

## **Overview of Monitors for U.S. and Global Steel Trade**

The U.S. Department of Commerce (Commerce) provides the public with a set of data tools that show trade patterns related to steel and steel-containing products. Commerce provides these tools to make current trade data available to the industry to inform their decision-making processes because the steel industry produces inputs for a wide range of manufacturing activities. These tools are also available to support Commerce's mission of enforcing U.S. trade laws because almost half of all U.S. antidumping and countervailing duties cover steel or steel-containing products. Each tool, called a monitor, provides visuals and data tables on a different trade topic related to this industry. At the end of the document (on page 7) is a how-to about downloading data and putting it into a pivot table; the process is the same in each of the monitors.

The U.S. Steel Import Monitor (part of the SIMA system) shows trends for U.S. imports of steel mill products, mostly from chapter 72 of the Harmonized Tariff Schedule of the United States (HTSUS), but also including some pipe and tube products classified under chapter 73 of the HTSUS. Products included in this monitor are made directly in steel mills and are primarily used as inputs into other production processes and for construction. Many of these products, such as hot-rolled band, are heavily traded as commodities and used as international price benchmarks. The data in the U.S. Steel Import Monitor combine official U.S. Census data that are updated monthly with near real-time data obtained from steel import licenses and updated at least once per week. This monitor also shows data at the product group level, the most specific level of data we provide.

The U.S. Steel Export Monitor shows U.S. exports of most of the same steel mill products that appear in the U.S. Steel Import Monitor. However, the data for the Export Monitor come exclusively from official trade statistics (there is no steel export licensing program in the U.S.) This monitor is updated monthly, when new official U.S. export data become available, and this monitor presents data at the product category level (a broader grouping of products into 6 main types of steel).

The Global Steel Trade Monitor (GSTM) provides data at the aggregate product category level (5 product categories) for all the top 20 largest steel importing and exporting countries and the European Union. These data are updated regularly, when countries release their official trade statistics. The GSTM website also links directly to our Global Steel Reports and Steel Country Reports <https://www.trade.gov/steel-reports>. These reports provide insights about the largest companies in each country, by production volume; the largest product categories; and the largest trading partners of the world's main steel producing countries.

The Downstream Monitor shows both U.S. imports and exports of steel-containing products, mostly classified under Chapter 73 of the HTSUS and therefore, made through further processing of steel mill products. Most downstream products included in this monitor are used as inputs to manufacture other products- though several products, such as steel wire garment hangers, are final products for consumers. The data in the Downstream Monitor come from official U.S. trade statistics and are updated monthly.

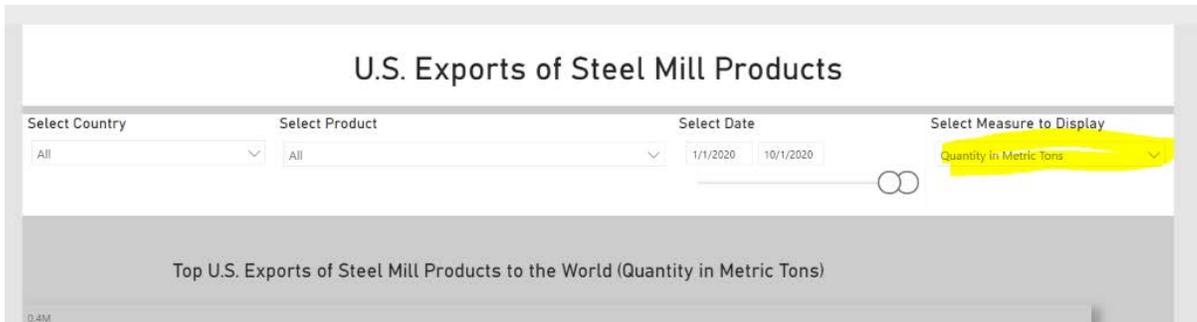
## **Instructions for Export Monitor**

1. Navigate to the page <https://www.trade.gov/data-visualization/steel-mill-export-monitor>
2. There are eight tabs on the bottom of the page, and each tab shows the data in a different format. From left to right, these tabs include:
  - "Monthly Data Page 1": This shows the top 5 monthly steel mill exports by month, through a bar graph and table;
  - "Monthly Data Pages 2-3": These two tabs show monthly data using line and bar graphs.
  - "Monthly Data Map": This tab geographically maps U.S. steel mill exports to partner countries. Product groups are color-coded and broken down by country. A key is available at the top of the map for your reference.
  - "Annual Data Pages 1-3" and "Annual Data Map": These remaining tabs present annual data through maps and various graphs.
3. At the top of each tab there is a set of drop-down filters just below the title for the page:

