Steel Exports Report: South Korea

Background

South Korea is the world’s fourth-largest steel exporter. In year-to-date 2017 (through March), further referred to as YTD 2017, South Korea exported 7.9 million metric tons — a 6 percent increase from 7.5 million metric tons in YTD 2016. South Korea’s exports represented about 7 percent of all steel exported globally in 2016. The volume of South Korea’s 2016 steel exports was less than a third of the world’s largest exporter, China, and just behind the third-largest exporter, Russia. In value terms, steel represented just 4 percent of the total amount of goods South Korea exported in 2016.

South Korea exports steel to more than 200 countries and territories. The nine countries labeled in the map below represent the top destinations for South Korea’s exports of steel, receiving more than 1 million metric tons each and accounting for 71 percent of South Korea’s steel exports in 2016.

Quick Facts:

- World’s fourth-largest steel exporter: 7.9 million metric tons (YTD 2017)
- 49% steel export growth since Q1 2010
- Exports as a share of production at 45.6% in YTD 2017
- YTD export volume up 6% while export value up 25%
- Top three export markets: China, Japan, United States
- Largest producers: POSCO and Hyundai Steel Co.
- 53 trade remedies in effect in 12 countries involving steel mill imports from South Korea

Data Source: Global Trade Atlas; Copyright © IHS Global Inc. 2017. All rights reserved.
Steel Exports Report: South Korea

Steel Trade Balance

Prior to 2009, South Korea had a trade deficit in steel products. Imports fell in 2009, bringing steel exports and imports closer into balance. In 2010, South Korea’s exports began to outpace imports and have grown 49 percent between Q1 2010 and Q1 2017. Over the same period, imports have decreased by 11 percent. As such, South Korea has posted a steel trade surplus since mid-2010. In YTD 2017, the surplus amounted to 2.3 million metric tons — a 22 percent increase from 1.9 million metric tons in YTD 2016.

Export Volume, Value, and Product

In 2014, South Korea’s steel exports reached a record high of 31.6 million metric tons before declining slightly by 2 percent to 30.9 million metric tons in 2015 and by another 2 percent to 30.3 million in 2016. In YTD 2017, South Korea exported 7.9 million metric tons of steel, up 6 percent from YTD 2016. The value of South Korea’s YTD 2017 exports also increased — up 25 percent to $5.8 billion from $4.6 billion in YTD 2016.

Flat products account for a significant share of South Korea’s steel exports. In YTD 2017, 73 percent, or 5.8 million metric tons, of South Korea’s steel exports were of flat products. Long products accounted for 10 percent, or 817 thousand metric tons, followed by pipe and tube products at 10 percent (762 thousand metric tons), stainless products at 5 percent (364 thousand metric tons), and semi-finished steel at 2 percent (162 thousand metric tons).
Steel Exports Report: South Korea

Exports by Top Market

Exports to South Korea’s top 10 steel markets represented 72 percent of South Korea’s steel export volume in YTD 2017 at 5.7 million metric tons (mmt). China was the largest market for South Korea’s exports with a 15 percent share (1.1 mmt), followed by Japan at 13 percent (1 mmt), the United States at 10 percent (0.8 mmt), India at 8 percent (0.6 mmt), Mexico at 6 percent (0.5 mmt), and Vietnam at 5 percent (0.4 mmt).

Trends in Exports to Top Markets

The volume of South Korea’s steel exports increased to six of South Korea’s top 10 steel export markets between YTD 2016 and YTD 2017. Exports to Mexico showed the largest increase in volume, up 31 percent from YTD 2016, followed by Indonesia (up 18%), Japan (up 17%), Vietnam (up 4%), China (up 3%), and India (up 1%). Large volume decreases included South Korea’s exports to Turkey (down 38%), Thailand (down 10%), Malaysia (down 9%), and the United States (down 5%).

The overall value of South Korea’s steel exports increased to nine of the top 10 markets, suggesting an increase in prices. Markets with considerable increases in steel value between YTD 2016 and YTD 2017 included exports to Mexico (up 50%), Indonesia (up 46%), Vietnam (up 39%), Japan (up 34%), China (up 26%), Thailand (up 17%), the United States (up 15%), India (up 11%), and Malaysia (up 9%). Only Turkey saw decrease in the value of South Korea’s steel exports in YTD 2017 — down 15 percent from YTD 2016.

Outside the top 10 markets, other notable changes in South Korea’s YTD 2017 export volume included exports to Belgium (up 85%), Iran (up 178%), and Taiwan (down 36%).
Steel Exports Report: South Korea

Top Markets by Steel Product Category

South Korea’s top export markets by volume vary across types of steel products. In YTD 2017, China accounted for the largest share of South Korea’s exports of flat products at 17 percent (1 million metric tons).

Japan was the largest destination for South Korea’s long product exports at 14 percent (114 thousand metric tons), followed by the United States at 8 percent (64 thousand metric tons). The United States also accounted for the largest share of South Korea’s pipe and tube exports at 61 percent (465 thousand metric tons).

South Korea exported the largest share of semi-finished steel to Indonesia in YTD 2017 at 40 percent (65 thousand metric tons) and the largest share of stainless steel to China at 16 percent (58 thousand metric tons).

**South Korea’s Top 5 Export Markets by Product - YTD 2017**

- **Flat Products**
  - China
  - Japan
  - India
  - Mexico
  - Thailand

- **Long Products**
  - Japan
  - United States
  - China
  - Vietnam
  - Malaysia

- **Pipe and Tube**
  - United States
  - Kuwait
  - Japan
  - Vietnam
  - China

- **Semi-finished**
  - Indonesia
  - Japan
  - India
  - Vietnam
  - Fiji

- **Stainless**
  - China
  - Turkey
  - Japan
  - Vietnam
  - Thailand

Source: IHS Global Trade Atlas
YTD through March
Steel Exports Report: South Korea

South Korea’s Import Market Share in Top Destinations

In 2016, the import market share for South Korea’s steel products increased in the majority of South Korea’s top export markets. The share of imports from South Korea in India increased the most — up 2.4 percentage points — followed closely by shares in Japan (up 2.1 percentage points) and China (up 1.9 percentage points). South Korea’s import share in Turkey and Italy both increased by a little over 1 percentage point. Mexico had the largest decrease in import share from South Korea in 2016, down 2.4 percentage points, followed by Indonesia (down 1.8 percentage points) and Thailand (down 1.5 percentage points).

Among South Korea’s top export markets, China, Japan, and India received more than 20 percent of their total steel imports from South Korea at 32.8 percent, 60.6 percent, and 24.7 percent, respectively. In 2016, flat products accounted overwhelmingly for the largest share of steel imports from South Korea in each China (88% or 3.9 million metric tons), Japan (77% or 2.7 million metric tons), and India (91% or 2.2 million metric tons).

### Steel Import Composition of Top Market-Share Countries - 2016

- **China**: Flat, Long, Stainless, Pipe & Tube, Semi-finished
- **Japan**: Flat, Long, Semi-finished, Stainless, Pipe & Tube
- **India**: Flat, Semi-finished, Long, Stainless, Pipe & Tube

Source: IHS Global Trade Atlas, based on import data per reporting country

Note: 2016 data for Vietnam not available
Steel Exports Report: South Korea

Overall Production and Export Share of Production

Between 2009 and 2012, South Korea’s crude steel production grew by 42 percent. Production fluctuated after that and average 69 million metric tons per year through 2016. In YTD 2017, production totaled 17.3 million metric tons — up 5 percent from 16.5 million metric tons in YTD 2016. Apparent consumption (a measure of steel demand) went from being in balance with production in 2009 and 2010 to falling behind production by 94 million metric tons in 2015. The gap between production and apparent consumption narrowed to 7.2 million metric tons in 2016. Exports as a share of production gradually increased from 41.2 percent in 2009 to 44.2 percent in 2016. South Korea’s steel exports as a share of production amounted to 45.6 percent in YTD 2017 — a slight increase compared to YTD 2016 (45.3%).

Top Producers

South Korea’s steel production is concentrated among a small number of companies, with the country’s top 3 producers accounting for 65.5 million metric tons, or 96 percent, of total 2016 production, based on available data.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Production (mmt)</th>
<th>Main Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>POSCO</td>
<td>41.6</td>
<td>Hot-rolled, cold-rolled, plate, stainless, electrical, wire rods</td>
</tr>
<tr>
<td>2</td>
<td>HYUNDAI Steel Company</td>
<td>20</td>
<td>Beams, reinforcing bars, hot-rolled, plates</td>
</tr>
<tr>
<td>3</td>
<td>Dongkuk Steel Mill Co, Ltd</td>
<td>3.3</td>
<td>Plates, sections, bars</td>
</tr>
</tbody>
</table>

Sources: World Steel Association; Hoovers; MarketLine

YTD through March
Steel Exports Report: South Korea

Trade Remedies in the Steel Sector

Antidumping duties (AD), countervailing duties (CVD), associated suspension agreements, and safeguards are often referred to collectively as trade remedies. These are internationally agreed upon mechanisms to address the market-distorting effects of unfair trade, or serious injury or threat of serious injury caused by a surge in imports. Unlike anti-dumping and countervailing measures, safeguards do not require a finding of an “unfair” practice. Before applying these duties or measures, countries investigate allegations and can remedy or provide relief for the injury caused to a domestic industry. The tables below provide statistics on the current number of trade remedies various countries have against steel mill products from South Korea.

