Excel Add-in
User Guide
V1.3.900.0
15th Nov 2021

INTRODUCTION

WELCOME!

Thank you for choosing to use Fastmarkets' Excel Add-in. As part of Fastmarkets' platform strategy, we will provide customers with richer, more flexible mechanisms to securely access our data. This tool will allow you to pull our pricing data directly into Excel, thereby enabling you to embed our prices into your workflow.

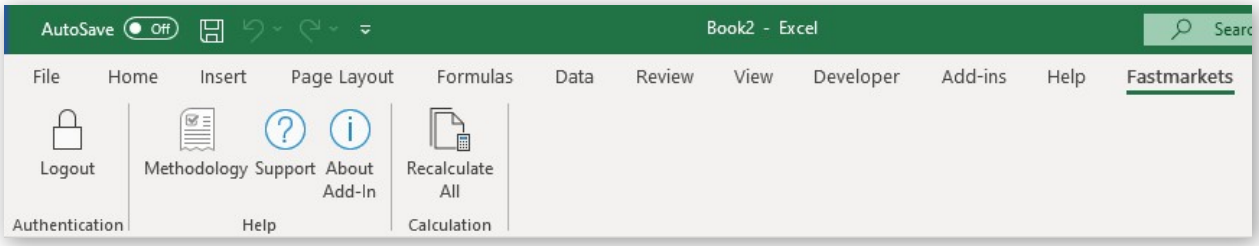
This user guide will help you get the most out of Fastmarkets' Excel Add-in to support your business needs. Please refer to the accompanying Technical Guide to install and log in for the first time to the Fastmarkets Excel Add-in.

Example templates of all functions included in Fastmarkets' Excel Add-in and how to work with them are available on the **Excel Add-In Support website** for your specific data license subscription. Please visit https://www.fastmarkets.com/excel-support.

If after reading these instructions you have further questions about how to use the Fastmarkets Dashboard, please contact our Customer Success teams or for access/order queries our Client Services team:

- **Europe, Middle East and Africa: +44 (0)20 3855 5581**
- **Asia: +65 31 633 458**
- **Americas: +1 708 329 2641**
- **Email: *customersuccess@fastmarkets.com***
- **Client Services Email: *client.services@fastmarkets.com***

For more information on Fastmarkets' products and services, please click on the Fastmarkets Excel Add-In ribbon buttons atop your spreadsheet or use the following links:



- **Pricing data:** https://www.fastmarkets.com/what-we-do/pricing-data
- **Pricing notices:** https://www.fastmarkets.com/about-us/methodology/price-notices/1
- **Methodology:** https://www.fastmarkets.com/about-us/methodology

WHAT'S NEW?

Version 1.3.900.0 of the Fastmarkets Excel Add-in features several enhancements and changes offering increased functionality and clarity.

- **A new "Recalculate" button for the toolbar** – this will provide a toolbar button enabling you to refresh ALL open workbooks (not just those using Fastmarkets functions) and is the same as the existing Control + Alt + F9 key stroke to update with the most recent assessments in spreadsheets.
- **Field name change** - the existing Appraisal Price field name will change to Preliminary Price – it denotes that the price is preliminary prior to being a final assessment price and will provide a TRUE or FALSE result. Preliminary prices (displaying a TRUE result) are only available for a proportion of our prices. This means for any customers using this existing field name they will need to amend it after the release to retrieve the data. This change is taking place to harmonize pricing fields for across Fastmarkets content.
- **Quarterly average** – from 15th November 2021, a new Price Calculation Type will be available providing quarterly averages. Please refer to the GetPriceCalculationType function below.

THE EXCEL FUNCTIONS

Fastmarkets' Excel Add-in enables you to easily obtain rich data around the commodities you follow. The table below summarizes the functions and pricing data available to you in this version. **Please note the use of the word "symbol" in the table and throughout this user guide. Each Fastmarkets price has a symbol – an alphanumeric code unique to that price.**

FUNCTION	VERSION	DESCRIPTION
GetInstruments( )	v1.2.612 or above	Returns all symbols and corresponding reference data that the user is authorized to access.
GetPriceCalculationType( )	v1.2.612 or above v1.3.816	Returns the price calculation types for the specified symbol. New 'Weighted Average of Trades' Price Calculation Type introduced for Cobalt symbols MB-CO-0004 & MB-CO-0005.
GetAvailableCurrencyConversions( )	V1.3.728 or above	Returns the available currency conversions for the specified symbol. The values returned should be used in the currency conversion parameter in the functions listed below.
GetAvailableUnitofMeasureConversions( )	V1.3.728 or above	Returns the available unit of measure conversions for the specified symbol.

		The values returned should be used in the unit-of-measure conversion parameter in the functions listed below.
GetInstrumentFields( )	v1.2.612 or above	Returns all available fields for a given symbol and Price Calculation Type.
GetLatestPrice( )	v1.2.612 or above v1.3.728	Returns the latest price data for the specified symbol, Field and Price Calculation Type. Currency and unit-of-measure conversion available.
GetPriceHistory( )	v1.2.612 or above v1.3.728	Returns price data history for the selected symbol. Currency and unit-of-measure conversion available.
GetPrice( )	v1.2.612 or above v1.3.728	Returns the latest price data for the specified symbol, Field, Price Calculation Type and Date. Currency and unit-of-measure conversion available.

Please note – nesting any Fastmarkets functions inside another Fastmarkets function is NOT recommended.

Let's explore the functions individually to see how you can make Fastmarkets' Excel Add-in work best for you.

GET INSTRUMENTS

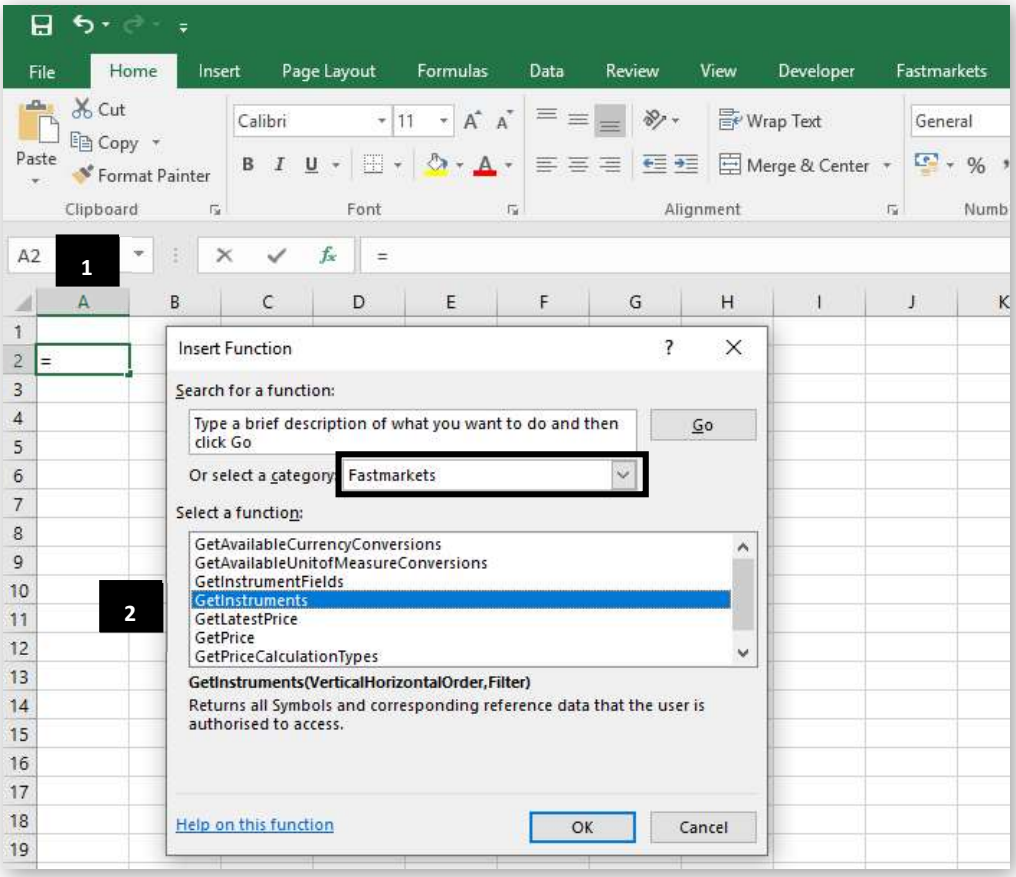
The GetInstruments( ) function enables you to view a list of all symbols and the corresponding reference data to which you're entitled in your data package. The table below provides a summary of this function.

Function summary	The GetInstruments( ) function fetches all symbols and corresponding reference data that the user is authorized to access.
Input parameters	VerticalHorizontalOrder; Filter

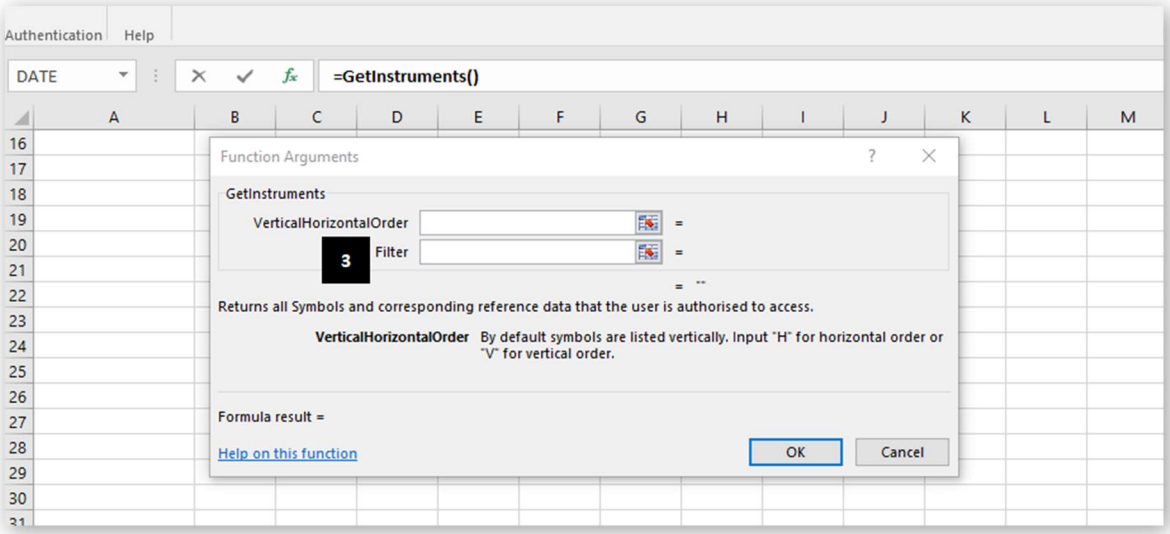
Output for the function	Inserts fields of data for each price, including Symbol, Currency, Unit of measure, Product, Location, Incoterm, Commodity, Price Type, Frequency, Source, Status and Description.
Example	=GetInstruments("V","steel")

Get the list of prices and their symbols

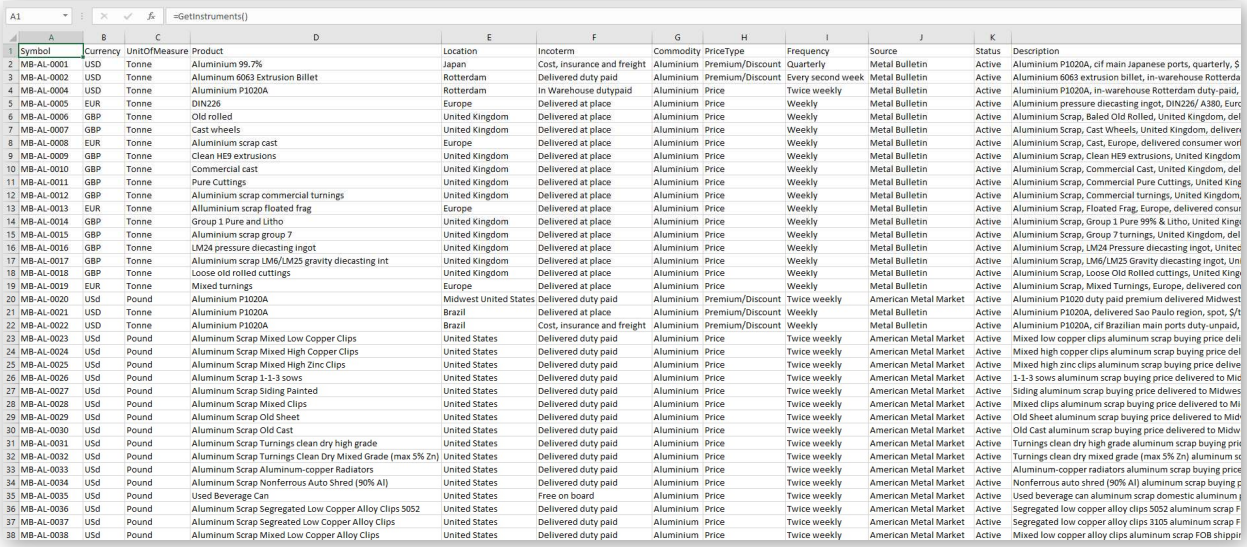
1. Select a cell where you want the prices to be displayed (for example, A2)
2. Click on the "function wizard" icon (fx). Choose the "Fastmarkets" category, select the "GetInstruments" function and click OK.



3. To display the full list of symbols and prices available for the data package you have chosen, leave the parameters blank and click OK. If you wish to filter the list so that you only see, say, aluminium symbols and prices, type “aluminium” in the “Filter” field.



The list of available prices will be inserted in the sheet (see following table). The first column contains the symbol unique to each price. The remaining columns contain the corresponding reference data (currency, unit of measure, product, location, incoterm, commodity, price type, frequency, source, status and description).



Symbol	Currency	UnitOfMeasure	Product	Location	Incoterm	Commodity	PriceType	Frequency	Source	Status	Description
MB-AL-0001	USD	Tonne	Aluminium 99.7%	Japan	Cost, insurance and freight	Aluminium	Premium/Discount	Quarterly	Metal Bulletin	Active	Aluminium P1020A, cif main Japanese ports, quarterly, $
MB-AL-0002	USD	Tonne	Aluminum 6063 Extrusion Billet	Rotterdam	Delivered duty paid	Aluminium	Premium/Discount	Every second week	Metal Bulletin	Active	Aluminium 6063 extrusion billet, in-warehouse Rotterda
MB-AL-0004	USD	Tonne	Aluminium P1020A	Rotterdam	In Warehouse dutypaid	Aluminium	Price	Twice weekly	Metal Bulletin	Active	Aluminium P1020A, in-warehouse Rotterdam duty-paid,
MB-AL-0005	EUR	Tonne	DIN226	Europe	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium pressure diecasting ingot, DIN226/ A380, Euro
MB-AL-0006	GBP	Tonne	Old rolled	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Baled Old Rolled, United Kingdom, del
MB-AL-0007	GBP	Tonne	Cast wheels	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Cast Wheels, United Kingdom, deliver
MB-AL-0008	EUR	Tonne	Aluminium scrap cast	Europe	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Cast, Europe, delivered consumer wor
MB-AL-0009	GBP	Tonne	Clean HE9 extrusions	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Clean HE9 extrusions, United Kingdom
MB-AL-0010	GBP	Tonne	Commercial cast	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Commercial Cast, United Kingdom, del
MB-AL-0011	GBP	Tonne	Pure Cuttings	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Commercial Pure Cuttings, United King
MB-AL-0012	GBP	Tonne	Aluminium scrap commercial turnings	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Commercial turnings, United Kingdom,
MB-AL-0013	EUR	Tonne	Alluminium scrap floated frag	Europe	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Floated Frag, Europe, delivered consur
MB-AL-0014	GBP	Tonne	Group 1 Pure and Litho	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Group 1 Pure 99% & Litho, United King
MB-AL-0015	GBP	Tonne	Aluminium scrap group 7	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Group 7 turnings, United Kingdom, del
MB-AL-0016	GBP	Tonne	LM24 pressure diecasting ingot	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, LM24 Pressure diecasting ingot, Unitec
MB-AL-0017	GBP	Tonne	Aluminium scrap LM6/LM25 gravity diecasting int	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, LM6/LM25 Gravity diecasting ingot, Un
MB-AL-0018	GBP	Tonne	Loose old rolled cuttings	United Kingdom	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Loose Old Rolled cuttings, United King
MB-AL-0019	EUR	Tonne	Mixed turnings	Europe	Delivered at place	Aluminium	Price	Weekly	Metal Bulletin	Active	Aluminium Scrap, Mixed Turnings, Europe, delivered con
MB-AL-0020	USd	Pound	Aluminium P1020A	Midwest United States	Delivered duty paid	Aluminium	Premium/Discount	Twice weekly	American Metal Market	Active	Aluminium P1020 duty paid premium delivered Midwest
MB-AL-0021	USD	Tonne	Aluminium P1020A	Brazil	Delivered at place	Aluminium	Premium/Discount	Weekly	Metal Bulletin	Active	Aluminium P1020A, delivered Sao Paulo region, spot, $/t
MB-AL-0022	USD	Tonne	Aluminium P1020A	Brazil	Cost, insurance and freight	Aluminium	Premium/Discount	Weekly	Metal Bulletin	Active	Aluminium P1020A, cif Brazilian main ports duty-unpaid,
MB-AL-0023	USd	Pound	Aluminum Scrap Mixed Low Copper Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Mixed low copper clips aluminum scrap buying price deli
MB-AL-0024	USd	Pound	Aluminum Scrap Mixed High Copper Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Mixed high copper clips aluminum scrap buying price del
MB-AL-0025	USd	Pound	Aluminum Scrap Mixed High Zinc Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Mixed high zinc clips aluminum scrap buying price delive
MB-AL-0026	USd	Pound	Aluminum Scrap 1-1-3 sows	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	1-1-3 sows aluminum scrap buying price delivered to Mic
MB-AL-0027	USd	Pound	Aluminum Scrap Siding Painted	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Siding aluminum scrap buying price delivered to Midwes
MB-AL-0028	USd	Pound	Aluminum Scrap Mixed Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Mixed clips aluminum scrap buying price delivered to Mi
MB-AL-0029	USd	Pound	Aluminum Scrap Old Sheet	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Old Sheet aluminum scrap buying price delivered to Mid
MB-AL-0030	USd	Pound	Aluminum Scrap Old Cast	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Old Cast aluminum scrap buying price delivered to Midw
MB-AL-0031	USd	Pound	Aluminum Scrap Turnings clean dry high grade	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Turnings clean dry high grade aluminum scrap buying pric
MB-AL-0032	USd	Pound	Aluminum Scrap Turnings Clean Dry Mixed Grade (max 5% Zn)	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Turnings clean dry mixed grade (max 5% Zn) aluminum sc
MB-AL-0033	USd	Pound	Aluminum Scrap Aluminum-copper Radiators	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Aluminum-copper radiators aluminum scrap buying price
MB-AL-0034	USd	Pound	Aluminum Scrap Nonferrous Auto Shred (90% Al)	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Nonferrous auto shred (90% Al) aluminum scrap buying p
MB-AL-0035	USd	Pound	Used Beverage Can	United States	Free on board	Aluminium	Price	Twice weekly	American Metal Market	Active	Used beverage can aluminum scrap domestic aluminum
MB-AL-0036	USd	Pound	Aluminum Scrap Segregated Low Copper Alloy Clips 5052	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Segregated low copper alloy clips 5052 aluminum scrap F
MB-AL-0037	USd	Pound	Aluminum Scrap Segreated Low Copper Alloy Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Segregated low copper alloy clips 3105 aluminum scrap F
MB-AL-0038	USd	Pound	Aluminum Scrap Mixed Low Copper Alloy Clips	United States	Delivered duty paid	Aluminium	Price	Twice weekly	American Metal Market	Active	Mixed low copper alloy clips aluminum scrap FOB shippir

Please review the Appendix for a complete description of what each field displays.

GET PRICE CALCULATION TYPES

The GetPriceCalculationTypes( ) function identifies the price calculation types that are available for each symbol. Use this function as a starting point to determine the type of data you wish to return – whether it is “Actual” for assessed physical prices or an average price for a particular frequency – “WeeklyAverage,” “MonthlyAverage”, "QuarterlyAverage" or “YearlyAverage.”

This release introduces a new 'Weighted Average of Trades' Price Calculation Type required for Cobalt instruments. Please note this Price Calculation Type is only available for the following instruments:

- MB-CO-0004 - Cobalt alloy grade, in-whs Rotterdam, $/lb
- MB-CO-0005 - Cobalt standard grade, in-whs Rotterdam, $/lb

NOTE: London Metal Exchange averages are not yet available through Fastmarkets’ Excel Add-in.

The parameters will enable you to easily populate a table to compare actual physical pricing and corresponding averages for a symbol across the same row or column.

The averages price calculation methodology for Fastmarkets US prices changed as of January 2021. You can find out more here: https://www.fastmarkets.com/support/averages-changes-faq

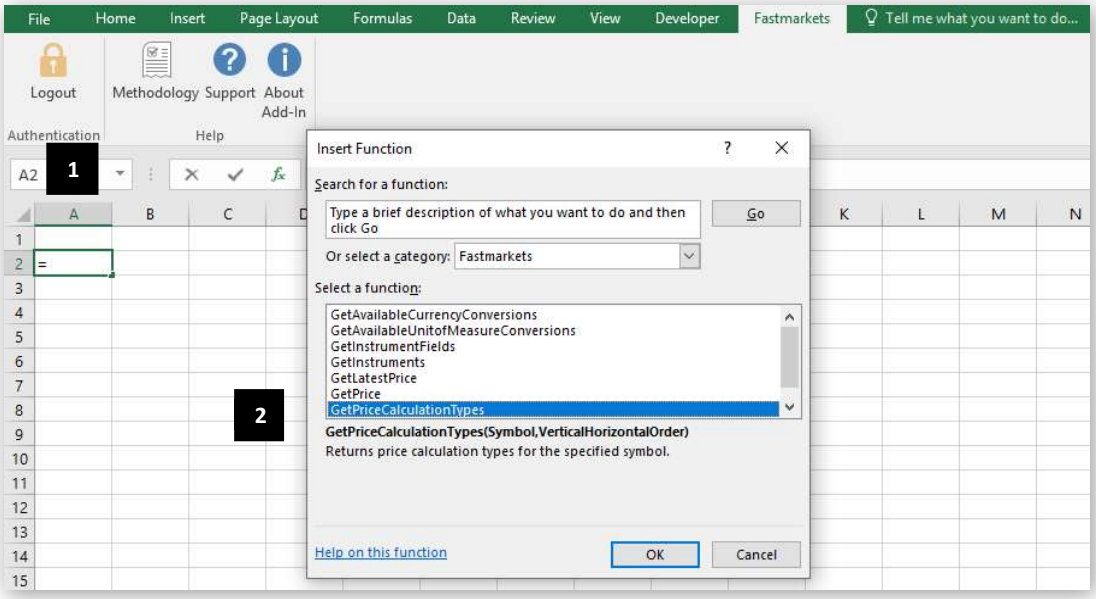
The following table provides a summary of this function.

Function summary	The GetPriceCalculationTypes( ) function fetches the price calculation types for a specified symbol.
Input parameters	Symbol; VerticalHorizontalOrder
Output for the function	Inserts price calculation types for each symbol – for example, Actual, WeeklyAverage, WeeklyAverageFriThur, WeightedAverageofTrades, MonthlyAverage, QuarterlyAverage,YearlyAverage.
Example	=GetPriceCalculationTypes(“MB-AL-0004”,“H”)

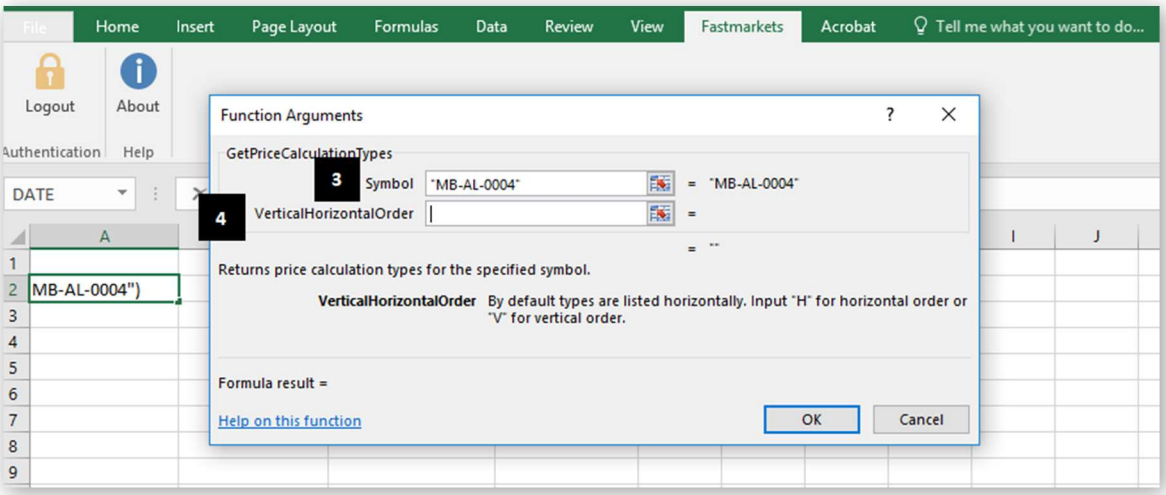
Get a list of Price Calculation Types for your specified symbol(s)

1. Select a cell where you want the prices to be displayed (for example, A2).

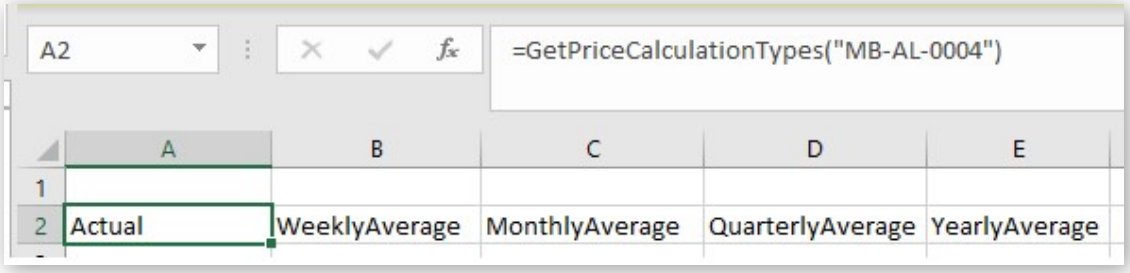
2. Click on the “function wizard” icon (fx). Choose the “Fastmarkets” category, select the “GetPriceCalculationTypes” function and click OK.



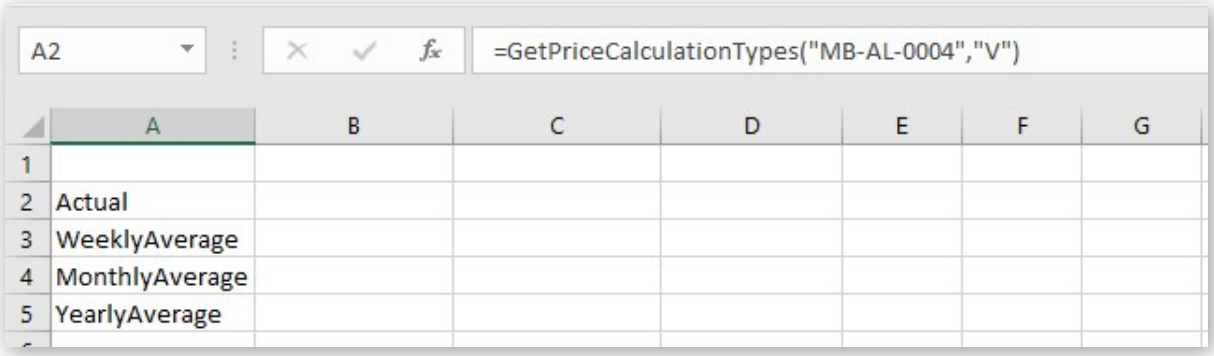
3. Enter the symbol. In this example we’re using MB-AL-0004
4. For the “VerticalHorizontalOrder” field, enter “V” if you want the Price Calculation Types to appear vertically or “H” if you want the Price Calculation Types to appear horizontally. This field is optional; if you leave it blank, the values will return horizontally by default. In this example, we will leave the field blank. Then click OK.



The Price Calculation Types will return as in the screenshot below.



The screenshot below shows how the Price Calculation Types return if the "VerticalHorizontalOrder" field is set to "V".



GET INSTRUMENT FIELDS

The GetInstrumentFields( ) function can be used to identify the fields that are available for each symbol and price calculation type. **Remember, each Fastmarkets price has a symbol – an alphanumeric code unique to that price.**

Some fields provide reference data, such as currency and unit of measure, and other pivotal data fields, including:

- **ShortDescription:** Shows the short description for the instrument.
- **LaunchDate:** Shows the date on which the instrument was launched.
- **Source:** Shows the source for the instrument.
- **Correction:** A TRUE/FALSE flag to show if a value has been corrected. This will update automatically in your spreadsheet.
- **Period:** Returns the same value as the AssessmentDate field for "Actual" physical pricing or the average period for the PriceCalculationType (for example, MonthlyAverage would return "Oct 2019."

- **Appraisal Price:** A TRUE/FALSE flag to denote that an appraisal – or interim – price has been published between assessment dates and values.
- **Pricing Rationale:** Provides insight into how our price reporters and editors have determined the pricing for the instrument(s) selected. If no pricing rationale has been provided, this field will remain blank.

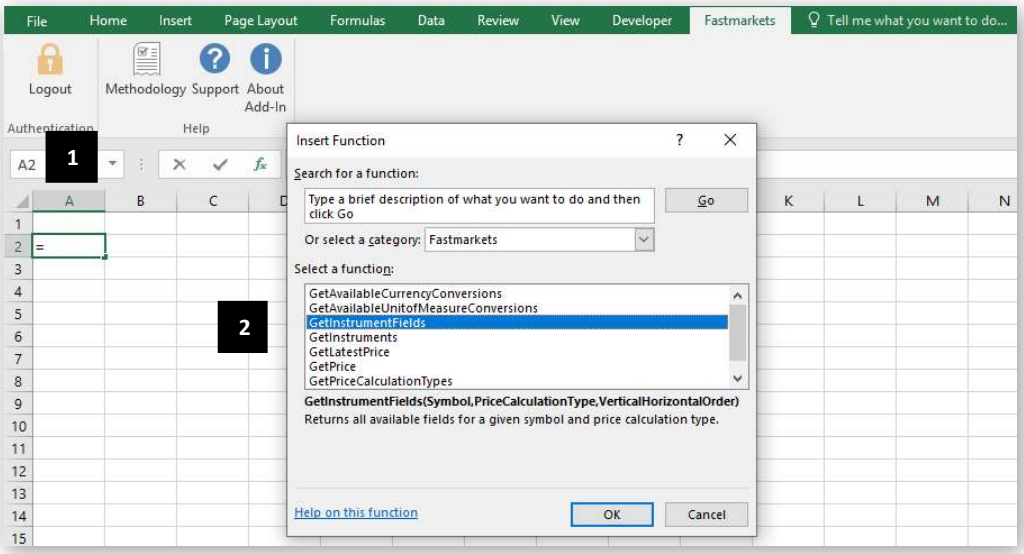
A full description of all fields can be found in the Appendix.

The following table provides a summary of this function.

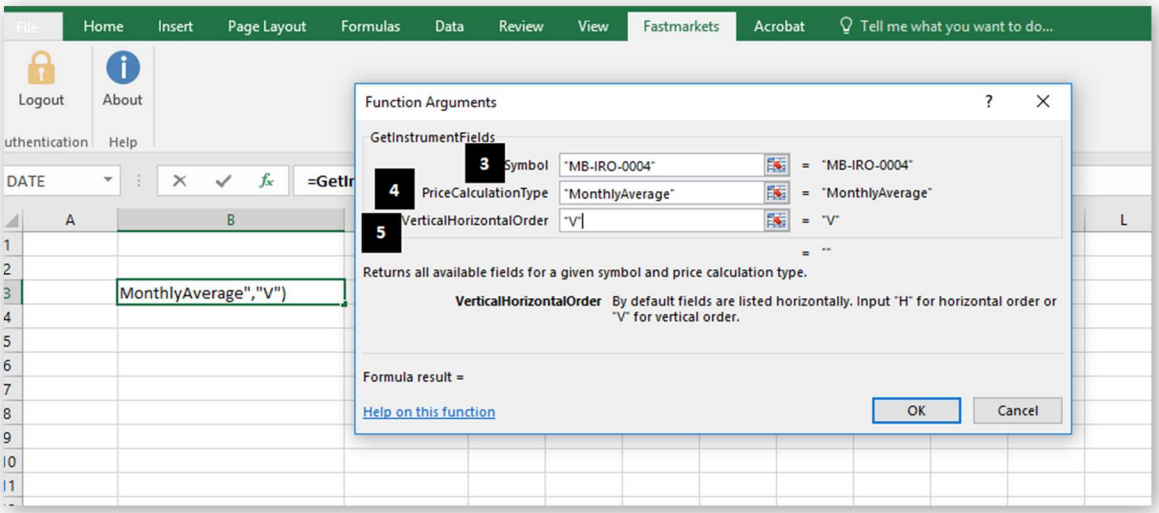
Function summary	The GetInstrumentFields( ) function may be used to fetch the data fields that are available for a given symbol and price calculation type. For example, exchange prices (to be introduced in later versions) will have different price fields from physical prices.
Input parameters	Symbol; PriceCalculationType; VerticalHorizontalOrder
Output for the function	Inserts an array displaying the available data fields. The fields available for actual and physical prices are: Date, AssessmentDate, Period, Low, Mid, High, Currency, UnitOfMeasure, Product, Location, Source, Incoterm, Commodity, PriceType, Frequency, Status, Correction, AppraisalPrice, PricingRationale, LowChange, LowChangeProportion, MidChange, MidChangeProportion, HighChange, HighChangeProportion, Description, ShortDescription and LaunchDate.
Example	=GetInstrumentFields("MB-AL-0002","MonthlyAverage","V")

Get the data fields available for a particular price

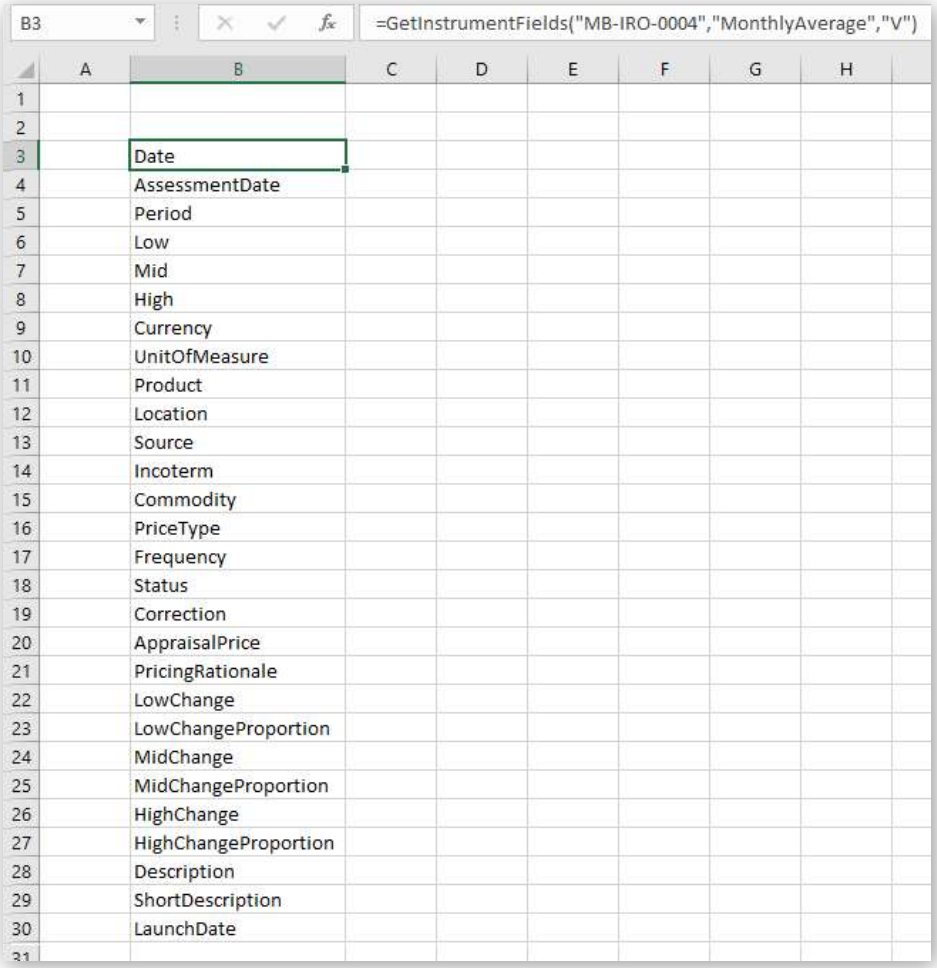
1. Select the cell where you want the data fields to be inserted (for example, A2).
2. Click on the "function wizard" icon (f_x), choose the "Fastmarkets" category, select the "GetInstrumentFields" function and click OK.



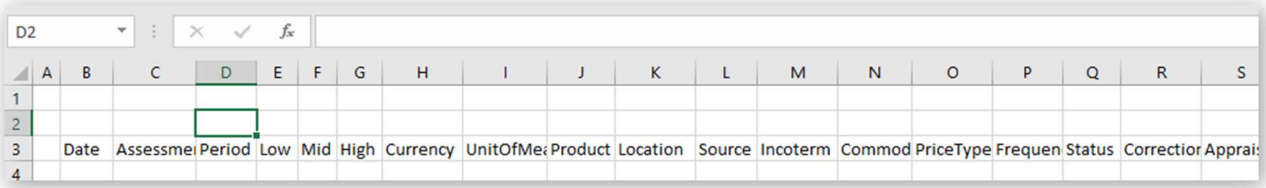
3. Enter the symbol. For this example, we're using MB-IRO-0004.
4. Enter the PriceCalculationType. This field is optional; if left blank, it will return fields for "Actual" (actual physical prices). If you know the PriceCalculationType, enter it in quotation marks (for example, "MonthlyAverage"). You can also cell reference it if you have used the GetPriceCalculationType function.
5. For the "VerticalHorizontalOrder" field, enter "V" if you want the data fields to appear vertically or "H" if you want the data fields to appear horizontally. (This field is optional; if left blank, it will return instrument fields horizontally.) Then click OK.



The data fields available for the symbol will appear in the spreadsheet as shown in the following screenshot if you select “V” for Vertical order.



The screenshot below shows how the data fields would appear horizontally if “H” were typed into the “VerticalHorizontalOrder” field instead of “V” as referenced in Step 4. (Note: Several fields are cut off for the viewability of this screenshot.)



GET LATEST PRICE

The GetLatestPrice( ) function enables you to view the latest price information for your chosen symbols and their price calculation types.

It is possible to convert price data to the currency and/or unit of measure specified through the TargetCurrency and TargetUnitOfMeasure parameters. These are optional parameters; if left blank, price data will be returned in the assessed currency and unit of measure. Please refer to the Currency & Unit of Measure Conversion section for an example.

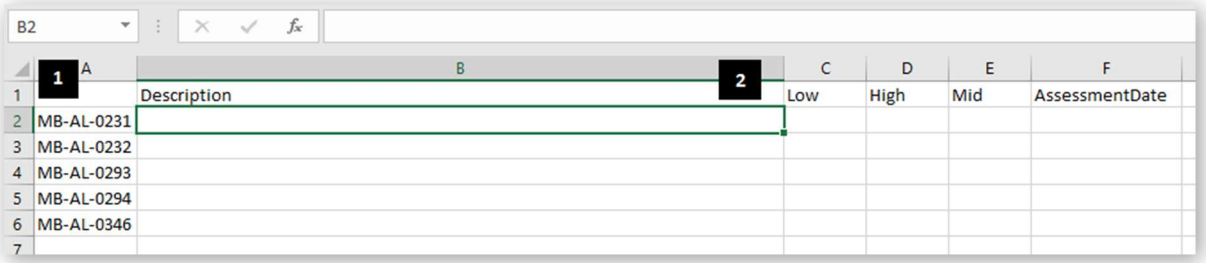
The table below provides a summary of this function.

Function summary	The GetLatestPrice( ) function fetches the latest price data for the specified Symbol, Field and Price Calculation Type. If TargetCurrency and or TargetUnitofMeasure parameters are entered, price fields will be converted to the specified currency and/or unit of measure. It can be used to get fields such as Low, Mid and High for actual physical prices or averages. Because the function applies to an individual cell, it gives the user control over the layout of the workbook. Once the table is laid out, the formula may be dragged or copied to populate all cells.
Input parameters	Symbol; PriceCalculationType; Field; TargetCurrency; TargetUnitOfMeasure
Output for the function	The result is inserted in a single cell; it represents the most recent price or average price data, depending on your chosen price calculation type, target currency and/or target unit of measure. Currency and UnitofMeasure fields will return Assessed Currency and/or Unit of Measure if left blank or converted/target Currency and/or UnitofMeasure if specified. Please note that if a price is updated every Monday and the user requests a price for Tuesday, Wednesday, Thursday or Friday, the function will return Monday's price.

