China’s Refined Copper Usage

By BGRIMM

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Main factors impacting China’s refined copper usage in 2007

Forecast of China’s refined copper usage till 2010

BGRIMM’s work
China’s refined copper usage in 2007

Refined copper consumption: av. 11%
Direct scrap usage: av. 13%
Net imports of Cu & Cu alloy semis – Cu content: av. 8%
Total copper consumption: av. 11%
China’s refined copper usage in 2007

- China’s refined copper usage increased by 19% in 2007, reaching 4546 kt.

- The factors impacting the statistics
  - Scraps usage (un-know)
  - Re-stocking or de-stocking of government, traders, or other organizations (un-know)
China’s cathode import

The Import & Export of refined copper

China cathode import in 2007

- Net import: 1368 kt in 2007, increasing by 134% YoY!
- In 2007, the imports in terms of bonded warehouse and storing enterprise imports for transit accounted for 21% and 13% respectively of total imports.

Data source: BGRIMM
China’s refined copper usage in 2007

- Fundamental sector promoted China’s refined copper usage in 2007
  - Strong fixed asset investment on infrastructure
  - Import substitution
  - Direct scrap usage decline
China’s refined copper usage in 2007

- GDP: 11.4%
  - Fixed asset investment: 24.8%
  - Real estate investment: 30.2%
- Foreign trade:
  - Import: 25.7%
  - Export: 20.8%
China’s refined copper usage in 2007

The import & Export of Semis

- **Import:** -4% in 2007
- **Export:** -5% in 2007
- **Net imports:** -3% in 2007

Data source: BGRIMM
Scrap direct usage decline

- High quality scarps which could be used directly were becoming tight

Direct scraps usage in brass mills: increasing by 0.5% YoY
Direct scraps usage in wire rod mills: falling by 6% YoY

- Central government allied local government to prohibit scraps smuggling in whole country
The trend of China’s copper consumption

Factors impacting future’s copper consumption

Positive factors:
- Chinese economy will be still very strong.
- The growth rate of infrastructure is still very high.
- The direct copper scraps usage will still keep declining.
- Import substitution will be continual.
- Export of copper and copper alloy semis will increase.

Negative factors:
- The growth rate of the export of containing copper goods might slow down.
- Tighten money policy
- Substitution will still exist.
- Capacity shifting out of China of some Chinese copper fabricators.
China refined copper consumption in 2008 - Positive factors

China’s macro-economy will continue to be strong

Central government target

<table>
<thead>
<tr>
<th>2008 Growth rate %</th>
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<tbody>
<tr>
<td>GDP</td>
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<tr>
<td>Fixed asset investment</td>
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<tr>
<td>Foreign trade</td>
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<tr>
<td>Import</td>
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<td>Export</td>
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</table>
China refined copper consumption in 2008
- Positive factors

- Infrastructure will be the main factor driving the market
  - Power cable
    - Investment in power grid in 11th five-year period: 1200 billion RMB, 2.4 times of that in 10th five year period
    - Investment in state grid updating program in the next 3 years: over 820 billion RMB
  - Transformer: keeping high production in 2008
  - Light train and subway construction: still booming
China refined copper consumption in 2008 - Positive factors

- Direct scrap usage might continually decline
  Some wire rod SCR mills are under construction.
  Small wire rod mills with scraps are very difficult to survive.

- Import substitution will be continual

- Export of semis was reopened this year through cancellation of export tax on copper and copper alloy semis
China refined copper consumption in 2008 - Positive factors

### Policies on Foreign Trade

<table>
<thead>
<tr>
<th>Time of implementation</th>
<th>Policies</th>
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<tbody>
<tr>
<td>1st Jan, 2006</td>
<td>Canceling tolling business with imported copper concentrate</td>
</tr>
<tr>
<td>10th, April, 2006</td>
<td>Imposing 10% export tax on refined copper, copper and copper alloy semis (Except tube)</td>
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<tr>
<td>15th Sep, 2006</td>
<td>Canceling VAT rebate of refined copper, copper alloy casting and copper powder, Cutting VAT rebate of major copper and copper alloy semis (except copper tube) from 13% to 5%,</td>
</tr>
<tr>
<td>Nov, 2006</td>
<td>Imposing 10% export tax on concentrate, and other copper containing materials,</td>
</tr>
<tr>
<td>June, 1st, 2007</td>
<td>Increasing export tax of blister and scraps to 15%</td>
</tr>
<tr>
<td>1st, Jan, 2008</td>
<td>Canceling import tax of blister, refined copper and scraps, Cutting export tax of high-purity refined copper (Cu&gt;99.995%) to 5% from 10%. Canceling export tax of copper and copper alloy semis to 0% from 10%</td>
</tr>
</tbody>
</table>

**Purpose:** Limit the export of cathode and copper raw materials, including concentrate, blister and scraps. Encourage the import of refined copper and copper raw materials. Reopen the export of copper and copper alloy semis.

**Background:** China’s high foreign surplus, China is short of copper resource and other copper raw materials. Limit the smelting capacity increasing.

Fabricating industry is not a high energy consumption industry and should encourage the export of those high quality semis, such as ACR tube etc.
China refined copper consumption in 2008
- Negative factors

- Growth rate of export is slowing down.
  Due to
  - Revaluation of RMB
  - Increasing shipment charges
  - VAT rebate issues

- Marco-economy control and tighten money policy in 2008

- Impact of substitution due to high copper price and the flexibilities of Chinese small down stream producers.
China refined copper consumption in 2008
- