Volume Weighted Average Price (VWAP)

Concept

Volume Weighted Average Price (VWAP) is a trading benchmark that measures the average price of an asset over a defined period each trading day, weighted by the volume traded at each price point. It is aimed to be widely used as a reference price for physical market participants, an execution benchmark for institutional orders, and a fair-value indicator for settlement and hedge evaluation.

The intraday timing for which the VWAP price for each metal will be calculated is mentioned below:

Particulars	MCX Evening Price (INR/Kg)	
	Standard Time	**Daylight Savings Time**
	MCX Trading Hours 9 am - 11:30 pm	**MCX Trading Hours 9 am - 11:55 pm**
Copper (2.5 MT)	5 - 5:15 pm	6 - 6:15 pm
Lead (5 MT)	5:05 - 5:35 pm	6:05 - 6:35 pm
Zinc (5 MT)	5:20 - 5:35 pm	6:20 - 6:35 pm
Aluminium (5 MT)	5:25 - 5:40 pm	6:25 - 6:40 pm
Nickel (250 kgs)	5:20 - 5:50 pm	6:20 - 6:50 pm

For the days when there is no VWAP price available due to no trades during that period, no price will be displayed for the respective metal.

Formula

$$VWAP = (\Sigma \text{ Price} \times \text{Volume}) / (\Sigma \text{ Volume})$$

Where Price is the traded price of the transaction (or interval) and Volume is the corresponding traded quantity, summed across all trades in the chosen window (e.g. a trading day, a settlement window, or a rolling intraday interval).

Internal

Worked Example

Consider four trades executed in copper futures during a session:

Trade	Price (Rs./Kg)	Volume (Kg)	Price x Volume
1	1264	500	632000
2	1265.2	1000	1265200
3	1264.7	800	1011760
4	1263.9	1200	1516680
Total		**3500**	**4425640**

VWAP = 4425640/3500 which comes to Rs. 1264.47 per Kg.

Internal