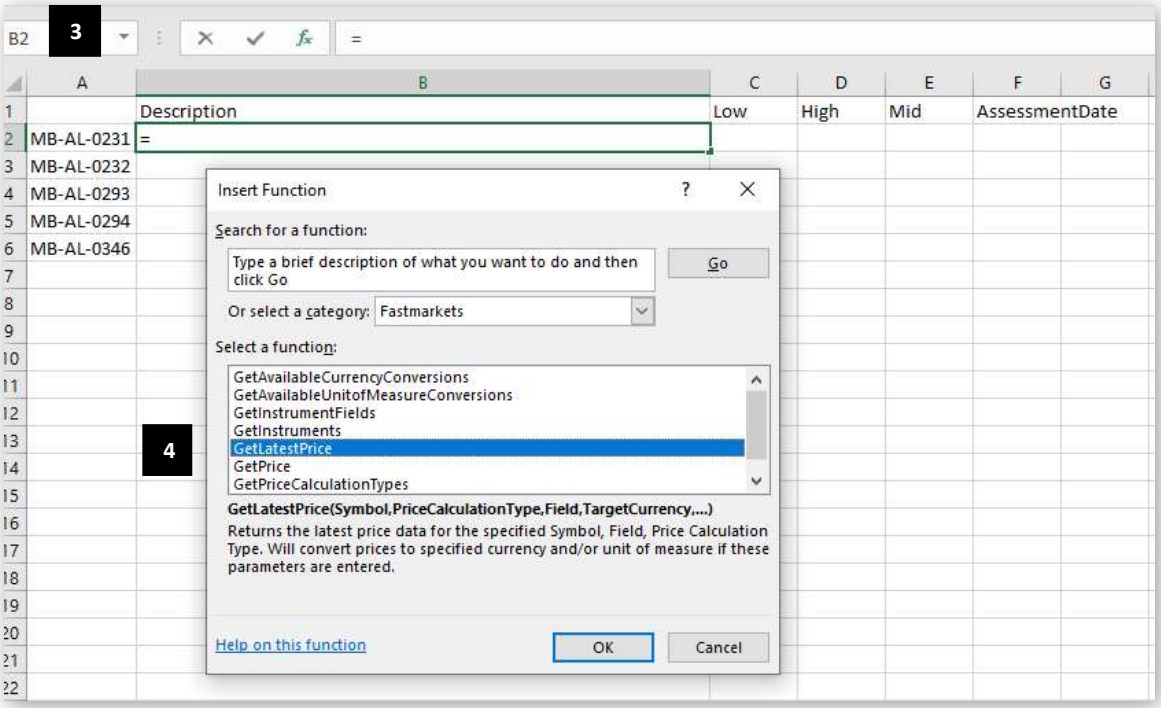
Example	=GetLatestPrice("MB-AL-0001","Actual", "Low")

View the latest "Actual" physical price data for one or more symbols (in the assessed currency and unit of measure)

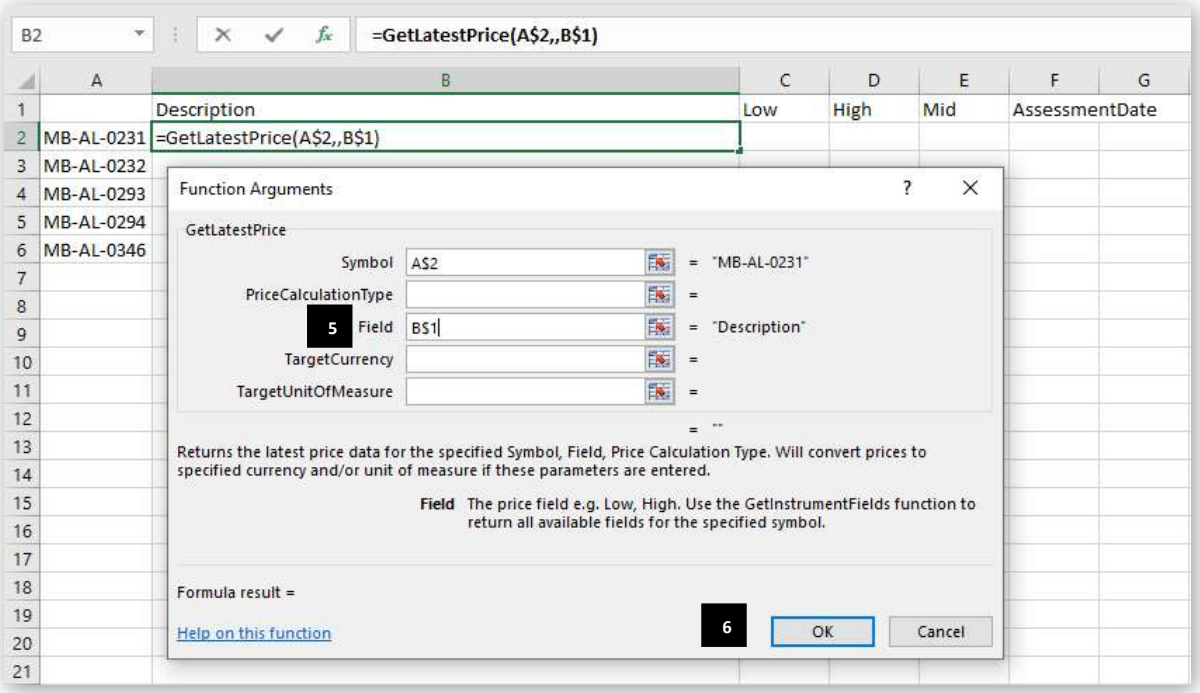
1. Copy the symbols for which you want to get the latest prices and paste them into a new sheet. For this example, we've chosen five aluminium premiums.
2. Fill in the column headers with the required price fields. **Fastmarkets' Excel Add-in supports the fields outlined in the table in the Appendix.** For the example shown in the following screenshot, we've chosen Description, Low, High, Mid and AssessmentDate as our fields.



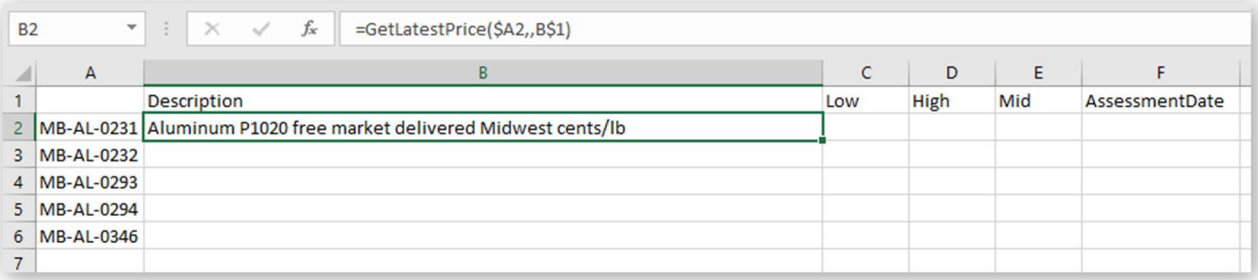
3. Select the cell where you want the first price to be inserted (for example, B2).
4. Click on the "function wizard" icon (fx). Choose the "Fastmarkets" category and select the "GetLatestPrice" function.



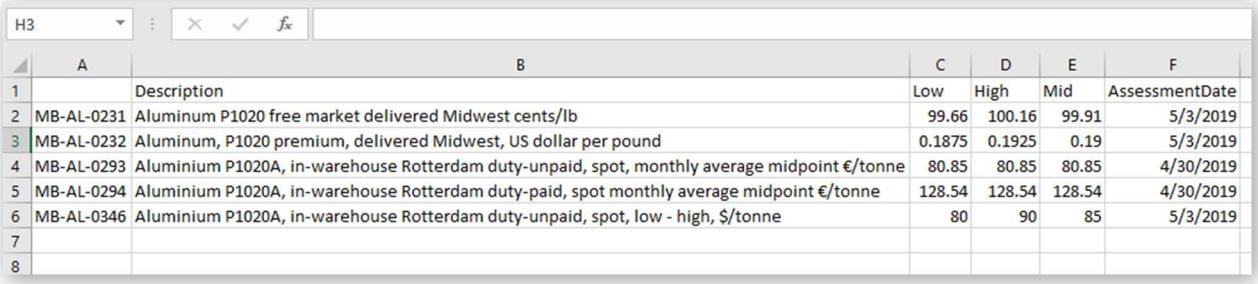
5. Fill in the following parameters as shown:
   - **Symbol:** Type the cell reference where the first price symbol has been inserted and apply the dollar sign ($) to the column (for this example, type $A2, since that is where symbol MB-AL-0231 has been inserted). Applying the $ will allow you to copy the formula over to other cells to fill out the table.
   - **PriceCalculationType:** This parameter enables you to determine the type of data to return for the symbol (physical pricing or averages). The parameter is optional; if left blank, it will return "Actual" for physical pricing. For this example, we will leave it blank.
   - **Field:** Type the cell reference where the first price field has been inserted and apply the dollar sign ($) to the row (for this example, type B$1, since that's where "Description" has been inserted). Applying the $ will allow you to copy the formula over to other cells.
   - **TargetCurrency:** This is an optional parameter; if left blank, it will return the assessed currency for the price. For this example, we will leave it blank.
   - **TargetUnitOfMeasure:** This is an optional parameter; if left blank, it will return the assessed unit of measure for the price. For this example, we will leave it blank.
6. Click OK.



The description of the instrument has now been inserted into cell B2 (see screenshot below).



7. Copy the formula over to get the information for all of the data fields you're seeking (see following screenshot). You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A and to one of the fields in Row 1.

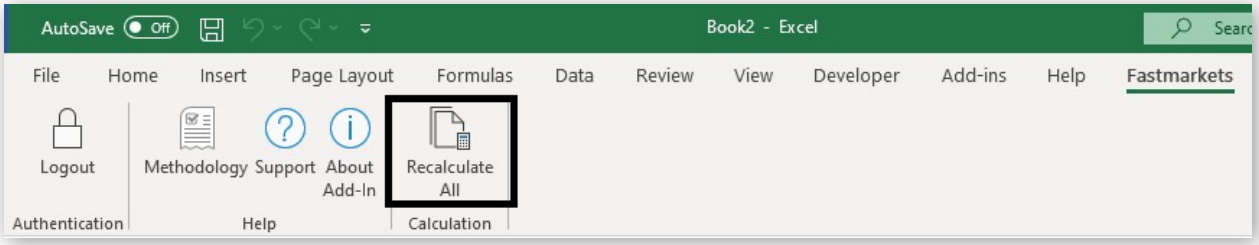


Note: The date format returned (mm/dd/yyyy versus dd/mm/yyyy) will be determined by your regional date and time settings.

Refreshing the latest pricing data

Depending on your Excel settings, your pricing data may update automatically. If your Excel is set to update calculations automatically, you may simply refresh the data. To change this setting, go to Options → Formulas → Calculation options and change Workbook Calculation from Automatic to Manual. If Workbook Calculation is set to manual, the keystrokes are as follows:

- **F2 and Enter** to update a specific cell
- **Ctrl + Alt + F9** to update the entire spreadsheet or click the Recalculate All button on the Fastmarkets ribbon:

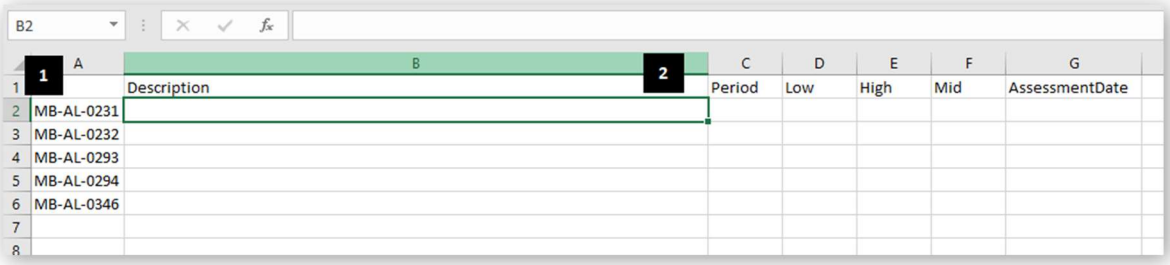


Please note this will refresh ALL open workbooks (not just those using Fastmarkets functions) and will update Fastmarkets functions with the most recent assessments in spreadsheets.

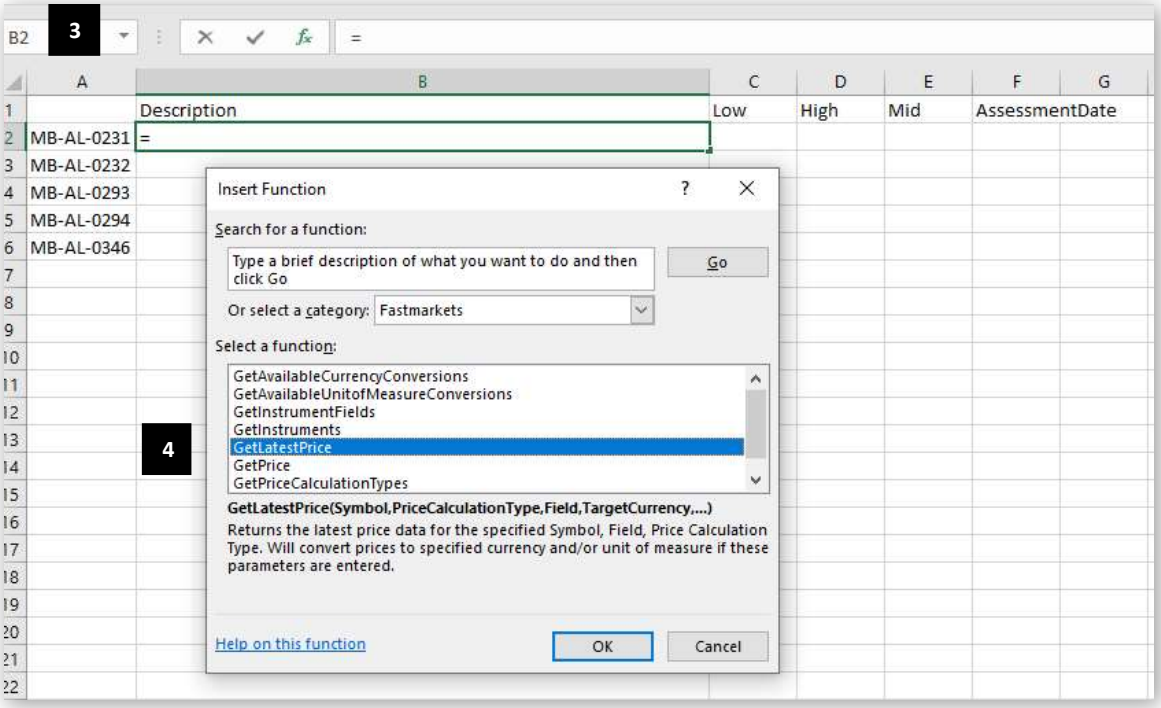
View the latest monthly average price data for one or more symbols

Fastmarkets produces independent, fair and representative price assessments and indices for ferrous, non-ferrous and scrap metal prices on a daily, bi-weekly, weekly, bi-monthly or monthly basis. Fastmarkets calculates and publishes monthly averages based on these independent, proprietary assessments which can be easily retrieved using the Excel Add-in. For details on how these monthly averages are calculated, please review our methodology documentation at https://www.fastmarkets.com/about-us/methodology.

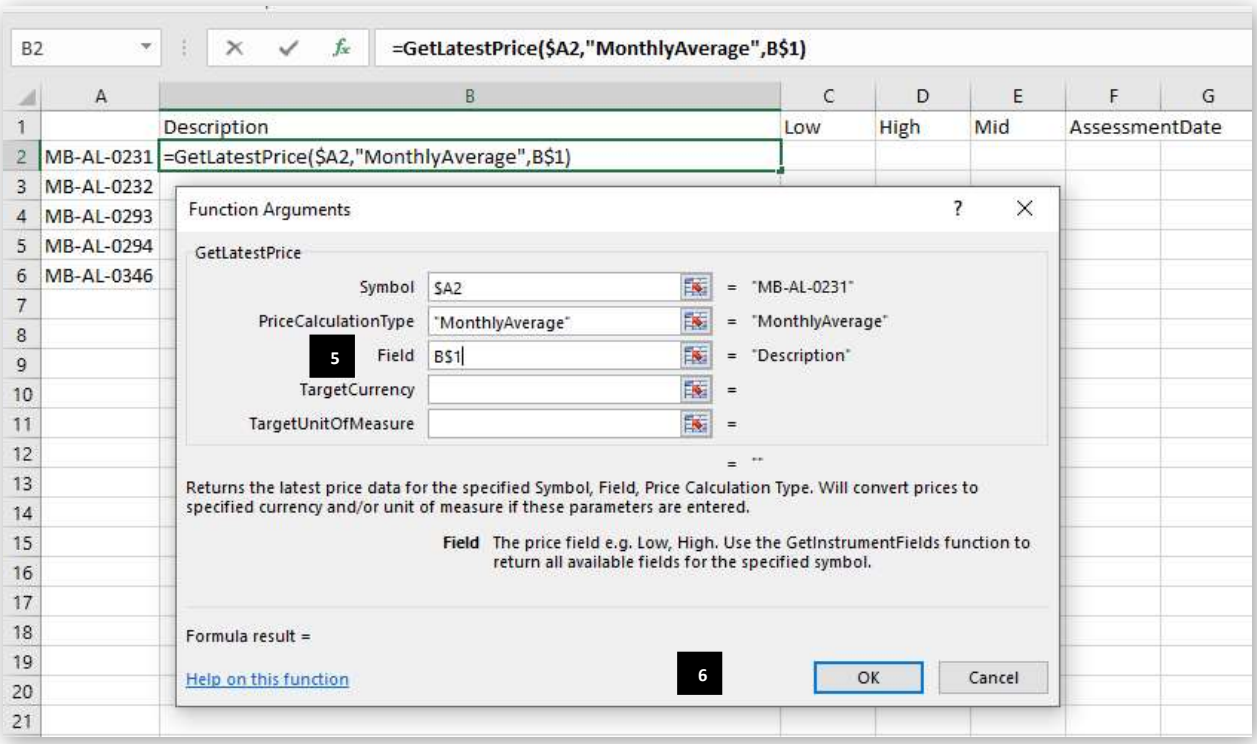
1. Copy the symbols for which you want to get the latest monthly average prices and paste them into a new sheet. For this example, we've chosen the same five aluminium premiums from the previous example.
2. Fill in the column headers with the required price fields. **Fastmarkets' Excel Add-in supports the fields outlined in the table in the Appendix for averages AND actual physical prices.** For this example, we've chosen Description, Period, Low, High, Mid and AssessmentDate. Period is a useful new field that allows you to view the week date range, month/year or year for the average data you specify.



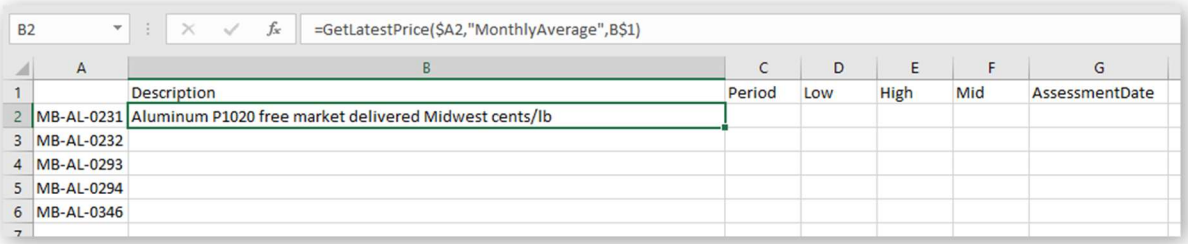
3. Select the cell where you want the first price to be inserted (for example, B2).
4. Click on the "function wizard" icon (fx). Choose the "Fastmarkets" category and select the "GetLatestPrice" function.



