The Driving Forces of High Chinese Cathode Imports in 2009

By BGRIMM

April 30th, Lisbon

China’s cathode imports in 2009 increased by 119% (1729kt) YoY, while the exports fell by 24% (23kt)YoY.

Net cathode imports increased by 189% (1752kt) from a year earlier.

Apparent cathode consumption increased by 40% YoY.
Breakdown of cathode imports by different trading methods

- Tolling business
- Bonded warehouse
- Normal business
- Storing enterprise for transit

- Normal trading business increased by 305% YoY
- Tolling business accounted for 15% (479.9 kt) in 2009, reflecting the weak exports of the copper and copper alloy semis and other downstream copper containing end-users.
- Imports in terms of bounded warehouse and storing enterprise for transit increased by 45% (138.6kt) and 135% (264.5kt) YoY respectively in 2009.

Questions about China’s high cathode imports

1. What’s the driving forces of the high cathode imports of China in 2009?
2. How will it impact China’s cathode imports in the future?
3/30/2010

The driven forces of high cathode imports

- Increased Chinese domestic demand
- Scraps usage by the fabricators
- Sufficient liquidity in China and the increasing concerns of inflation
- Re-stocking of the SRB and other financial institutes

Review of China’s cathode usage in 2009

Cathode usage in 2009 increased by 18% YoY

due to:

- Strong investment in infrastructure, including power grid, railway, metro, etc.
- The domestic demand of home electrical appliances was encouraged by the subsidy programs in both rural and urban areas
- Strong auto production drove the demand of related copper containing parts
- Recovered building industry since last Q2 promoted the demand of copper usage in building industry
China’s cathode & total copper consumption

Total copper usage 8%

- Cathode usage +18%
- Scraps direct usage by the fabricators -25%
- Net imported copper and copper alloy semis - 8.5%

Copper and copper alloy semis demand

Domestic market for individual industry

Oversea market with exported end users

Copper consumption impacted by exports

Breakdown of copper usage

Domestic market: Copper usage was good.
Oversea market: The exports of clothing related hardware (zip, buttons) and IC fell by 11% and 4.2% in 2009. Copper content in export products accounted for 22% of total Cu usage in 2008, and it fell to 17% in 2009.
Domestic scrap supply

1. Domestic old scraps generation increased by 13% YoY
   - The government subsidy program on the replacement of the end of life (EOL) home electrical appliances and automobiles etc.
   - The strong investment of the infrastructure projects and building industry

2. Domestic new scrap generation fell by 2%
   - Low activity of fabricating industries for hardware and electronic components production. (Hardware, connectors etc…)

Scraps imports

China’s scrap imports and its value

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>kt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>Mn USD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Av price</td>
<td>USD/t</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Av LME 3-month</td>
<td>USD/t</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>% LME price</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4943</td>
<td>5585</td>
<td>5577</td>
<td>3998</td>
</tr>
<tr>
<td></td>
<td>4,044</td>
<td>6,390</td>
<td>5,968</td>
<td>6,090</td>
</tr>
<tr>
<td></td>
<td>818</td>
<td>1144</td>
<td>1070</td>
<td>1523</td>
</tr>
<tr>
<td></td>
<td>6665</td>
<td>7087</td>
<td>6887</td>
<td>5185</td>
</tr>
<tr>
<td></td>
<td>12.3%</td>
<td>16.1%</td>
<td>15.5%</td>
<td>29.4%</td>
</tr>
</tbody>
</table>

- Before 2008, average price of the imported scraps was less than 20% of LME 3 month copper price.
- In 2009, the average imported scrap price was 29.4% of the LME 3 month price, reflecting the increased copper content in the imported scraps.
Comparison of China’s copper scrap imports by major destination in 2008 & 2009

- Scraps imports from Japan fell by 66.3% (1366kt) and the reduced scraps import from Japan accounted for 87% of total reduced scrap imports.
- Chinese scrap imports from Germany, USA and Australia increased by 546% (464kt), 21% (109kt) and 17.5% (69kt) respectively, in 2009.

China Scrap supply & usage

- Although the gross weight of the imported scraps fell by 28% YoY in 2009, copper content of the imported scraps might just fell by 11% (155kt) due to the increased Cu grade of the imported scraps.
- With the increased domestic scrap supply, total scrap supply in 2009 might just be down by 5%.
- Scraps direct usage by the fabricators fell by 25% (307kt) YoY, due to
  - The supply of high quality scraps for the fabricators was less than before.
  - With the improving required quality for the semis, many fabricators upgraded their equipment. Some imported wire rod lines which can only use cathode, commissioned last year.
- The scraps used by secondary smelter/refinery increased by 4.9% (56kt).
  - Big Chinese copper producers lifted their secondary production for meeting their production target last year
  - Commission of new secondary smelting capacity
Sufficient liquidity in the market and high cathode imports of all kinds of metals

In 2009, bank lending increased by 96% from a year earlier.

China’s Imports Of Major Base Metals, in 2008 and 2009 kt

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>GR YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined Cu</td>
<td>1,456</td>
<td>3,130</td>
<td>131%</td>
</tr>
<tr>
<td>Primary Al</td>
<td>122</td>
<td>1,496</td>
<td>113%</td>
</tr>
<tr>
<td>Refined Ni</td>
<td>117</td>
<td>243</td>
<td>108%</td>
</tr>
<tr>
<td>Refined Pb</td>
<td>31</td>
<td>157</td>
<td>409%</td>
</tr>
<tr>
<td>Refined Zn</td>
<td>183</td>
<td>670</td>
<td>265%</td>
</tr>
</tbody>
</table>

Source: China Customs

Sufficient liquidity in China and the increasing concerns of inflation encouraged the buying interests of the base metals, Cu, Ni, Pb and Zn etc.

The debate of high cathode stocks in China

No more hidden stocks
- The difficulties of logistic, transportation and storage.
- Nobodies actually saw the inventories and counted them.

High inventories due to
- Logically reasonable
- The sufficient liquidity, increasing copper price and shortage of other investment opportunities.
- Follow the direction of SRB
Official semis production data

- Semis production in 2009: +9% YoY-BGRIMM, +19% YoY-official data
- Weak official semis production data
  - Statistic approaches
    - No classification between copper and copper alloy semis
    - Statistic as gross weight rather than copper content
  - Double counting
    - the first copper usage plant and the second copper usage plant
    - Copper mother coil verse final copper sheet/strip
    - Mother tube final copper tube
    - Wire rod wire
  - Too many producers
    - The production of some small plants was not involved in the official data.

Does official semis data reflect the actual copper consumption?

Summary

- High stocks level in the record (SRB, SHFE, end users, speculators)
- Scraps shortage was not so severe in 2009
- Liquidity will continue to be a major factors impacting the stocking and destocking of the metal inventories
- There should be big distinction between high apparent consumption growth rate and real consumption.
- It is difficult for the cathode imports in 2010 to be higher than that of 2009.
China Copper Quarterly Report - BGRIMM

**BGRIMM**

- A professional research institute with 54 years in metal industry.
- A strong research team provides you professional analysis of Chinese copper industry.

**Ms LI LAN.**

The principle senior analyst with 13 years working experience in copper industry

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**China Copper Quarterly Report - BGRIMM**

- Help you to know the insight of Chinese copper production and consumption
Thanks for your attention!

Beijing General Research Institute of Mining and Metallurgy
Li Lan & Wang Ye
Email: leelan@163.net
Tel: +86-10-88399869
Fax: +86-10-88399497