<table>
<thead>
<tr>
<th>Country</th>
<th>AD</th>
<th>CVD</th>
<th>Suspension Agreements and Undertakings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Brazil</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Canada</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>European Union</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>India</td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Thailand</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>United States</td>
<td>13</td>
<td>5</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>46</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

Source: World Trade Organization, through June 1, 2017

Global Steel Mill Safeguards in Effect

<table>
<thead>
<tr>
<th>Country</th>
<th>Product(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Steel rebar</td>
</tr>
<tr>
<td>India</td>
<td>1) Hot-rolled steel in coils; 2) Hot-rolled steel flat sheets and plates</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1) Articles of finished casing and tubing; 2) Flat-rolled products of iron or non-alloy steel; 3) I and H sections of other alloy steel; 4) Bars and rods, hot-rolled, in irregularly wound coils</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1) Hot-rolled steel plate; 2) Steel concrete reinforcing bar; 3) Steel wire rod and deformed bar-in-coil</td>
</tr>
<tr>
<td>Morocco</td>
<td>1) Cold-rolled sheets and plated or coated sheets; 2) Reinforcing bars and wire rods</td>
</tr>
<tr>
<td>Philippines</td>
<td>Steel angle bars</td>
</tr>
<tr>
<td>Thailand</td>
<td>1) Hot-rolled steel flat products with certain amounts of alloying elements; 2) Unalloyed hot-rolled steel flat products in coils and not in coils; 3) Structural hot-rolled H-beams with alloy</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Semi-finished and certain finished products of alloy and non-alloy steel</td>
</tr>
</tbody>
</table>

Source: World Trade Organization, through May 22, 2017
Steel Exports Report: Glossary

**Apparent Consumption:** Domestic crude steel production plus steel imports minus steel exports. Shipment data are not available for all countries, therefore crude steel production is used as a proxy.

**Export Market:** Destination of a country’s exports.

**Flat Products:** Produced by rolling semi-finished steel through varying sets of rolls. Includes sheets, strips, and plates. Used most often in the automotive, tubing, appliance, and machinery manufacturing sectors.

**Import Penetration:** Ratio of imports to apparent consumption.

**Import Source:** Source of a country’s imports.

**Long Products:** Steel products that fall outside the flat products category. Includes bars, rails, rods, and beams. Used in many sectors but most commonly in construction.

**Pipe and Tube Products:** Either seamless or welded pipe and tube products. Used in many sectors but most commonly in construction and energy sectors.

**Semi-finished Products:** The initial, intermediate solid forms of molten steel, to be re-heated and further forged, rolled, shaped, or otherwise worked into finished steel products. Includes blooms, billets, slabs, ingots, and steel for castings.

**Stainless Products:** Steel products containing at minimum 10.5% chromium (Cr) offering better corrosion resistance than regular steel.

**Steel Mill Products:** Carbon, alloy, or stainless steel produced by either a basic oxygen furnace or an electric arc furnace. Includes semi-finished steel products and finished steel products. For trade data purposes, steel mill products are defined at the Harmonized System (HS) 6-digit level as: 720610 through 721650, 721699 through 730110, 730210, 730240 through 730290, and 730410 through 730690. The following discontinued HS codes have been included for purposes of reporting historical data (prior to 2007): 722520, 722693, 722694, 722910, 730410, 730421, 730610, 730620, and 730660.

**Global Steel Trade Monitor:** The monitor provides global import and export trends for the top countries trading in steel products. The current reports expand upon the early release information already provided by the Steel Import Monitoring and Analysis (SIMA) system that collects and publishes data on U.S. imports of steel mill products. Complementing the SIMA data, these reports provide objective and current global steel industry information about the top countries that play an essential role in the global steel trade. Information in these reports includes global exports and import trends, production and consumption data and, where available, information regarding trade remedy actions taken on steel products. The reports will be updated quarterly.

**Steel Import Monitoring and Analysis (SIMA) System:** The Department of Commerce uses a steel import licensing program to collect and publish aggregate data on near real-time steel mill imports into the United States. SIMA incorporates information collected from steel license applications with publicly released data from the U.S. Census Bureau. By design, this information provides stakeholders with valuable information on the steel trade with the United States. For more information about SIMA, please go to http://enforcement.trade.gov/steel/license/.