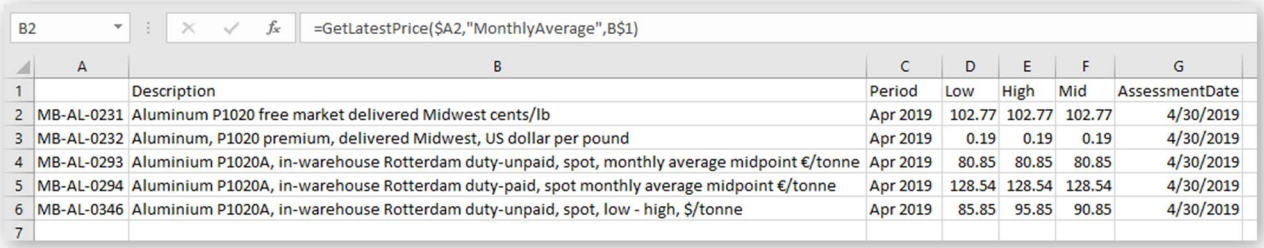
5. Fill in the parameters as shown below:
    - **Symbol:** Type the cell reference where the first price symbol has been inserted and apply the dollar sign ($) to the column (for this example, type $A2, since that's where symbol MB-AL-0231 has been inserted). Applying the dollar sign ($) will allow you to copy the formula over to other cells to fill out the table.
    - **PriceCalculationType:** To retrieve averages, this field needs to have a value entered. If you are unsure of what to enter, please refer to the earlier section on the GetPriceCalculationType function. For this example, enter "MonthlyAverage".
    - **Field:** Type the cell reference where the first price field has been inserted and apply the dollar sign ($) to the row (for this example, type B$1, since that's where "Description" has been inserted). Applying the dollar sign ($) will allow you to copy the formula over to other cells.
    - **TargetCurrency:** In this example, it is left blank to return the assessed currency for the price.
    - **TargetUnitOfMeasure:** In this example, it is left blank to return the assessed unit of measure for the price.
6. Click OK.



The description of the instrument has now been inserted into Cell B2, as shown below.



7. Copy the formula over to get the information for all of the data fields you are seeking (see following screenshot). You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A and to one of the fields in Row 1.



B2 =GetLatestPrice($A2,"MonthlyAverage",B$1)

	A	B	C	D	E	F	G
1		Description	Period	Low	High	Mid	AssessmentDate
2	MB-AL-0231	Aluminum P1020 free market delivered Midwest cents/lb	Apr 2019	102.77	102.77	102.77	4/30/2019
3	MB-AL-0232	Aluminum, P1020 premium, delivered Midwest, US dollar per pound	Apr 2019	0.19	0.19	0.19	4/30/2019
4	MB-AL-0293	Aluminium P1020A, in-warehouse Rotterdam duty-unpaid, spot, monthly average midpoint €/tonne	Apr 2019	80.85	80.85	80.85	4/30/2019
5	MB-AL-0294	Aluminium P1020A, in-warehouse Rotterdam duty-paid, spot monthly average midpoint €/tonne	Apr 2019	128.54	128.54	128.54	4/30/2019
6	MB-AL-0346	Aluminium P1020A, in-warehouse Rotterdam duty-unpaid, spot, low - high, $/tonne	Apr 2019	85.85	95.85	90.85	4/30/2019
7							

An important note on monthly averages

In general, every symbol should have a monthly average, however, in some instances there is a reason why averages may not be available. Please refer to the following sections to check if this is the case.

Why am I not able to retrieve monthly average prices for US weekly scrap composites?

The following weekly scrap composite prices are an average of the daily composite prices calculated for the week from Friday to Thursday. Published monthly averages are not available for these prices. The corresponding daily composite prices, shown in the table below, should be used to retrieve monthly average prices. The averages price calculation methodology for Fastmarkets US prices changed as of January 2021. You can find out more here: https://www.fastmarkets.com/support/averages-changes-faq

Daily Composite		Weekly Composite - FriThurs weekly average	
Symbol	Description	Symbol	Description
MB-STE-0217	Alabama Shredded auto scrap consumer buying price $/gross ton	MB-STE-0519	Alabama shredded auto scrap consumer buying price US$/gross ton weekly composite
MB-STE-0228	Chicago No. 1 heavy melt scrap consumer buying price $/gross ton	MB-STE-0528	Chicago no. 1 heavy melt consumer buying price US$/gross ton weekly composite
MB-STE-0232	Chicago No. 1 busheling scrap consumer buying price $/gross ton	MB-STE-0524	Chicago no. 1 busheling scrap consumer buying price US$/gross ton weekly composite price
MB-STE-0233	Chicago Shredded auto scrap consumer buying price $/gross ton	MB-STE-0520	Chicago shredded auto scrap consumer buying price US$/gross ton weekly composite
MB-STE-0257	Cleveland No. 1 busheling scrap consumer buying price $/gross ton	MB-STE-0525	Cleveland no. 1 busheling scrap consumer buying price US$/gross ton weekly composite
MB-STE-0285	Philadelphia No. 1 heavy melt scrap consumer buying price $/gross ton	MB-STE-0529	Philadelphia no. 1 heavy melt consumer buying price US$/gross ton weekly composite
MB-STE-0289	Philadelphia Shredded auto scrap consumer buying price $/gross ton	MB-STE-0521	Philadelphia shredded auto scrap consumer buying price US$/gross ton weekly composite
MB-STE-0303	Pittsburgh No. 1 heavy melt scrap consumer buying price $/gross ton	MB-STE-0530	Pittsburgh no. 1 heavy melt consumer buying price US$/gross ton weekly composite
MB-STE-0306	Pittsburgh No. 1 busheling scrap consumer buying price $/gross ton	MB-STE-0526	Pittsburgh no. 1 busheling consumer buying price US$/gross ton weekly composite
MB-STE-0308	Pittsburgh Shredded auto scrap consumer buying price $/gross ton	MB-STE-0522	Pittsburgh shredded auto scrap consumer buying price US$/gross ton weekly composite
MB-STE-0426	No. 1 heavy melt scrap daily composite $/gross ton	MB-STE-0531	No. 1 heavy melt consumer buying price US$/gross ton weekly composite
MB-STE-0427	Shredded auto scrap daily composite $/gross ton	MB-STE-0523	Shredded auto scrap consumer buying price US$/gross ton weekly composite
MB-STE-0428	No. 1 busheling scrap daily composite $/gross ton	MB-STE-0527	No. 1 busheling scrap consumer buying price US$/gross ton weekly composite

There are other symbols for which I cannot retrieve average prices. Is there an error?

Another group of symbols for which average prices are not available are those where a converted price (currency and/or unit of measure) is available as well as the published "parent" symbol in the base currency or unit of measure. In this instance, to access or display the monthly average for the converted price, please refer to the "parent" symbol listed below. First convert the currency and/or unit of measure of the "parent" symbol, then access the average price field:

"Parent" symbol					"Converted" symbol				
Symbol	Description	Base Unit of Measure	Base Currency	Monthly Average	Symbol	Description	Converted Unit of Measure	Converted Currency	Monthly Average
MB-CU-0002	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb	Pound	USd	Yes	MB-CU-0310	Copper grade 1 cathode premium, ddp Midwest US, $/tonne	Tonne	USD	No
MB-AL-0040	Aluminum alloy A380.1, delivered Midwest, US cents/lb	Pound	USd	Yes	MB-AL-0233	Aluminum alloy A380.1, delivered Midwest, $/lb	Pound	USD	No
MB-FEC-0007	Ferro-chrome high carbon 6-8% C, basis 60-65% Cr, max 2% Si, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FEC-0012	Ferro-chrome high carbon 6-8% C, basis 60-65% Cr, max 2% Si, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-FEC-0009	Ferro-chrome low carbon 0.10%C, 62% Cr min, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FEC-0014	Ferro-chrome low carbon 0.10%C, 62% Cr min, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-FEC-0010	Ferro-chrome low carbon 0.15%C, 60% Cr min, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FEC-0015	Ferro-chrome low carbon 0.15%C, 60% Cr min, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-FEC-0008	Ferro-chrome low carbon 0.05%C, 65% Cr min, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FEC-0013	Ferro-chrome low carbon 0.05%C, 65% Cr min, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-FEM-0003	Ferro-manganese medium carbon 80% Mn, max 1.50% C, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FEM-0004	Ferro-manganese medium carbon 80% Mn, max 1.50% C, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-FES-0002	Ferro-silicon 75% Si, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-FES-0003	Ferro-silicon 75% Si, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-SIM-0003	Silico-manganese 65% Mn min, min 16% Si, in-whs Pittsburgh, US cents/lb	Pound	USd	Yes	MB-SIM-0005	Silico-manganese 65% Mn min, min 16% Si, in-whs Pittsburgh, $/lb	Pound	USD	No
MB-STE-0170	Steel reinforcing bar (rebar), fob mill US, $/cwt	Hundredweight	USD	Yes	MB-STE-0465	Steel reinforcing bar (rebar), fob mill US, $/short ton	ShortTon	USD	No
MB-STE-0172	Steel cut-to-length plate carbon grade, fob mill US, $/cwt	Hundredweight	USD	Yes	MB-STE-0467	Steel cut-to-length plate carbon grade, fob mill US, $/short ton	ShortTon	USD	No
MB-STE-0184	Steel hot-rolled coil index, fob mill US, $/cwt	Hundredweight	USD	Yes	MB-STE-0468	Steel hot-rolled coil index, fob mill US, $/short ton	ShortTon	USD	No
MB-STE-0185	Steel cold-rolled coil, fob mill US, $/cwt	Hundredweight	USD	Yes	MB-STE-0469	Steel cold-rolled coil, fob mill US, $/short ton	ShortTon	USD	No
MB-STE-0186	Steel hot-dipped galvanized (base) steel coil, fob mill US, $/cwt	Hundredweight	USD	Yes	MB-STE-0470	Steel hot-dipped galvanized (base) steel coil, fob mill US, $/short ton	ShortTon	USD	No

GET PRICE HISTORY

The GetPriceHistory( ) function enables you to view historical prices for a symbol. From this version, it is possible to convert price data to the currency and/or unit of measure specified through the TargetCurrency and TargetUnitOfMeasure parameters. These are optional parameters; if left blank, price data will be returned in the assessed currency and unit of measure. Please refer to the Currency & Unit of Measure Conversion section for an example.

The table below provides a summary of this function.

Function summary	The GetPriceHistory( ) function can be used to fetch the price history for a given symbol. The user can specify the price calculation type to determine whether to return physical price or average price history; start and end date; fill setting to determine how to fill gaps between data points; horizontal or vertical layout; ascending or descending dates; and whether to retrieve specific or all fields. If TargetCurrency and or TargetUnitofMeasure parameters are entered, price data history will be converted to the specified currency and/or unit of measure; if left blank, the assessed currency and/or unit of measure is returned.
Input parameters	Symbol; PriceCalculationType; StartDate; EndDate; FillSetting; VerticalHorizontalOrder; AscendingDescending; TargetCurrency; TargetUnitOfMeasure; Field1 … Field 8. **NOTE: Nesting volatile Microsoft Excel functions such as =TODAY( ) or =NOW( ) into date parameter inputs is not recommended.**
Output for the function	Inserts a series table displaying historical dates and corresponding price fields. The PriceCalculationType parameter specifies if the function should return actual physical pricing or

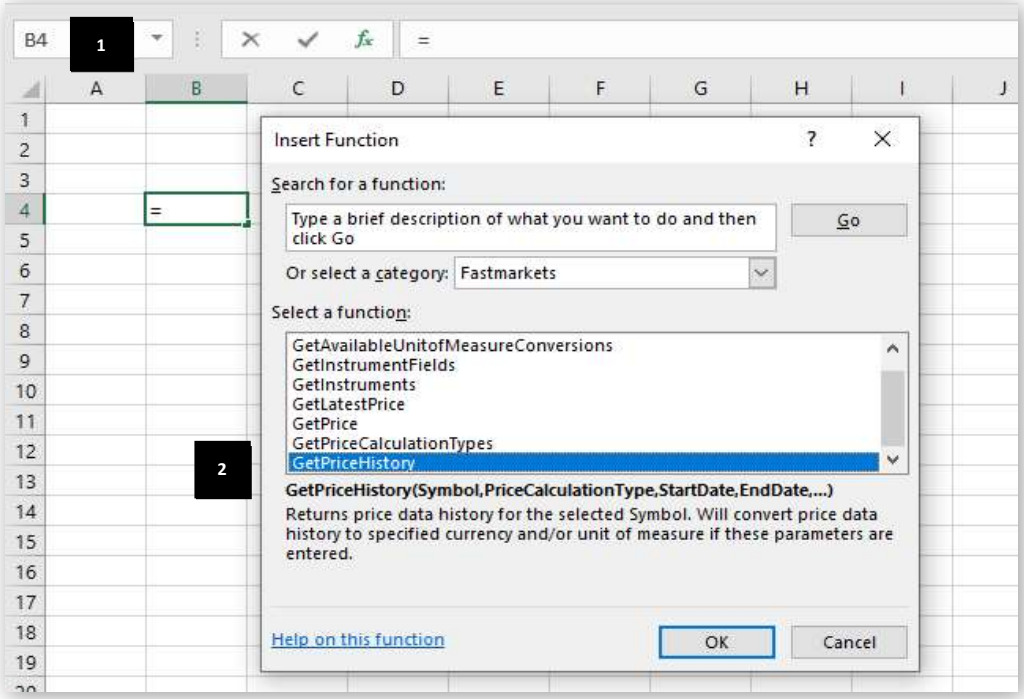
	an average. The FillSetting parameter determines how to handle non-assessment days in the historical time series. If the FillSetting parameter is not specified, the default data will display "ValueOnly" (these are assessment-only dates and values). If the TargetCurrency and or TargetUnitofMeasure parameters are entered, price data history will be converted to the specified currency and/or unit of measure; if left blank, the assessed currency and/or unit of measure is returned. The next table explains the choices available with this parameter.
Example	=GetPriceHistory("MB-AL-0001","Actual", "25/07/2014","27/02/2018","ValueOnly","V", "A","Low","Mid","High","Location","Currency", "UnitOfMeasure","AssessmentDate")

The table below explains how the historical prices return with each fill setting option within the parameter, enabling you to customize the time series data with which you work.

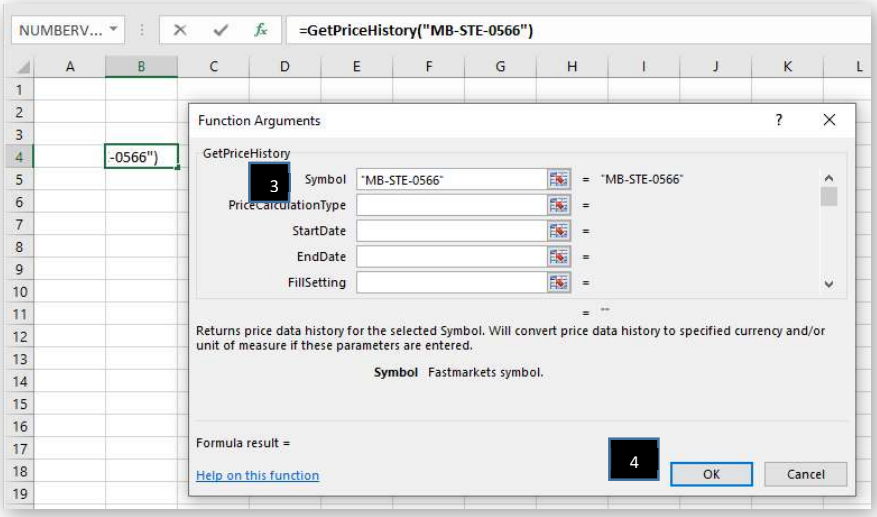
FILL SETTING	DESCRIPTION
ValueOnly	The dates and prices returned will only display when assessed or published prices are available. For example, for a MonthlyAverage, the field will display dates and values once per month.
CarryForward	If there is no updated price for a given day, the function will "carry forward" – or repeat – the last available price for **ALL WEEKDAYS** until the price is updated again (**public holidays will NOT be excluded**). For example, a price is assessed weekly, on Monday. For the subsequent Tuesday, Wednesday, Thursday and Friday, the function will return Monday's price.
Null	**ALL WEEKDAYS INCLUDING HOLIDAYS** will be displayed in the Date column. If there is no updated price for a given date, the corresponding row will be blank.

View the physical price history for a particular symbol

1. Select the cell where you want the price history to be inserted (for example, B4).
2. Click on the “function wizard” icon (fx), choose the “Fastmarkets” category, select the “GetPriceHistory” function and click OK.



3. Fill in the Symbol field ONLY. This is the quickest way to get the full physical price history for assessment-only dates. You may fill in the StartDate and EndDate fields if you wish to narrow the price history to a specific range. The date format returned (mm/dd/yyyy versus dd/mm/yyyy) will be determined by your regional date and time settings. For this example, we will use the symbol “MB-STE-0566”.
4. Click OK.



The price data history has now been inserted into the sheet, as shown in the following screenshot.

B4 =GetPriceHistory("MB-STE-0566")

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	MB-STE-0566	Brazil export slab $ per tonne fob main port											
2													
3													
4		Date	AssessmentDate	Low	Mid	High	Currency	UnitOfMe	Product	Location	Incoterm	Commodity	Description
5		05/04/2019	05/04/2019	510	530	550	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
6		29/03/2019	29/03/2019	510	530	550	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
7		22/03/2019	22/03/2019	510	530	550	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
8		15/03/2019	15/03/2019	500	520	540	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
9		08/03/2019	08/03/2019	500	520	540	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
10		01/03/2019	01/03/2019	500	520	540	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
11		22/02/2019	22/02/2019	490	510	530	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
12		15/02/2019	15/02/2019	460	485	510	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
13		08/02/2019	08/02/2019	420	445	470	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
14		01/02/2019	01/02/2019	410	435	460	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
15		25/01/2019	25/01/2019	410	435	460	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
16		18/01/2019	18/01/2019	410	435	460	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
17		11/01/2019	11/01/2019	415	440	465	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
18		04/01/2019	04/01/2019	430	452.5	475	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
19		28/12/2018	28/12/2018	430	452.5	475	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
20		21/12/2018	21/12/2018	430	452.5	475	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
21		14/12/2018	14/12/2018	430	452.5	475	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
22		07/12/2018	07/12/2018	430	457.5	485	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
23		30/11/2018	30/11/2018	435	465	495	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
24		23/11/2018	23/11/2018	450	477.5	505	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
25		16/11/2018	16/11/2018	505	510	515	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
26		09/11/2018	09/11/2018	510	512.5	515	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
27		02/11/2018	02/11/2018	505	510	515	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
28		26/10/2018	26/10/2018	505	510	515	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
29		19/10/2018	19/10/2018	500	505	510	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
30		12/10/2018	12/10/2018	490	500	510	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
31		05/10/2018	05/10/2018	480	490	500	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
32		28/09/2018	28/09/2018	500	505	510	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
33		21/09/2018	21/09/2018	500	515	530	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
34		14/09/2018	14/09/2018	500	515	530	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
35		07/09/2018	07/09/2018	520	530	540	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
36		31/08/2018	31/08/2018	520	542.5	565	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
37		24/08/2018	24/08/2018	520	550	580	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port
38		17/08/2018	17/08/2018	535	557.5	580	USD	Tonne	Steel slab	Brazil	Free on board	Steel	Brazil export slab $ per tonne fob main port

The GetPriceHistory( ) function also allows you to customize the way the price history is displayed in your spreadsheet. The following three, step-by-step examples show how the FillSetting parameter can be used to customize your returned data. The second and third

examples ("CarryForward" and "Null") are particularly useful if you plan to align, in your spreadsheet, the returned data with your own data or other sources of daily published data.