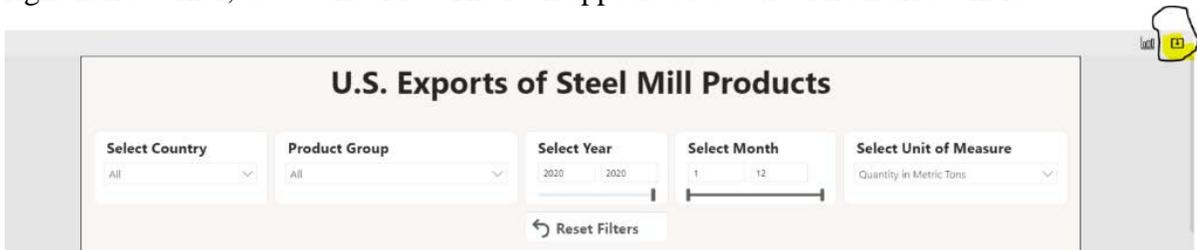
The screenshot shows a filter interface titled "U.S. Exports of Steel Mill Products". It contains five filter sections: "Select Country" with a dropdown menu showing "All"; "Product Group" with a dropdown menu showing "All"; "Select Year" with a range selector showing "2020" to "2020"; "Select Month" with a range selector showing "1" to "12"; and "Select Unit of Measure" with a dropdown menu showing "Quantity in Metric Tons". Below these filters is a "Reset Filters" button with a circular arrow icon.

These filters, from left to right, include:

- "Select Country": This filter provides a drop-down menu for you to select partner countries of interest; and
- "Product Group": This also provides a, drop-down menu for you to select various or all product groups;
- "Select Year": This filter can be used to view quantity data for selected years. This can be changed by moving a horizontal slider bar, or by simply typing the start and end years you wish to see;
  - "Select Month": This filter can be used to view quantity data for selected months; this filter can be controlled using a slider bar or by typing the numerical months ("1" for January through "12" for December).
- "Select Unit of Measure": This allows the user to change the unit used for showing the dataset. The default is to show exports by volume, in metric tons.
  - You can change the view to show exports by value using the drop-down in the upper right-hand corner, just above the bar graph. This drop-down allows users to select "Quantity in Metric Tons" or "Value in U.S. Dollars."
  - Please note that a metric ton is 1,000 kilograms, or approximately 0.907 net tons.



4. In addition to these filters, users can also export the data by clicking the icon in the upper right-hand corner, above the title. The icon appears as a box with an arrow in it.



5. The “Monthly Data Page 1” and “Annual Data Page 1” tabs are particularly complex. Both include data presented through a bar graph that shows the top five products, as well as a data table below that provides more complete data. In order to filter the data table on the lower half of either tab:
  - Navigate to the upper left-hand corner of the data table and select whether to view the table in “Country View” or “World Product Group View.”
    - “Country View”: This filter presents quantity data first by country. A small “+” sign is available next to each country name which can be clicked to reveal the quantity of each product group exported to that country.
    - “World Product Group View”: This filter presents quantity data first by product group. A small “+” sign is available next to each product group which can be clicked to reveal the quantity of that product exported to each country.
  - In the upper right-hand corner of the data, additional filtering options are available, represented by various icons. Be aware that these icons only appear if your cursor is hovered over the table.
    - The three dots: This right rightmost icon gives you the option to export the data as an Excel or CSV file.
  
6. “Monthly Data Page 2” and “Annual Data Page 2” display two bar charts: The former tab is of the quantity of steel mill products exported to each partner country, and the latter is of the quantity of each product group exported.
  - In the upper right-hand corner of each graph, additional filtering options are available, represented by various icons. Be aware that these icons only appear if your cursor is hovered over the charts.
    - The three dots: This right most icon gives you the option to:

- Export the data as an Excel or CSV file,
  - Display the dataset as a bar chart and data table,
  - Sort the export quantity from ascending or descending value
- Pivot Table Instructions: By clicking “export data” the user will be able to download the current table view for analysis in Excel.
  - After downloading and opening the Excel document, the user will be able to see the filters applied at download. This data can be organized and manipulated within Microsoft Excel and easily transformed into a pivot table by clicking on a cell within the table and going to Insert > Pivot Table and clicking OK.
  - Delete the Rows 1 & 2, then INSERT and click on Pivot table, you will then be able to arrange your data into tables.
  - Drag and drop the concepts you want in the table (columns, rows, values).

