.woodmac.com | www.world-bureau.com

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https://www.mcxindia.com/market-data/spot-market-price
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