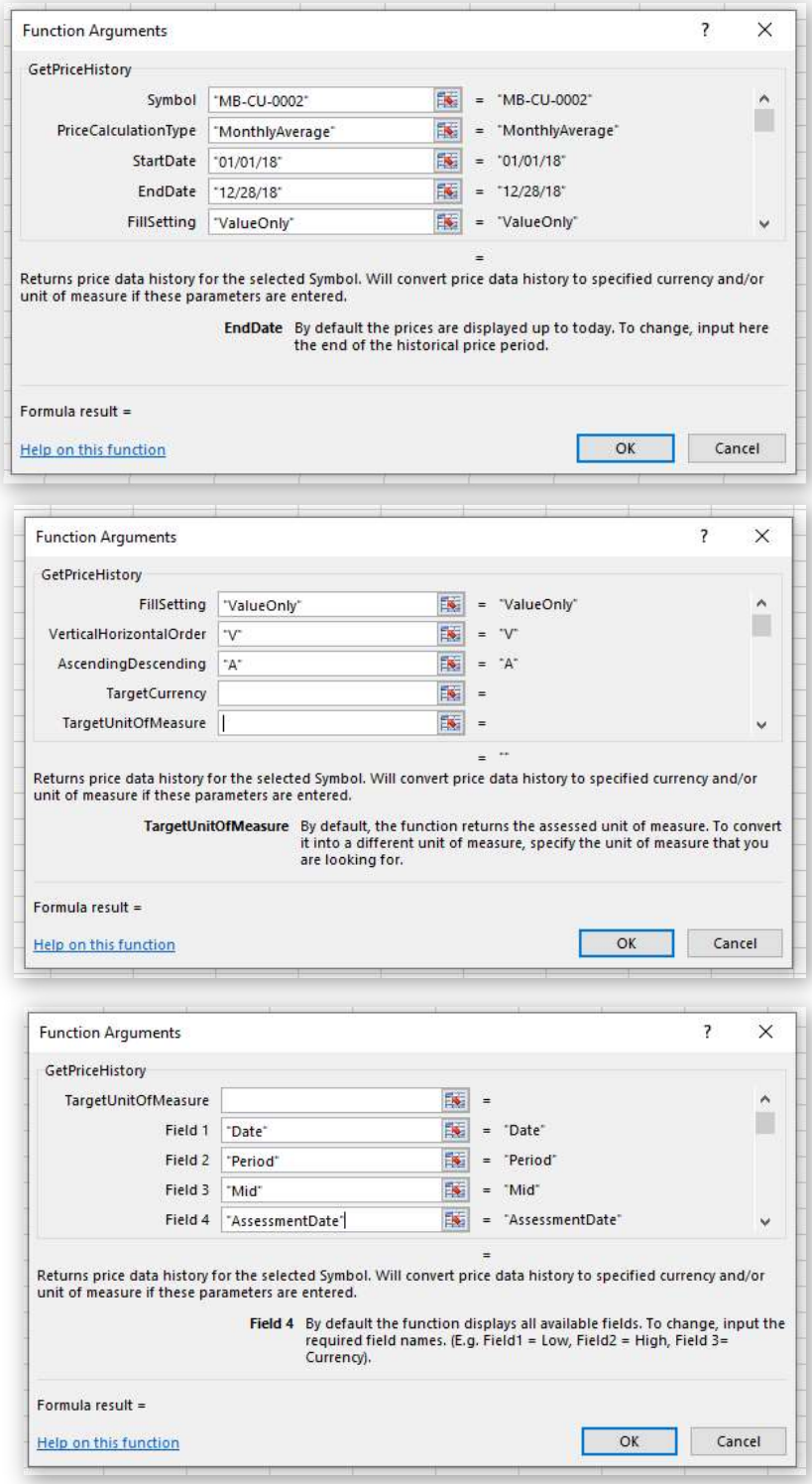
- **"ValueOnly":** Returns prices on their assessment dates.
- **"CarryForward":** Returns prices for every weekday that are "carried forward" – or repeated – between assessment dates.
- **"Null":** Returns all weekdays but displays prices only on their assessment date; other dates are blank.

NOTE: PUBLIC HOLIDAYS ARE NOT EXCLUDED. Fill settings "Null" and "CarryForward" will return **ALL WEEKDAYS**. This is important to consider if manually calculating an average period and comparing to published monthly average prices when entering "MonthlyAverage".

"ValueOnly": Return monthly average prices for assessment dates with specific data fields

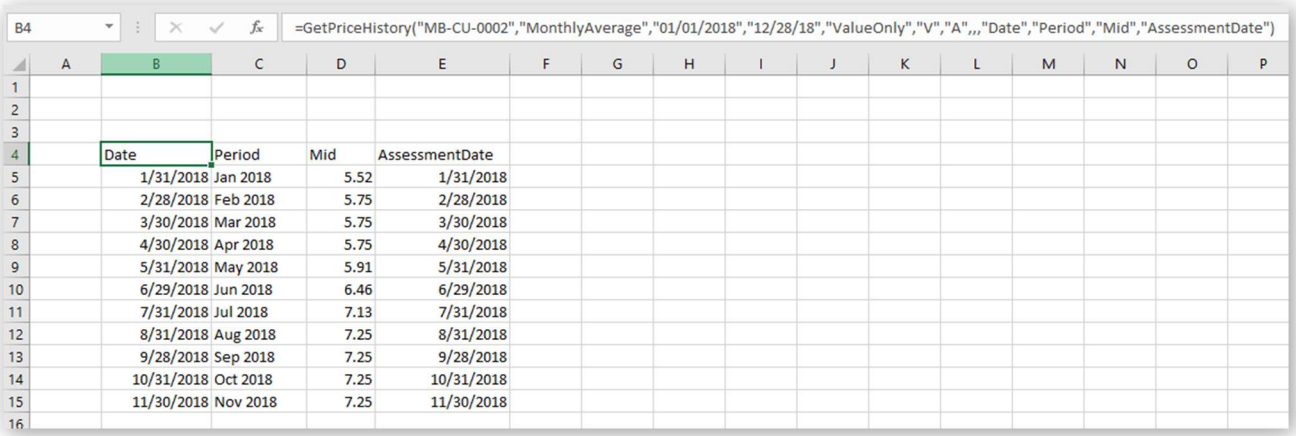
1. Select the cell where you want the price history to be inserted (for example, B4).
2. Click on the "function wizard" icon (fx), choose the "Fastmarkets" category, select the "GetPriceHistory" function and click OK – just as you did before.
3. Fill in the parameters as below:
   - **Symbol:** For this example, we'll use the symbol "MB-CU-0002".
   - **PriceCalculationType:** "MonthlyAverage"
   - **StartDate:** "01/01/18" (January 1, 2018)
   - **EndDate:** "12/28/18" (December 28, 2018)
   - **FillSetting:** "ValueOnly"
   - **VerticalHorizontalOrder:** "V"
   - **AscendingDescending:** "A"
   - **TargetCurrency:** In this example, it is left blank to return the assessed currency for the price.
   - **TargetUnitOfMeasure:** In this example, it is left blank to return the assessed unit of measure for the price.
   - **Field1:** "Date"
   - **Field2:** "Period"
   - **Field3:** "Mid"
   - **Field4:** "AssessmentDate"

The following three screenshots show all of the parameters entered into the function arguments as outlined above.



4. Once you have finished populating the fields, click OK. The historical price table will flow into the sheet according to the specified parameters, as shown in the following

screenshot. **NOTE: These are average values on their published/assessed dates (holidays are factored in). This is the official Fastmarkets average for the instrument.**



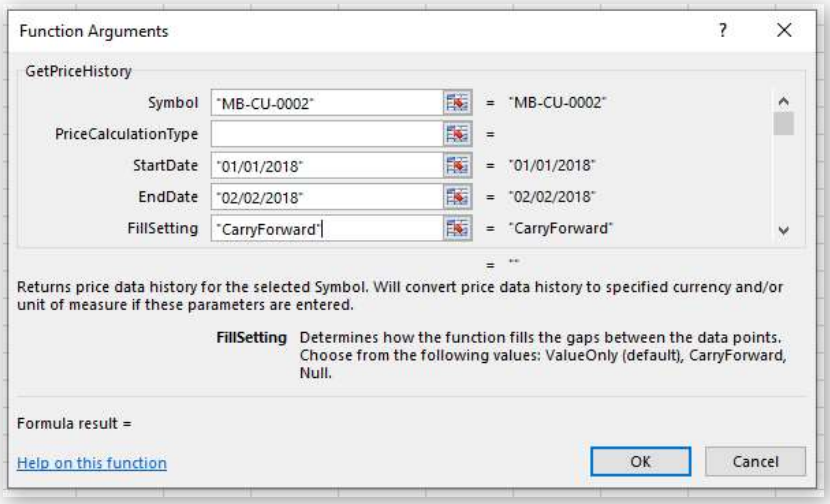
B4 =GetPriceHistory("MB-CU-0002","MonthlyAverage","01/01/2018","12/28/18","ValueOnly","V","A",,,"Date","Period","Mid","AssessmentDate")

	Date	Period	Mid	AssessmentDate
5	1/31/2018	Jan 2018	5.52	1/31/2018
6	2/28/2018	Feb 2018	5.75	2/28/2018
7	3/30/2018	Mar 2018	5.75	3/30/2018
8	4/30/2018	Apr 2018	5.75	4/30/2018
9	5/31/2018	May 2018	5.91	5/31/2018
10	6/29/2018	Jun 2018	6.46	6/29/2018
11	7/31/2018	Jul 2018	7.13	7/31/2018
12	8/31/2018	Aug 2018	7.25	8/31/2018
13	9/28/2018	Sep 2018	7.25	9/28/2018
14	10/31/2018	Oct 2018	7.25	10/31/2018
15	11/30/2018	Nov 2018	7.25	11/30/2018

"CarryForward": Return physical assessment prices with specific data fields that are rolled forward on non-assessment dates

1. Select the cell where you want the price history to be inserted (for example, B4).
2. Click on the "function wizard" icon (fx), choose the "Fastmarkets" category, select the "GetPriceHistory" function and click OK – just as you did before.
3. Fill in the parameters as below:
   - **Symbol:** For this example, we'll use the symbol "MB-CU-0002".
   - **PriceCalculationType:** This parameter enables you to determine the type of data to return for the symbol (physical pricing or averages). The parameter is optional; if left blank, it will return "Actual" for physical pricing. For this example, we will leave it blank.
   - **StartDate:** "01/01/18" (January 1, 2018)
   - **EndDate:** "02/02/18" (February 2, 2018)
   - **FillSetting:** "CarryForward"
   - **VerticalHorizontalOrder:** "V"
   - **AscendingDescending:** "A"
   - **TargetCurrency:** This is an optional parameter; if left blank, it will return the assessed currency for the price. We will leave it blank in this example.
   - **TargetUnitOfMeasure:** This is an optional parameter; if left blank, it will return the assessed unit of measure for the price. We will leave it blank in this example.
   - **Field1:** "Date"
   - **Field2:** "AssessmentDate"
   - **Field3:** "Low"
   - **Field4:** "Mid"
   - **Field5:** "High"

The following screenshot shows the example with the FillSetting parameter set to “CarryForward”.



Once you have finished populating the fields, click OK. The historical price table will flow into the sheet according to the specified parameters, as shown in the following screenshot. These are the actual physical price assessments for the instrument.

Note the difference between the Date column, displaying every weekday, and the AssessmentDate column where it is clear that the published assessment has been "carried forward" on non-assessment dates along with the corresponding prices.

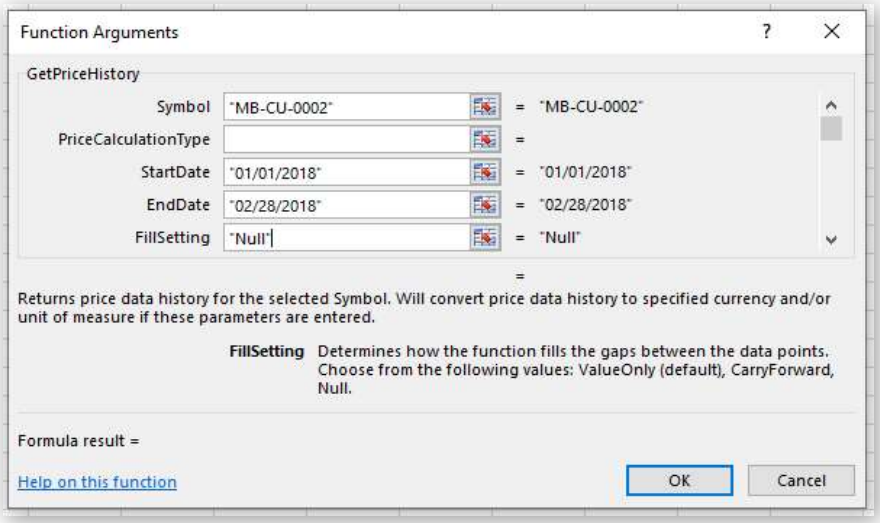
Holidays are NOT factored in; if this format is used to calculate the average, please ensure holidays are manually removed from the calculation.

	A	B	C	D	E
1	Date	AssessmentDate	Low	Mid	High
2	02/02/2018	01/30/2018	5.5	5.75	6
3	02/01/2018	01/30/2018	5.5	5.75	6
4	01/31/2018	01/30/2018	5.5	5.75	6
5	01/30/2018	01/30/2018	5.5	5.75	6
6	01/29/2018	01/23/2018	5.25	5.5	5.75
7	01/26/2018	01/23/2018	5.25	5.5	5.75
8	01/25/2018	01/23/2018	5.25	5.5	5.75
9	01/24/2018	01/23/2018	5.25	5.5	5.75
10	01/23/2018	01/23/2018	5.25	5.5	5.75
11	01/22/2018	01/16/2018	5.25	5.5	5.75
12	01/19/2018	01/16/2018	5.25	5.5	5.75
13	01/18/2018	01/16/2018	5.25	5.5	5.75
14	01/17/2018	01/16/2018	5.25	5.5	5.75
15	01/16/2018	01/16/2018	5.25	5.5	5.75
16	01/15/2018	01/09/2018	5.25	5.5	5.75
17	01/12/2018	01/09/2018	5.25	5.5	5.75
18	01/11/2018	01/09/2018	5.25	5.5	5.75
19	01/10/2018	01/09/2018	5.25	5.5	5.75
20	01/09/2018	01/09/2018	5.25	5.5	5.75
21	01/08/2018	01/02/2018	5.25	5.5	5.75
22	01/05/2018	01/02/2018	5.25	5.5	5.75
23	01/04/2018	01/02/2018	5.25	5.5	5.75
24	01/03/2018	01/02/2018	5.25	5.5	5.75
25	01/02/2018	01/02/2018	5.25	5.5	5.75
26	01/01/2018	12/27/2017	5.25	5.5	5.75

“Null”: Return actual physical assessment prices with specific data fields filled on their assessment dates but blank on non-assessment dates

1. Select the cell where you want the price history to be inserted (for example, B4).
2. Click on the “function wizard” icon (f_x), choose the “Fastmarkets” category, select the “GetPriceHistory” function and click OK – just as you did before.
3. Fill in the parameters as below:
   - **Symbol:** For this example, we’ll use the symbol “MB-CU-0002”.
   - **PriceCalculationType:** This parameter can be left blank for actual physical price assessments
   - **StartDate:** “01/27/18” (January 27, 2018)
   - **EndDate:** “02/28/18” (February 28, 2018)
   - **FillSetting:** “Null”
   - **VerticalHorizontalOrder:** “V”
   - **AscendingDescending:** “A”
   - **TargetCurrency:** This is an optional parameter; if left blank, it will return the assessed currency for the price. We will leave it blank in this example.
   - **TargetUnitOfMeasure:** This is an optional parameter; if left blank, it will return the assessed unit of measure for the price. We will leave it blank in this example.
   - **Field1:** “Date”
   - **Field2:** “AssessmentDate”
   - **Field3:** “Low”
   - **Field4:** “Mid”
   - **Field5:** “High”

The following screenshot shows the same example as before with the FillSetting parameter set to “Null”.



4. Once you have finished populating the fields, click OK. The historical price table will flow into the sheet according to the specified parameters, as shown below.

	A	B	C	D	E
1	Date	AssessmentDate	Low	Mid	High
2	02/02/2018				
3	02/01/2018				
4	01/31/2018				
5	01/30/2018	01/30/2018	5.5	5.75	6
6	01/29/2018				
7	01/26/2018				
8	01/25/2018				
9	01/24/2018				
10	01/23/2018	01/23/2018	5.25	5.5	5.75
11	01/22/2018				
12	01/19/2018				
13	01/18/2018				
14	01/17/2018				
15	01/16/2018	01/16/2018	5.25	5.5	5.75
16	01/15/2018				
17	01/12/2018				
18	01/11/2018				
19	01/10/2018				
20	01/09/2018	01/09/2018	5.25	5.5	5.75
21	01/08/2018				
22	01/05/2018				
23	01/04/2018				
24	01/03/2018				
25	01/02/2018	01/02/2018	5.25	5.5	5.75
26	01/01/2018				

Historic pricing data: frequently asked questions

1. **What is the longest time series I can download?**
   All historical pricing data is available through Fastmarkets' Excel Add-in. The length of the history will depend on when the price was launched.
2. **Can I choose between daily/weekly/monthly/quarterly/yearly average prices?**
   Daily physical pricing ("Actual") and weekly, monthly, quarterly and yearly average prices are available for all metals instruments in version 1.2.612 and above.
3. **How can I see if a price was corrected?**
   In case of a price correction, the function returns the latest available version of the price (the latest corrected value). A correction flag field – "Correction" – is available in Fastmarkets' Excel Add-In version 1.2.612 and above. An output of "TRUE" denotes a price that has been corrected; an output of "FALSE" denotes a price not requiring a correction.
4. **Are non-assessment days excluded/included from the time series?**
   The FillSetting parameter enables you to customize how time series data returns using the GetPriceHistory( ) function. Select from "ValueOnly" for assessment-only dates and prices; "CarryForward" to have the function roll the last available price forward if there is no updated price for a given day; or "Null" to display prices on their assessment dates and empty cells if there is no updated price for a given day.
5. **Are holiday calendars taken into account when displaying price history?**
   No. At present, Fastmarkets' Excel Add-in displays all weekdays (including public holidays) between the start and end dates of the period if the FillSetting parameter is set to "CarryForward" or "Null". We recommend retrieving price history for Fastmarkets published averages using the Price Calculation Type rather than a manual calculation to ensure holidays are removed. However, we appreciate some customers will want to calculate averages manually, please note to remove public holidays as above. Please refer to Fastmarkets' methodology for more information on holiday calendars for specific ferrous and non-ferrous market prices and averages: https://www.fastmarkets.com/about-us/methodology.
6. **Can I use other Microsoft Excel functions such as =TODAY( ) or =NOW( ) to calculate or automate a specific date or number of days/periods in the GetPriceHistory( ) function?**
   No. It is not recommended to nest or use volatile Microsoft Excel functions such as =TODAY( ) or =NOW( ) with Fastmarkets functions. For advice or assistance with this, please contact our Customer Success team: customersuccess@fastmarkets.com.

GET PRICE

The GetPrice( ) function enables you to view the price **for one or more symbols and price calculation types as of a given date**.

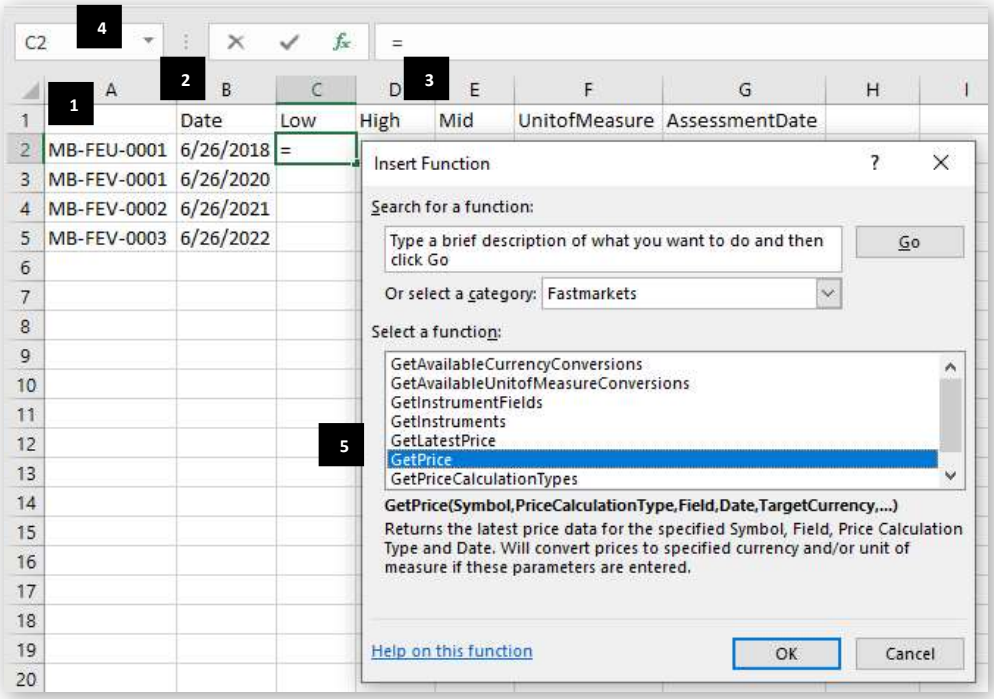
The table below provides a summary of this function.