[Here is a link to Microsoft’s instructions on how to get started with using Pivot Tables: <https://support.microsoft.com/en-us/office/video-create-a-pivottable-and-analyze-your-data-7810597d-0837-41f7-9699-5911aa282760>]

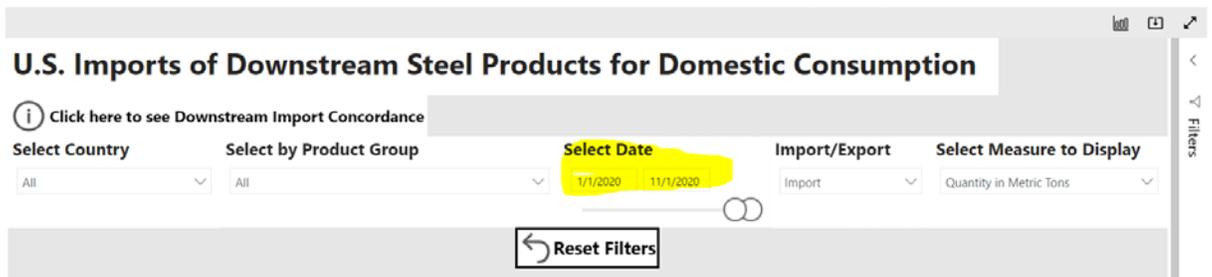
7. “Monthly Data Page 3” and “Annual Data Page 3” present two line graphs: The former tab shows the total monthly quantity of steel exported to each country (distinguished by color), while the latter tab shows the total global quantity of each product group (distinguished by color) exported monthly/annually.
  - Navigate to the right corner of each graph to access additional capabilities:
    - The three dots: This right most icon gives you the options to:
      - Export the data as an Excel or CSV file; or,
      - Display the dataset as a bar chart and data table.
8. “Monthly Data Map” and “Annual Data Map” offer more visual summaries of the monthly/annual share of product groups exported to each country. The key that identifies each product is located at the top of each map. Hovering the cursor over each slice in one of the various pie charts displays a more detailed pop-up of the product group exported into a given country. Hovering the cursor over each slice in one of the various pie charts displays a more detailed pop-up of the product group exported into a given country.
  - At the top right of the dashboard, there are three icons:
    - Bar graph icon: Clicking this gives you the option to export the maps as a PDF, PowerPoint, or photo (PNG);
    - Down arrow icon: This allows you to download the summary or underlying dataset of the export data as either an Excel Pivot Table or Chart; and,
    - Diagonal arrow icon: This expands the dashboard to full screen.

## Instructions for Downstream Monitor

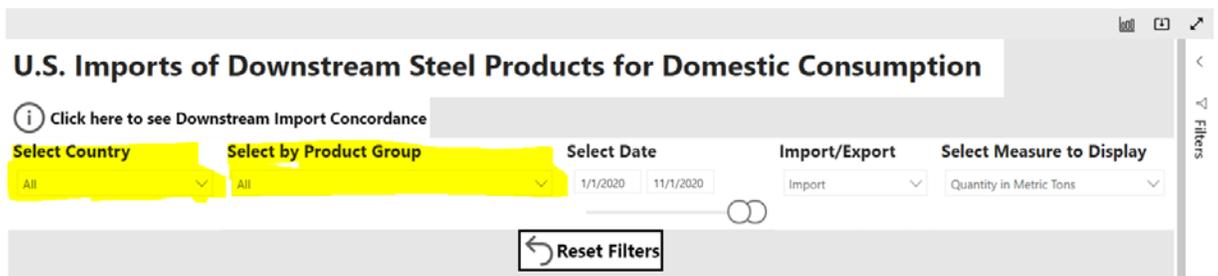
1. The Downstream Monitor displays both U.S. imports and exports of products made from steel. When you first access the site, it defaults to showing imports, but the user can switch between exports and imports from a drop-down menu at the top.