Function summary	The GetPrice( ) function fetches the price for a symbol and price calculation type as of a given date. It can be used to get the High, Mid and Currency fields, among others. Because the function applies to an individual cell, it gives the user control over the layout of the workbook. Once the table is laid out, the formula may be dragged or copied to fill other cells. If TargetCurrency and/or TargetUnitofMeasure parameters are entered, price data history will be converted to the specified currency/unit of measure; if left blank, the assessed currency and/or unit of measure is returned.
Input parameters	Symbol; PriceCalculationType; Field; Date; TargetCurrency (may be left blank); TargetUnitOfMeasure (may be left blank). **NOTE: Nesting volatile Microsoft Excel functions such as =TODAY( ) or =NOW( ) into date parameter inputs is not recommended.**
Output for the function	Inserts a single field (such as High, Low, Currency) into the selected cell that represents the most recent price data as of the given date. The Excel Add-in rolls the last available price forward. For example, a price is updated on Monday. For the subsequent Tuesday, Wednesday, Thursday and Friday, the function will return Monday's price. If TargetCurrency and/or TargetUnitofMeasure parameters are entered, price data history will be converted to the specified currency/unit of measure; if left blank, the assessed

	currency and/or unit of measure is returned.
Example	=GetPrice("MB-AL-0001","Low","07/02/2018")

Get the price(s) for a specific date

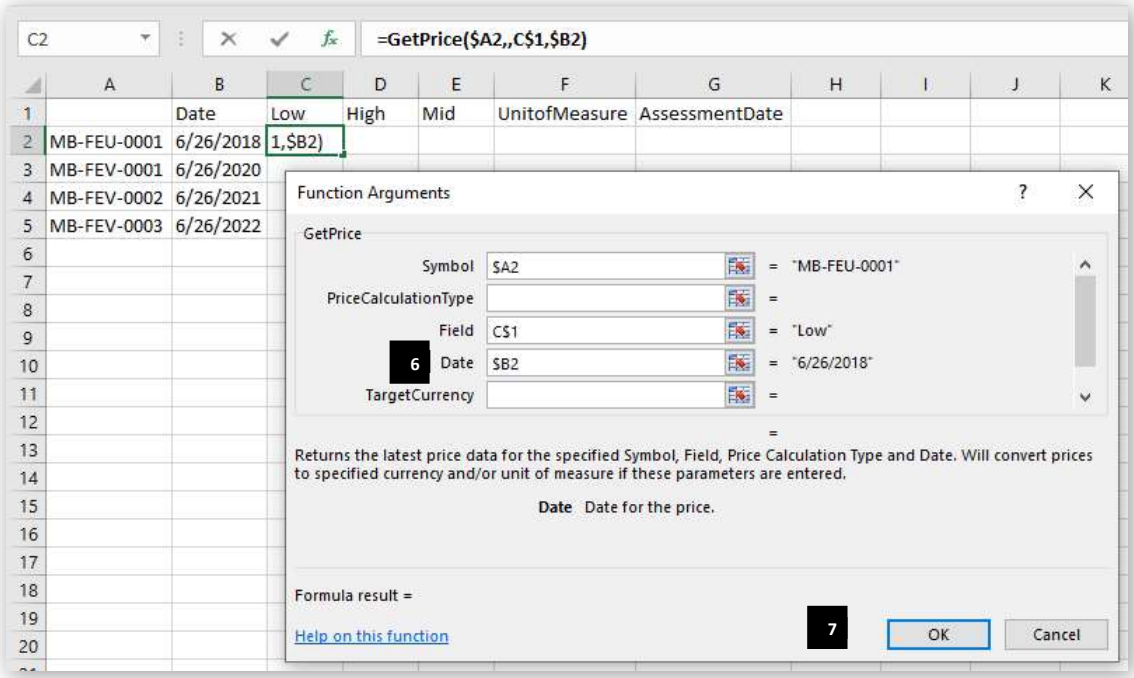
1. Copy and paste the required symbol(s) into a new sheet. For this example, we're using symbols "MB-FEU-0001", "MB-FEV-0001", "MB-FEV-0002" and "MB-FEV-0003".
2. Insert the date for which you want to display the price(s). For this example, we're using June 26, 2018.
3. Fill in the column headers with the required price fields. **Fastmarkets' Excel Add-in supports the fields outlined in the table in the Appendix.** For this example, we're using Low, High, Mid, UnitOfMeasure and AssessmentDate.
4. Select the cell where you want the first price to be inserted (for example, C2).
5. Click on the "function wizard" icon (fx), choose the "Fastmarkets" category and select the "GetPrice" function. Then click OK.



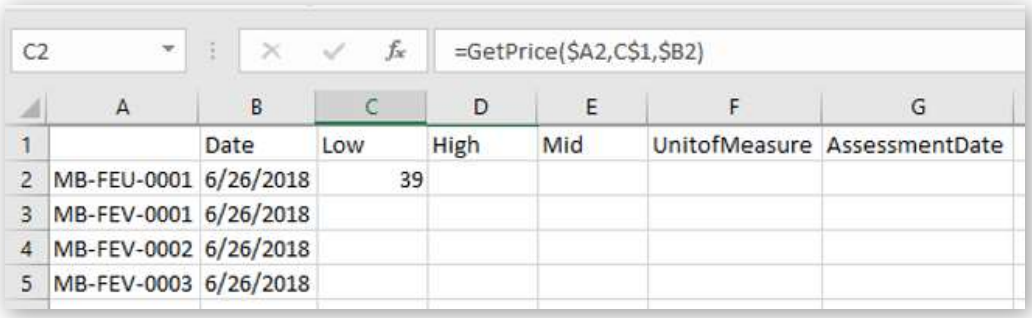
6. Fill in the parameters as below:
   - **Symbol:** Click on the cell where the first price symbol has been inserted (in this example, A2). Apply the dollar sign ($) to the column ($A2). This will allow you to copy the formula to other cells.

- **Field:** Click on the cell where the first price field – "Low" – has been inserted (in this example, C1). Apply the dollar sign ($) to the row (C$1). This will allow you to copy the formula to other cells.
- **Date:** Click on the cell where the date has been inserted (in this example, B2). Apply the dollar sign ($) to the row ($B2). This will allow you to copy the formula to other cells.
- **TargetCurrency:** This is an optional parameter; if left blank, it will return the assessed currency for the price. We will leave it blank in this example.
- **TargetUnitOfMeasure:** This is an optional parameter; if left blank, it will return the assessed unit of measure for the price. We will leave it blank in this example.

7. Click OK.

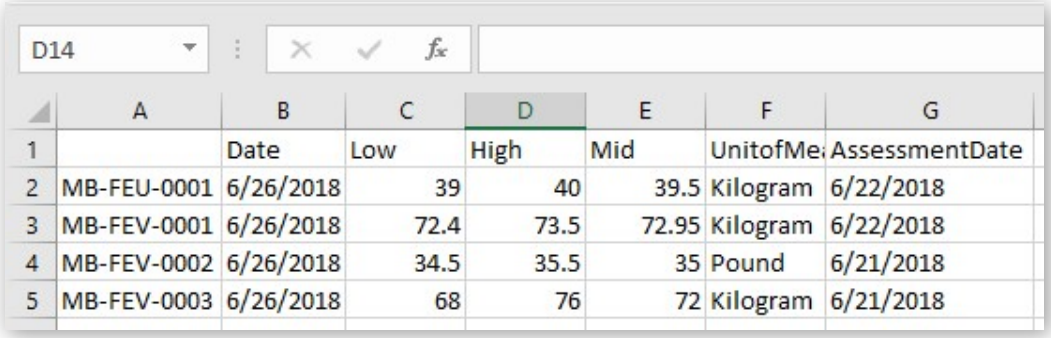


The low price for the first symbol – "MB-FEU-0001" – will appear in cell C2, as shown in the following screenshot.



	A	B	C	D	E	F	G
1		Date	Low	High	Mid	UnitofMeasure	AssessmentDate
2	MB-FEU-0001	6/26/2018	39				
3	MB-FEV-0001	6/26/2018					
4	MB-FEV-0002	6/26/2018					
5	MB-FEV-0003	6/26/2018					

8. Copy the formula over to get the information for all of the data fields you are seeking (see following screenshot). You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A and to one of the fields in Row 1.



	A	B	C	D	E	F	G
1		Date	Low	High	Mid	UnitofMe	AssessmentDate
2	MB-FEU-0001	6/26/2018	39	40	39.5	Kilogram	6/22/2018
3	MB-FEV-0001	6/26/2018	72.4	73.5	72.95	Kilogram	6/22/2018
4	MB-FEV-0002	6/26/2018	34.5	35.5	35	Pound	6/21/2018
5	MB-FEV-0003	6/26/2018	68	76	72	Kilogram	6/21/2018

NOTE: If you are retrieving monthly average prices for a specific period, it is recommended that you **request the last date of the month**. Monthly average prices are published and stored historically on the last working day of each month. For example, to retrieve the monthly average for April 2019, enter 04/30/2019 in the date parameter – not 04/01/2019. Entering 04/01/2019 will return the monthly average for March (the latest average value for that date).

GET AVAILABLE CURRENCY CONVERSIONS

The GetAvailableCurrencyConversions( ) function will identify the currency conversions that are available for each symbol for which you choose to convert pricing data. Use this function as a starting point to determine the TargetCurrency input parameter for use in the GetPrice( ),

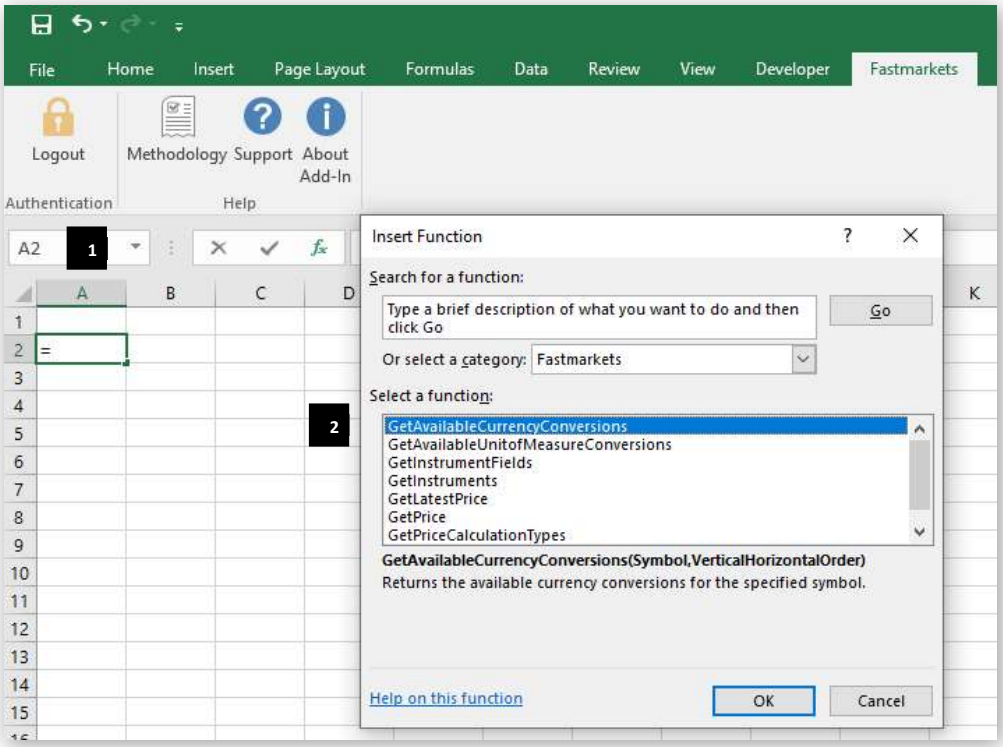
GetLatestPrice( ) and GetPriceHistory( ) functions to convert your prices into a different currency.

The table below provides a summary of this function.

Function summary	The GetAvailableCurrencyConversions( ) function fetches the available currency conversions for the specified symbol(s).
Input parameters	Symbol; VerticalHorizontalOrder
Output for the function	Inserts available currency conversions for each symbol (for example, USD, USd for US cents, EUR, and GBP).
Example	= GetAvailableCurrencyConversions("MB-AL-0004","H")

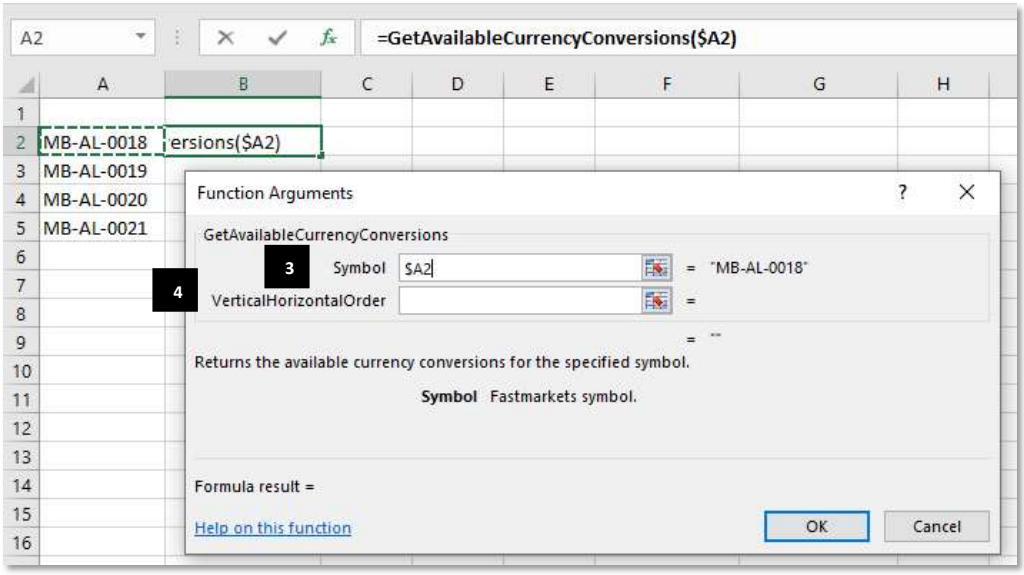
Get a list of available currency conversions for your specified symbol(s)

1. Select a cell where you want the first price to be displayed (for example, A2).
2. Click on the "function wizard" icon (fx), choose the "Fastmarkets" category, select the "GetAvailableCurrencyConversions" function and click OK.



3. In this example we will return the available currency conversions for a list of symbols. (Note: The available currencies may differ, depending on the base currency of the symbols in the list.) Click on the cell where the first price symbol has been inserted (in this example, A2). Apply the dollar sign ($) to the column ($A2). This will allow you to copy the formula to other cells.

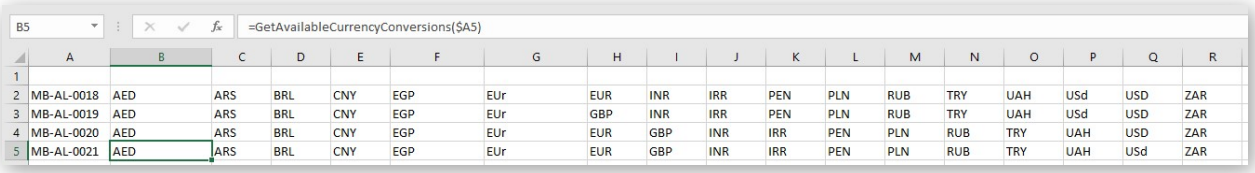
4. For the “VerticalHorizontalOrder” field, enter “V” if you want the data fields to appear vertically or “H” if you want the data fields to appear horizontally. This field is optional; if left blank, it will return instrument fields horizontally. We will leave it blank for this example. Then click OK.



The available currency conversions for the first symbol will return as in the screenshot below.

5. Copy the formula over to get the available currencies for all symbols in the list. You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A.

All available currency conversions will now be displayed. They may differ among the symbols in your list, depending on the base currency.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1																		
2	MB-AL-0018	AED	ARS	BRL	CNY	EGP	EUr	EUR	INR	IRR	PEN	PLN	RUB	TRY	UAH	USd	USD	ZAR
3	MB-AL-0019	AED	ARS	BRL	CNY	EGP	EUr	GBP	INR	IRR	PEN	PLN	RUB	TRY	UAH	USd	USD	ZAR
4	MB-AL-0020	AED	ARS	BRL	CNY	EGP	EUr	EUR	GBP	INR	IRR	PEN	PLN	RUB	TRY	UAH	USD	ZAR
5	MB-AL-0021	AED	ARS	BRL	CNY	EGP	EUr	EUR	GBP	INR	IRR	PEN	PLN	RUB	TRY	UAH	USd	ZAR

GET AVAILABLE UNIT OF MEASURE CONVERSIONS

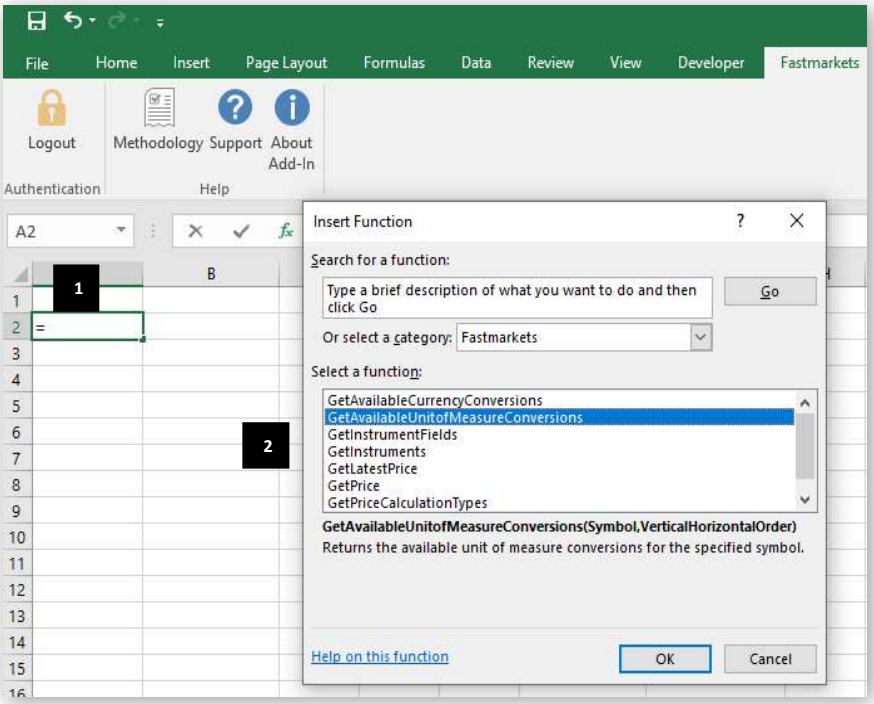
The GetAvailableUnitOfMeasureConversions( ) function will identify the unit-of-measure conversions that are available for each symbol for which you choose to convert pricing data. Use this function as a starting point to determine the TargetUnitOfMeasure input parameter for use in the GetPrice( ), GetLatestPrice( ) and GetPriceHistory( ) functions.

The table below provides a summary of this function.

Function summary	The GetAvailableUnitOfMeasureConversions( ) function fetches the available unit-of-measure conversions for the specified symbol(s).
Input parameters	Symbol; VerticalHorizontalOrder
Output for the function	Inserts available unit-of-measure conversions for each symbol (for example, Tonne, Kilogram, Pound, Long Ton, Short Ton).
Example	= GetAvailableUnitOfMeasureConversions(“MB-AL-0004”,“H”)

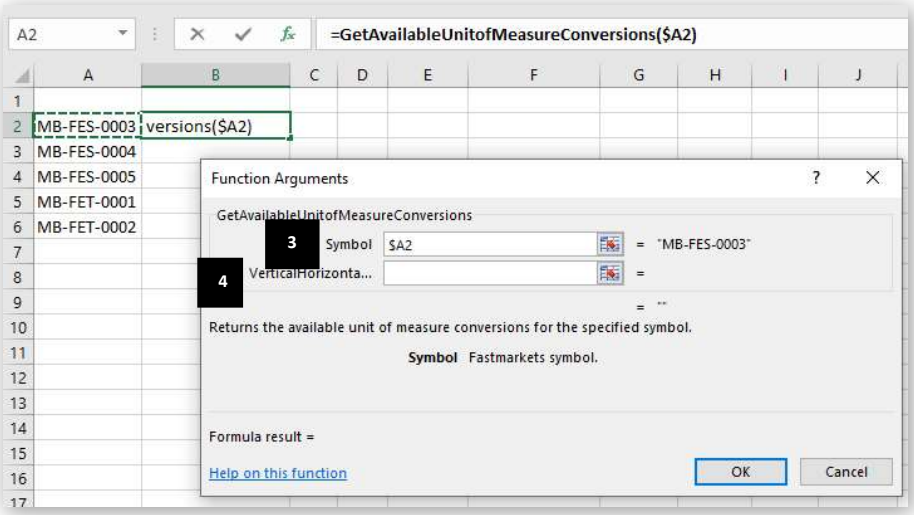
Get a list of available unit-of-measure conversions for your specified symbol(s)

1. Select a cell where you want the first price to be displayed (for example, A2).
2. Click on the “function wizard” icon (fx), choose the “Fastmarkets” category, select the “GetAvailableUnitofMeasureConversions” function and click OK.