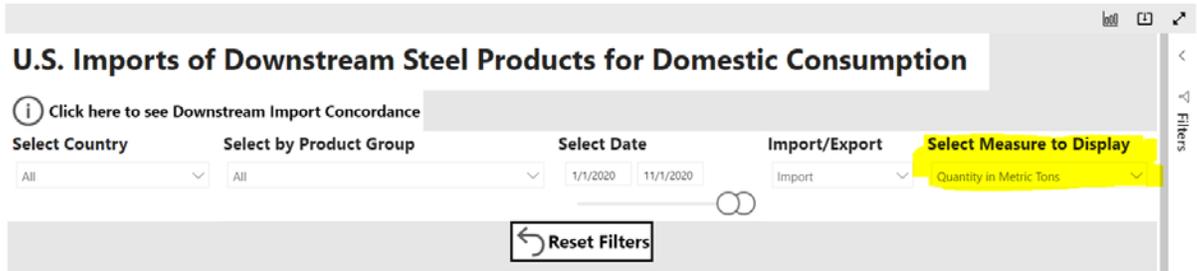
2. Another drop-down filter allows the user to choose the date range they wish to see:



3. Users can also select the product group and country they want the data to show:



One can also see the data in both quantity and value:

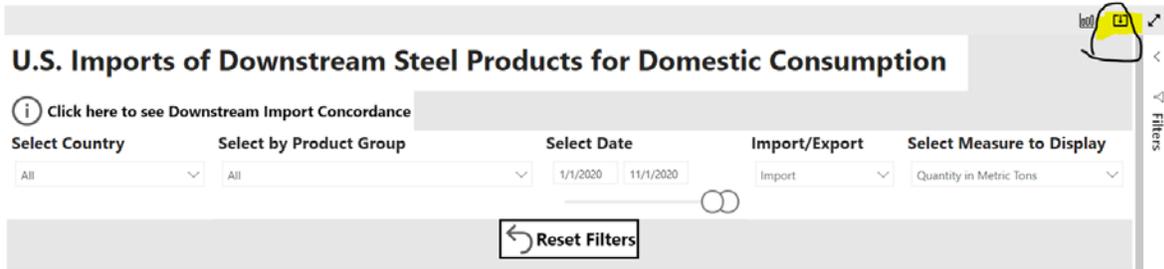


4. The monitor has six tabs at the bottom. Each one shows the data using different graphics.



From left to right, these tabs include:

- "Monthly Data Page 1": This shows the top 5 monthly steel mill exports by month, through a bar graph and a table;
  - "Monthly Data Page 2": This tab shows monthly data disaggregated by time and by country through bar and line graphs.
  - "Monthly Data Map": This tab geographically maps U.S. steel mill exports to partner countries. Product groups are color-coded and broken down by country. A key is available at the top of the map for your reference.
  - "Annual Data Page 1": This shows the top 5 monthly steel mill exports by year, through a bar graph and a table;
  - "Annual Data Page 2": This tab shows yearly data disaggregated by time and by country through bar and line graphs.
  - "Annual Data Map": This remaining tab geographically maps U.S. steel mill exports to partner countries. Product groups are color-coded and broken down by country. A key is available at the top of the map for your reference.
9. There is also an option to download the data shown in the tables by clicking the icon on the upper right of the screen:



This data and data for all the other monitors, can be viewed in the form of a pivot table in Microsoft Excel. Once having exported the data, the user will be able to analyze the current table view in Excel.

### **Pivot Table Instructions:**

- After downloading and opening the Excel document, the user will be able to see the filters applied at download. This data can be organized and manipulated within Microsoft Excel. This data can be easily transformed into a pivot table by:
  - First deleting any blank or non-data filled rows at the top of the page. This will likely mean deleting rows 1 and 2.
  - Then clicking on a cell within the table, or highlighting the entire table, and then clicking “Insert,” “Pivot Table,” and confirming the appropriate data is selected by clicking “OK.”
  - You will now be able to arrange your data into tables. Drag and drop the concepts you want in the table at the right of the screen (columns, rows, values).
  - For further instructions analyzing data with pivot tables, here is a link to Microsoft’s instructions on how to get started with them:  
<https://support.microsoft.com/en-us/office/video-create-a-pivortable-and-analyze-your-data-7810597d-0837-41f7-9699-5911aa282760>