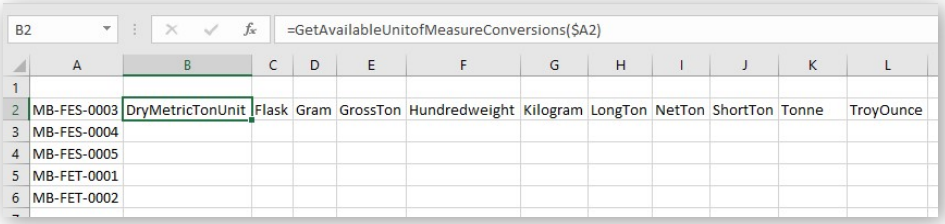


3. In this example, we will return the available unit-of-measure conversions for a list of symbols. (Note: The available units of measure may differ, depending on the base unit of the symbols in the list.) Click on the cell where the first price symbol has been inserted (in this example, A2). Apply the dollar sign ($) to the column ($A2). This will allow you to copy the formula to other cells.

4. For the “VerticalHorizontalOrder” field, enter “V” if you want the data fields to appear vertically or “H” if you want the data fields to appear horizontally. This field is optional; if left blank, it will return instrument fields horizontally. We will leave it blank for this example. Then click OK.

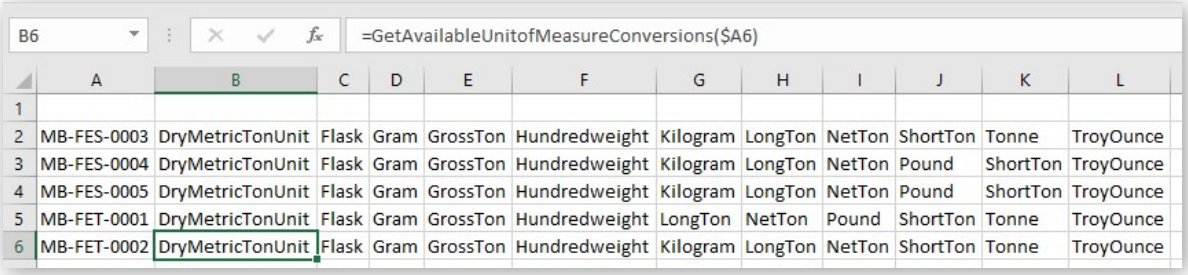


The available unit-of-measure conversions for the first symbol will be returned.



5. Copy the formula over to get the available units of measure for all of the symbols in the list. You can either grab the little square in the corner of the cell with the function in it and drag it down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A.

All available unit-of-measure conversions will now be displayed. They may differ among the symbols in your list, depending on the base unit.



CURRENCY AND UNIT-OF-MEASURE CONVERSION

The Fastmarkets Excel Add-in enables you to convert the assessed currency and/or unit of measure for prices so you can compare them on a like-for-like basis.

Our currency conversion uses foreign exchange rates provided by a range of suppliers for current and historical pricing. Daily rates on current pricing are provided by Morningstar and update intraday on an hourly basis until 23:00 UTC.

Historical prices are converted using the conversion rate for the day the price was originally assessed, which has been provided by different foreign exchange rate providers.

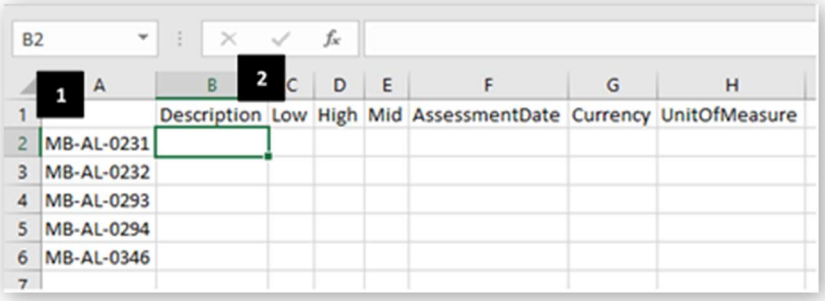
The following examples provide instructions on how to convert prices in your spreadsheet into the currency and/or unit of measure of your choice using the GetPrice( ), GetLatestPrice( ) and GetPriceHistory( ) functions. You may wish to use the GetAvailableCurrencyConversions( ) and GetAvailableUnitofMeasureConversions( ) functions explained earlier to provide the necessary input parameters for your chosen TargetCurrency and TargetUnitOfMeasure.

Note: You may need to adjust the decimal place formatting to the returned results to display all decimal places. Any calculations based on those cells will calculate to the full available number of decimal places regardless of display formatting.

Convert the latest price data for one or more symbols to a different currency and unit of measure using the GetLatestPrice( ) function

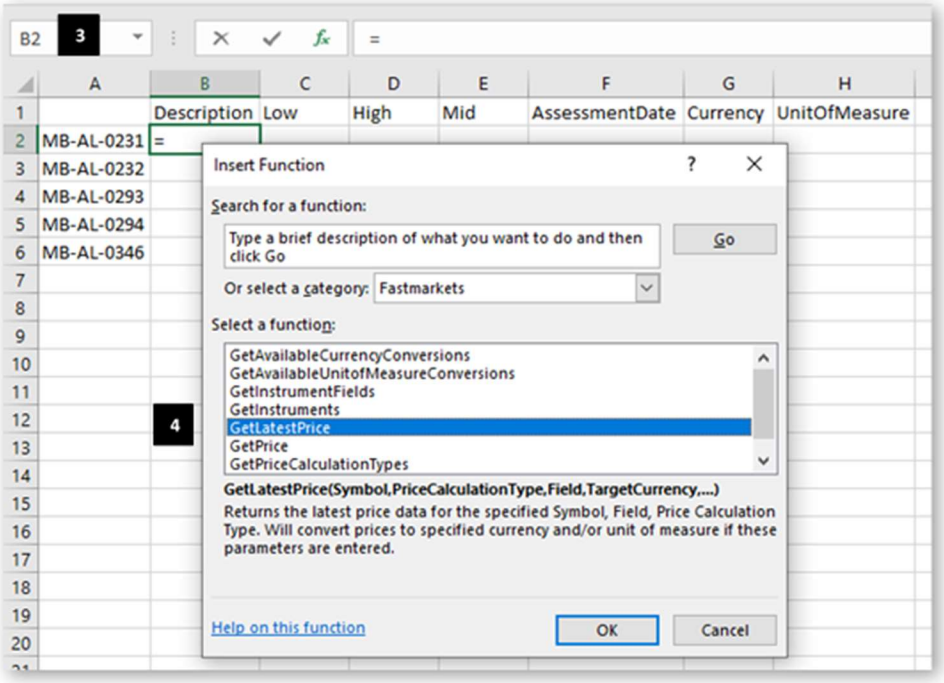
This example shows how to convert the different assessed currencies and units of measure for a table of prices into US cents per pound for ease of comparison. If you only wish to convert the currency, the TargetUnitOfMeasure parameter may be left blank at Step 5. If you only wish to convert the unit of measure, the TargetCurrency parameter may be left blank at Step 5. If the parameters are left blank, the assessed currency and unit of measure will be returned. **Note: You may wish to use the GetAvailableCurrencyConversions( ) and GetAvailableUnitOfMeasureConversions( ) functions to check the available inputs for this example, since available conversions for currency and unit of measure may differ, depending on the assessed prices in your list.**

1. Add the symbols for which you want to get the latest prices and paste them into a new sheet. For this example, we've chosen five aluminium premiums.
2. Fill in the column headers with the required price fields. **Fastmarkets' Excel Add-in supports the fields outlined in the table in the Appendix.** For the example shown in the following screenshot, we've chosen Description, Low, High, Mid, AssessmentDate, Currency and UnitOfMeasure for our fields.



3. Select the cell where you want the first price to be inserted (for example, B2).

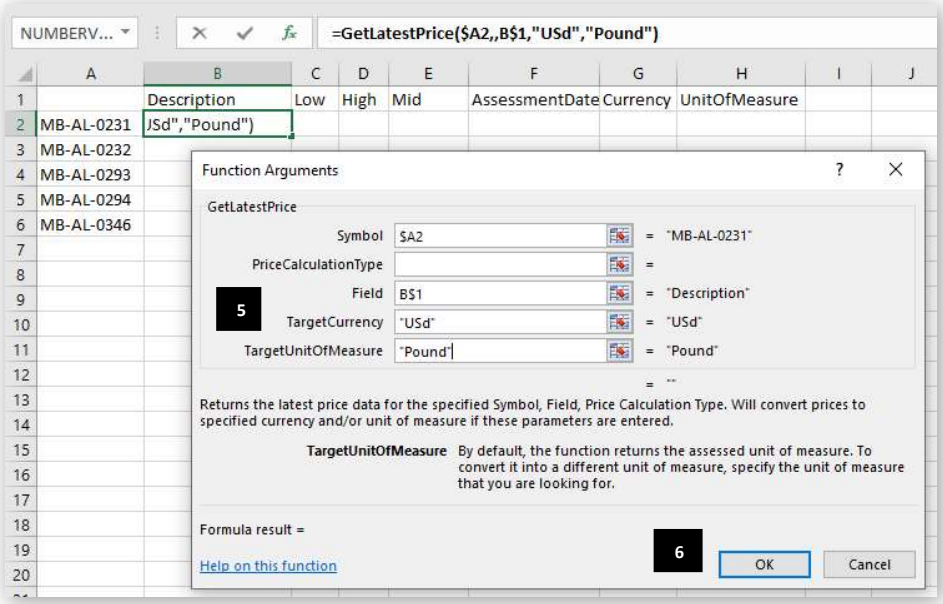
4. Click on the “function wizard” icon (fx), choose the “Fastmarkets” category and select the “GetLatestPrice” function.



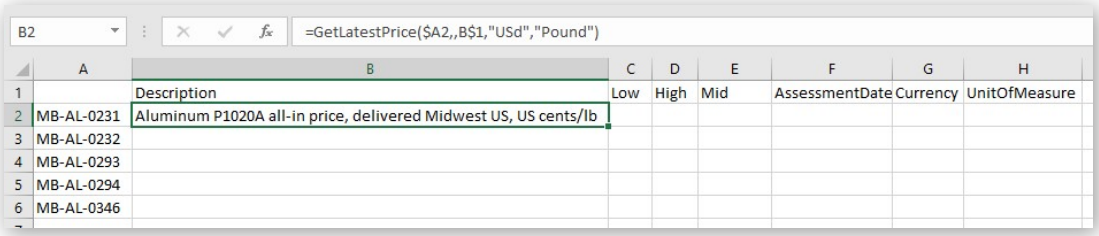
5. Fill in the following parameters as shown:
   - **Symbol:** Type the cell reference where the first price symbol has been inserted and apply the dollar sign ($) to the column (for this example, type $A2, since that is where symbol MB-AL-0231 has been inserted). Applying the dollar sign ($) will allow you to copy the formula over to other cells to fill out the table.
   - **PriceCalculationType:** This parameter enables you to determine the type of data to return for the symbol (physical pricing or average). This parameter is optional; if left blank, it will return “Actual” for physical pricing. In this example, we will leave it blank.
   - **Field:** Type the cell reference where the first price field has been inserted and apply the dollar sign ($) to the row (for this example, type B$1, since that’s where “Description” has been inserted). Applying the dollar sign ($) will allow you to copy the formula over to other cells.
   - **TargetCurrency:** If left blank, it will return the assessed currency; if a target currency is entered, that is what will be displayed. In this example, we will enter “USd” for all prices to be converted to US cents. **Note: To find the available conversions for your chosen symbols, please refer to the GetAvailableCurrencyConversions( ) function section.**

- **TargetUnitOfMeasure:** If left blank, it will return the assessed unit of measure; if a target unit of measure is entered, that is what will be displayed. In this example, we will enter "Pound". **Note: To find the available units of measure for your chosen symbols, please refer to the GetAvailableUnitOfMeasureConversions( ) function section.**

6. Click OK.



The description of the instrument has now been inserted into cell B2, as shown below.



7. Copy the formula over to get the information for all of the data fields you're seeking (see following screenshot). You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A and one of the fields in Row 1.

The prices that are returned will be in US cents per pound, and the Currency and UnitOfMeasure fields will return USd and Pound respectively.

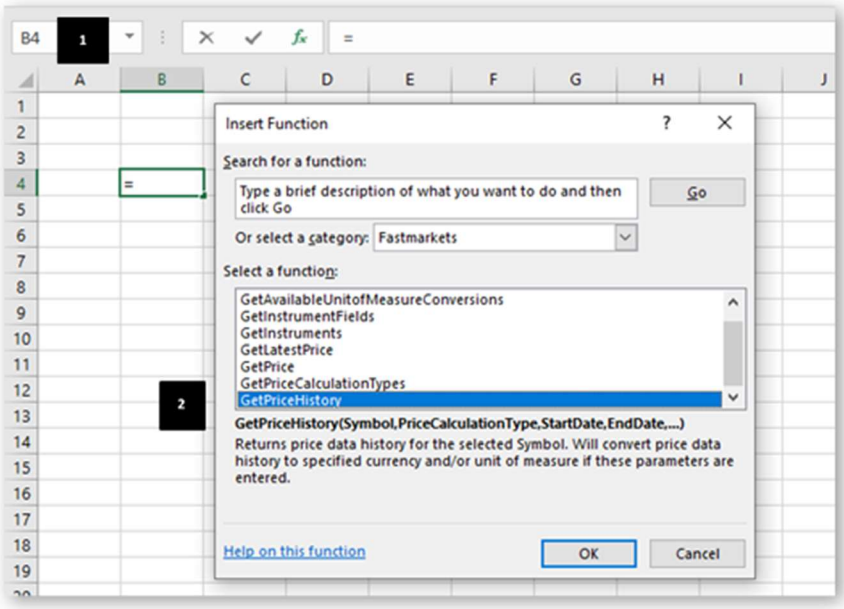
	A	B	C	D	E	F	G	H
1		Description	Low	High	Mid	AssessmentDate	Currency	UnitOfMeasure
2	MB-AL-0231	Aluminum P1020A all-in price, delivered Midwest US, US cents/lb	94.6	96.09	95.34	12/13/2019	USd	Pound
3	MB-AL-0232	Aluminium P1020A premium, ddp Midwest US, $/lb	14.5	16	15.25	12/13/2019	USd	Pound
4	MB-AL-0293	Aluminium P1020A monthly average midpoint, spot premium, in-w	3.69	3.688	3.687954	11/29/2019	USd	Pound
5	MB-AL-0294	Aluminium P1020A monthly average midpoint, spot premium, in-w	5.93	5.928	5.927711	11/29/2019	USd	Pound
6	MB-AL-0346	Aluminium P1020A premium, in-whs dup Rotterdam, $/tonne	3.63	4.082	3.855535	12/16/2019	USd	Pound

Return converted price history for monthly average prices for assessment dates with default data fields

This example uses the GetPriceHistory( ) function and shows how to convert the historical monthly average prices from the assessed currency and unit of measure (US cents per pound) for one price into US dollars per tonne. It uses the default fields returned by the GetPriceHistory( ) function, and this example will return historical prices for assessment dates. Please refer to the GetPriceHistory( ) function section for more information on how to work with specific data fields or to return historical prices for actual physical price assessments instead of averages.

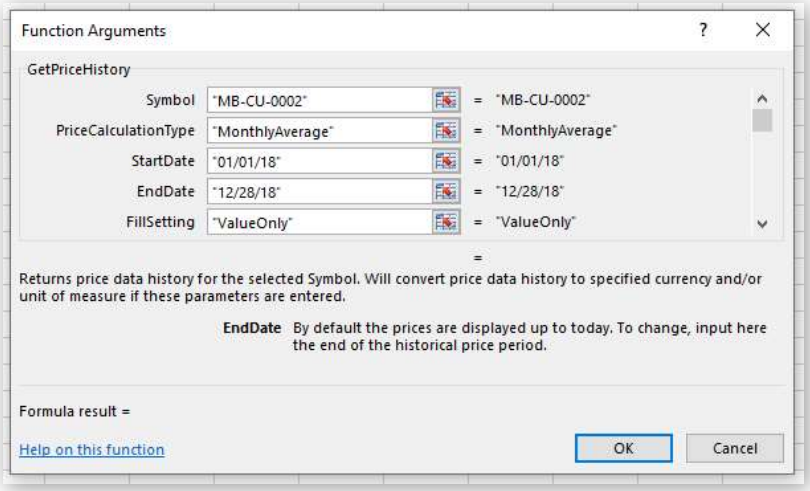
If you only wish to convert the currency, the TargetUnitOfMeasure parameter may be left blank at Step 3. If you only wish to convert the unit of measure, the TargetCurrency parameter may be left blank at Step 3. If the parameters are left blank, the assessed currency and unit of measure will be returned. **Note: You may wish to use the GetAvailableCurrencyConversions and GetAvailableUnitOfMeasureConversions to check the available inputs for this example as available conversions for currency and unit of measure will differ depending on the assessed prices in your list.**

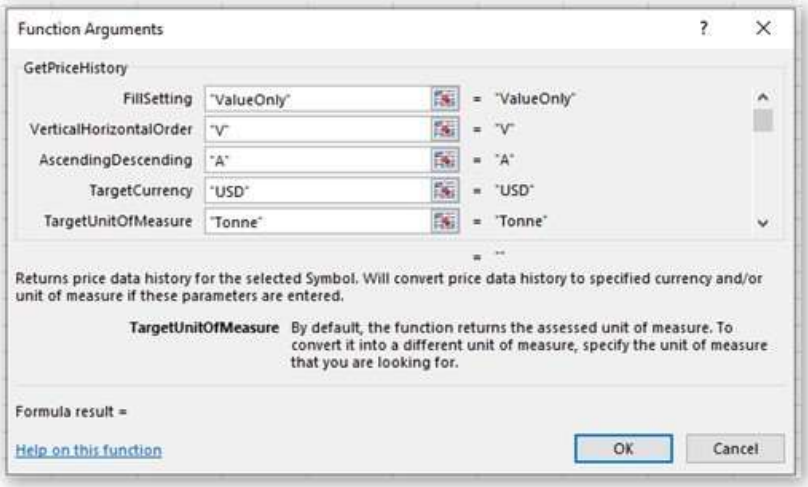
1. Select the cell where you want the price history to be inserted (for example, B4).
2. Click on the “function wizard” icon (fx), choose the “Fastmarkets” category, select the “GetPriceHistory” function and click OK.

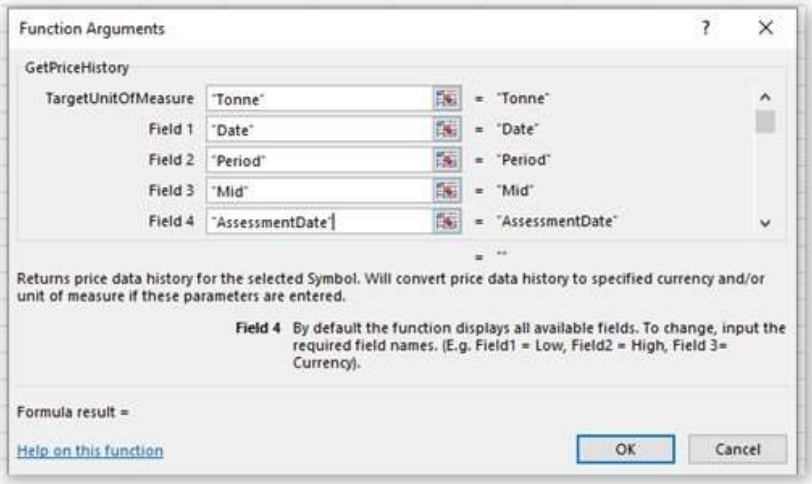


3. Fill in the parameters as below:
   - **Symbol:** For this example, we'll use the symbol "MB-CU-0002".
   - **PriceCalculationType:** "MonthlyAverage"
   - **StartDate:** "01/01/18" (January 1, 2018)
   - **EndDate:** "12/28/18" (December 28, 2018)
   - **FillSetting:** "ValueOnly"
   - **VerticalHorizontalOrder:** "V"
   - **AscendingDescending:** "A"
   - **TargetCurrency:** ThisIf left blank, it will return the assessed currency; if a target currency is entered, that is what will be displayed. In this example, we will enter "USD" for all prices to be converted to US dollars. **Note: To find the available conversions for your chosen symbols, please refer to the GetAvailableCurrencyConversions( ) function section.**
   - **TargetUnitOfMeasure:** If left blank, it will return the assessed unit of measure; if a target unit of measure is entered, that is what will be displayed. In this example, we will enter Tonne. **Note: To find the available unit of measure for your chosen symbols, please refer to the GetAvailableUnitofMeasureConversions( ) function section.**
   - **Field1, Field2, Field3…:** We will leave these parameters blank to return the default fields of Date, AssessmentDate, Period, Low, Mid, High, Currency, UnitOfMeasure, Product, Location, Incoterm, Commodity and Description.

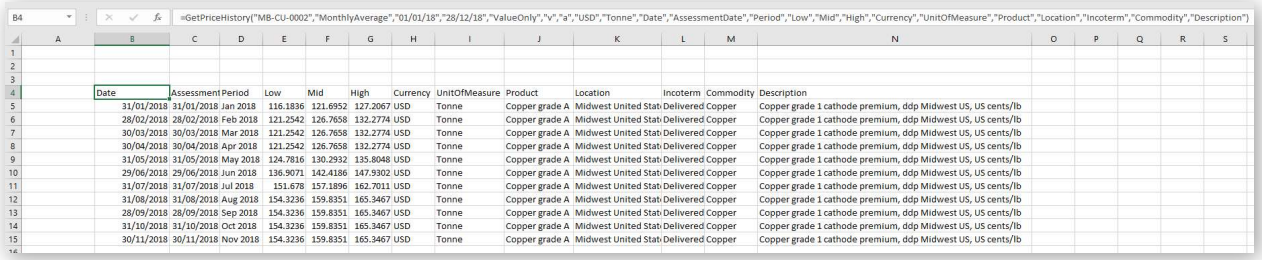
   The following three screenshots show all of the parameters entered into the function arguments as outlined above.


Function Arguments
GetPriceHistory
Symbol "MB-CU-0002" = "MB-CU-0002"
PriceCalculationType "MonthlyAverage" = "MonthlyAverage"
StartDate "01/01/18" = "01/01/18"
EndDate "12/28/18" = "12/28/18"
FillSetting "ValueOnly" = "ValueOnly"
Returns price data history for the selected Symbol. Will convert price data history to specified currency and/or unit of measure if these parameters are entered.
EndDate By default the prices are displayed up to today. To change, input here the end of the historical price period.
Formula result =
Help on this function
OK
Cancel


Function Arguments
GetPriceHistory
FillSetting "ValueOnly" = "ValueOnly"
VerticalHorizontalOrder "V" = "V"
AscendingDescending "A" = "A"
TargetCurrency "USD" = "USD"
TargetUnitOfMeasure "Tonne" = "Tonne"
Returns price data history for the selected Symbol. Will convert price data history to specified currency and/or unit of measure if these parameters are entered.
TargetUnitOfMeasure By default, the function returns the assessed unit of measure. To convert it into a different unit of measure, specify the unit of measure that you are looking for.
Formula result =
Help on this function
OK
Cancel


Function Arguments
GetPriceHistory
TargetUnitOfMeasure "Tonne" = "Tonne"
Field 1 "Date" = "Date"
Field 2 "Period" = "Period"
Field 3 "Mid" = "Mid"
Field 4 "AssessmentDate" = "AssessmentDate"
Returns price data history for the selected Symbol. Will convert price data history to specified currency and/or unit of measure if these parameters are entered.
Field 4 By default the function displays all available fields. To change, input the required field names. (E.g. Field1 = Low, Field2 = High, Field 3= Currency).
Formula result =
Help on this function
OK
Cancel

4. Once you have finished populating the fields, click OK. The historical price table will flow into the sheet according to the specified parameters. As shown below, the Low, Mid and High price fields have been converted to US dollars per tonne and the Currency and UnitOfMeasure fields are displaying the target currency and unit of measure selected.



=GetPriceHistory("MB-CU-0002","MonthlyAverage","01/01/18","28/12/18","ValueOnly","v","a","USD","Tonne","Date","AssessmentDate","Period","Low","Mid","High","Currency","UnitOfMeasure","Product","Location","Incoterm","Commodity","Description")

Date	AssessmentDate	Period	Low	Mid	High	Currency	UnitOfMeasure	Product	Location	Incoterm	Commodity	Description
31/01/2018	31/01/2018	Jan 2018	116.1836	121.6952	127.2067	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
28/02/2018	28/02/2018	Feb 2018	121.2542	126.7658	132.2774	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
30/03/2018	30/03/2018	Mar 2018	121.2542	126.7658	132.2774	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
30/04/2018	30/04/2018	Apr 2018	121.2542	126.7658	132.2774	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
31/05/2018	31/05/2018	May 2018	124.7816	130.2932	135.8048	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
29/06/2018	29/06/2018	Jun 2018	136.9071	142.4186	147.9302	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
31/07/2018	31/07/2018	Jul 2018	151.678	157.1896	162.7011	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
31/08/2018	31/08/2018	Aug 2018	154.3236	159.8351	165.3467	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
28/09/2018	28/09/2018	Sep 2018	154.3236	159.8351	165.3467	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
31/10/2018	31/10/2018	Oct 2018	154.3236	159.8351	165.3467	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb
30/11/2018	30/11/2018	Nov 2018	154.3236	159.8351	165.3467	USD	Tonne	Copper grade A	Midwest United Stat	Delivered	Copper	Copper grade 1 cathode premium, ddp Midwest US, US cents/lb

Convert price(s) for a specific date into a specified currency or unit of measure using the GetPrice( ) function

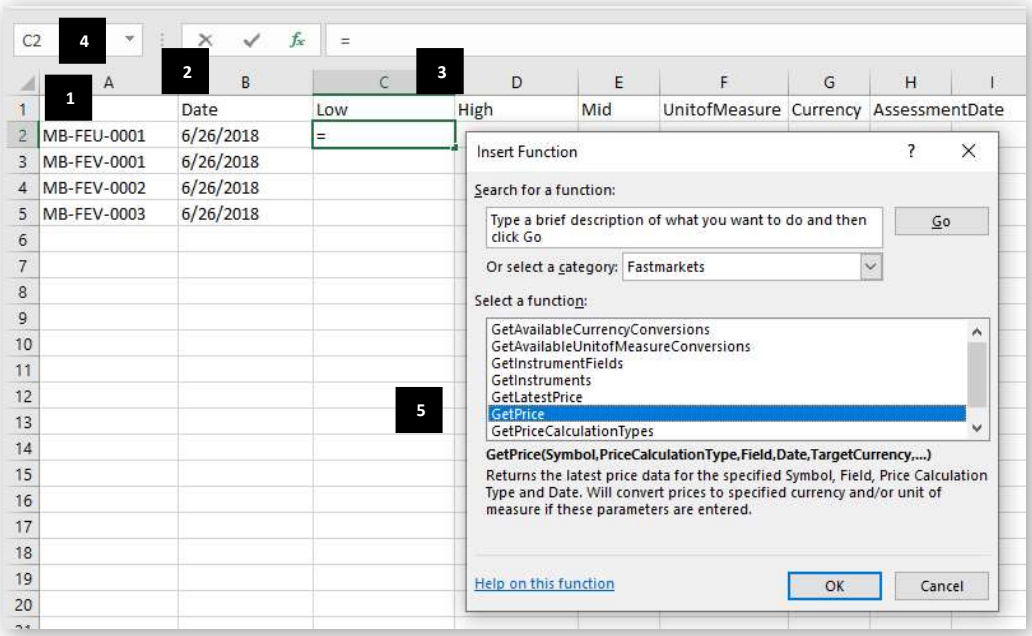
This example enables you to view converted prices for multiple symbols and price calculation types **as of a given date** in a currency and/or unit of measure you choose. The assessed currency for all symbols in this example is US dollars, and the unit of measure is either kilogram or pound. Here, we will convert all of the selected prices into euros per pound.

Please refer to the GetPriceHistory( ) function section for more information on how to work with specific data fields or to return prices for averages.

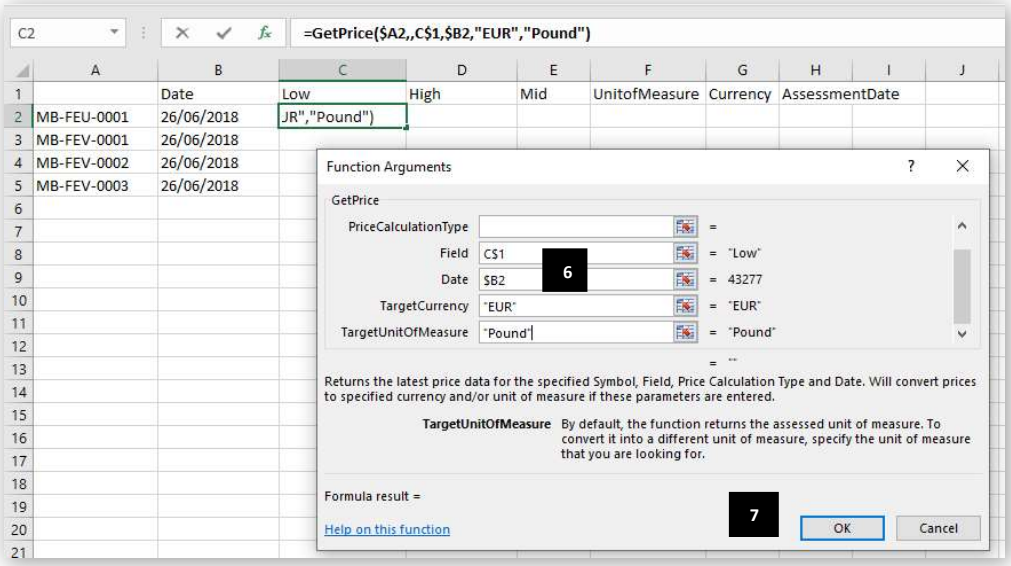
If you only wish to convert the currency, the TargetUnitOfMeasure parameter may be left blank at Step 3. If you only wish to convert the unit of measure, the TargetCurrency parameter may be left blank at Step 3. If the parameters are left blank, the assessed currency and unit of measure will be returned. **Note: You may wish to use the GetAvailableCurrencyConversions and GetAvailableUnitOfMeasureConversions to check the available inputs for this example as available conversions for currency and unit of measure will differ depending on the assessed prices in your list.**

1. Copy and paste the required symbol(s) into a new sheet. For this example, we are using symbols “MB-FEU-0001”, “MB-FEV-0001”, “MB-FEV-0002” and “MB-FEV-0003”.
2. Insert the date for which you want to display the price(s). For this example, we’re using June 26, 2018.
3. Fill in the column headers with the required price fields. **Fastmarkets’ Excel Add-in supports the fields outlined in the table in the Appendix.** For this example, we’re using Low, High, Mid, Currency, UnitOfMeasure and AssessmentDate.
4. Select the cell where you want the first price to be inserted (for example, C2).

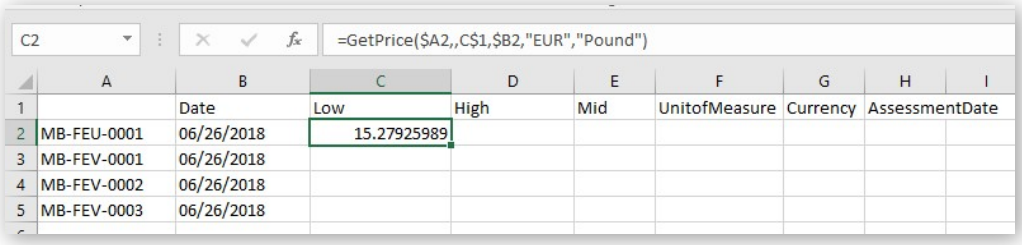
5. Click on the “function wizard” icon (fx), choose the “Fastmarkets” category and select the “GetPrice” function. Then click OK.



6. Fill in the parameters as below:
   - **Symbol:** Click on the cell where the first price symbol has been inserted (in this example, A2). Apply the dollar sign ($) to the column ($A2). This will allow you to copy the formula to other cells.
   - **Field:** Click on the cell where the first price field – “Low” – has been inserted (in this example, C1). Apply the dollar sign ($) to the row (C$1). This will allow you to copy the formula to other cells.
   - **Date:** Click on the cell where the date has been inserted (in this example, B2). Apply the dollar sign ($) to the row ($B2). This will allow you to copy the formula to other cells.
   - **TargetCurrency:** If left blank, it will return the assessed currency; if a target currency is entered, that is what will be displayed. In this example, we will enter “EUR” for all prices to be converted to euros. **Note: To find the available conversions for your chosen symbols, please refer to the GetAvailableCurrencyConversions( ) function section.**
   - **TargetUnitOfMeasure:** If left blank, it will return the assessed unit of measure; if a target unit of measure is entered, that is what will be displayed. In this example, we will enter “Pound”. **Note: To find the available unit of measure for your chosen symbols please refer to the GetAvailableUnitOfMeasureConversions( ) function section.**
7. Click OK.

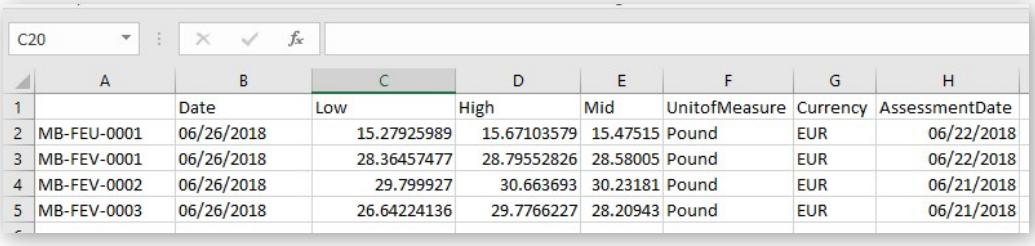


8. The low price for the first symbol – "MB-FEU-0001" – will appear in cell C2, as shown below.



	A	B	C	D	E	F	G	H	I
1		Date	Low	High	Mid	UnitofMeasure	Currency	AssessmentDate	
2	MB-FEU-0001	06/26/2018	15.27925989						
3	MB-FEV-0001	06/26/2018							
4	MB-FEV-0002	06/26/2018							
5	MB-FEV-0003	06/26/2018							

9. Copy the formula over to get the information for all of the data fields you are seeking (see following screenshot). You can either grab the little square in the corner of the cell with the function in it and drag it across and down to highlight your entire table; or you can copy and paste the cell with the function in it into your entire table. Because you applied the dollar sign ($) in the formula, all retrieved data will point to one of the price symbols in Column A and to one of the fields in Row 1.



	A	B	C	D	E	F	G	H
1		Date	Low	High	Mid	UnitofMeasure	Currency	AssessmentDate
2	MB-FEU-0001	06/26/2018	15.27925989	15.67103579	15.47515	Pound	EUR	06/22/2018
3	MB-FEV-0001	06/26/2018	28.36457477	28.79552826	28.58005	Pound	EUR	06/22/2018
4	MB-FEV-0002	06/26/2018	29.799927	30.663693	30.23181	Pound	EUR	06/21/2018
5	MB-FEV-0003	06/26/2018	26.64224136	29.7766227	28.20943	Pound	EUR	06/21/2018

The prices that are returned will be in euros per pound, and the Currency and UnitOfMeasure fields will return EUR and Pound respectively.

APPENDIX: ERROR MESSAGES

The following table summarizes the error messages that may appear for Fastmarkets Excel Add-in users, along with a description/examples for each. All of these error messages are cell-based – they indicate an error with the formula entered in the given cell.

ERROR MESSAGE	DESCRIPTION / EXAMPLE
#N/A Server error: Instrument <symbol> does not exist	An invalid symbol was entered in the formula (for example, MB-AL-0000000001).
#N/A Server error: The date '01-01-2030' represents future time.	The StartDate or EndDate represents future time.
#N/A Invalid field: (field name)	An invalid field was entered in the formula. For example, the user enters the following: =GetPriceData("MB-AL-0001","Open", "07/03/2018"), which specifies the field "Open" that is not among the supported fields for physical prices. In this example, the error message will display: #N/A Invalid field: Open.
#N/A Invalid parameter: (parameter name)	A parameter is missing in the formula. For example, the user tries to create the GetPriceData function without specifying the date. In this instance, the error message will display: #N/A Invalid parameter: Date.
#N/A Invalid parameter: VerticalHorizontalOrder	An invalid value was entered for the VerticalHorizontalOrder parameter (something other than "H" or "V").
#N/A Invalid parameter: AscendingDescending	An invalid value was entered for the AscendingDescending parameter (something other than "D" or "A").
#N/A Invalid parameter: PriceCalculationType	Price calculation type cannot be found in the database.
#N/A Invalid parameter: FillSetting	The value entered for "FillSettings" is other than "ValueOnly", "CarryForward", "Null".
#N/A No Price available for selected calculation type	There is no price available for the selected price calculation type.
#N/A Invalid parameter: End Date	An invalid End Date parameter was entered (for example, the user specified an End Date that comes before the Start Date).

#N/A Invalid parameter: Filter	An invalid filter was entered in the GetReferenceData( ) function that doesn't return any results.
#N/A Conversion between USD and CAD is not available	No currency conversion available for selected target/base currency pairing.
#N/A Conversion between Tonne and NickelUnit is not available	No unit of measure conversion available for selected target/base unit of measure pairing.
#N/A No price available for WeeklyAverage before '<date>'	No data available for selected symbol/price calculation type before specified start date.
#N/A No conversion rate available to EUR for '<date>'	No target currency conversion rate available for specified start date - error starts first available conversion rate time series date.
#N/A No price available before '<date>'	No physical price assessment time series available for specified start date - error states first available price ("Actual") time series date.
#N/A Log in required	You are not logged in.
#N/A Server error: You do not have access to instrument <symbol>	You are not authorized to see the given price.
#N/A Update required	The user's version is below the minimum supported version.
#N/A Timeout	A network error occurred.
#N/A Server error	A server error occurred.
#N/A No data for given date	No prices are available for the requested symbol and date.
#N/A N/A	Any other error case that is not covered above.

APPENDIX: FIELD DESCRIPTIONS

FIELD	DESCRIPTION	RESULT
Date	Date stamp for returned data	dd/mm/yyyy or mm/dd/yyyy – Excel date value that defaults to user's local date format
AssessmentDate	Date and time of most recent or specified assessment	dd/mm/yyyy or mm/dd/yyyy – Excel date value that defaults to your local date format
Period	Text field providing a description of the period where PriceCalculationType selected is an average	Note this will be blank if PriceCalculationType = Actual e.g. 17-23 Nov 2018 for a weekly average value
Low	Low price	e.g. 88
Mid	Mid price	e.g. 89
High	High price	e.g. 90
Currency	Currency description	e.g. 3 letter ISO Currency Code EUR
UnitOfMeasure	Unit of measure description	e.g. Tonne
Product	Commodity product name	e.g. Aluminium 99.7%
Location	Instrument location of origin	e.g. Japan
Source	Data source of the assessed value	e.g. American Metal Market or Metal Bulletin
Incoterm	Incoterm description	e.g. Cost, insurance and freight
Commodity	Commodity	e.g. Copper
Price Type	The type of published price	e.g. Index
Frequency	Frequency of assessment	e.g. Weekly
Status	Status description of symbol	e.g. Active, Discontinued
Correction	Revision flag indicating a price value has been corrected	e.g. TRUE (price value has been corrected) or FALSE (price value has not been corrected)
PreliminaryPrice	Flag indicating a price is undergoing a preliminary/appraisal process prior to final assessment. Note – this may not be available for every symbol	e.g. TRUE (price is undergoing appraisal process) or FALSE (price is not undergoing preliminary/appraisal process)
Pricing rationale	Text information providing editorial rationale behind an assessment price. Note – this may not be available for every symbol	e.g. Premium unchanged with majority of participants out of the market due to year-end holidays.
LowChange	Difference between low price of previous assessment and low price of latest assessment	e.g. -1.0
LowChange%	Difference between low price of previous assessment and low price of latest assessment expressed as a decimal value	e.g. 0.01 = 1%, -0.01 = -1%

MidChange	Difference between mid price of previous assessment and mid price of latest assessment	e.g. -1.0
MidChange%	Difference between mid price of previous assessment and mid price of latest assessment expressed as a decimal value	e.g. 0.01 = 1%, -0.01 = -1%
HighChange	Difference between high price of previous assessment and high price of latest assessment	e.g. -1.0
HighChange%	Difference between high price of previous assessment and high price of latest assessment expressed as a decimal value	e.g. 0.01 = 1%, -0.01 = -1%
Description	Full description of instrument	e.g. Aluminium scrap, Commercial turnings, United Kingdom, delivered consumer works, £ per tonne
ShortDescription	Short description of the instrument	e.g. Aluminium scrap, Commercial turnings, UK, delivered consumer works, £/tonne *Note: in some cases, ShortDescription may return the same description as the Description field*
LaunchDate	Date on which the instrument was launched	dd/mm/yyyy or mm/dd/yyyy – Excel date value that defaults to user's local date format

APPENDIX: HOLIDAY CALENDAR

A link to the latest Fastmarkets pricing holiday calendar can be found at the bottom of the Fastmarkets methodology website here: https://www.fastmarkets.com/about-us/methodology.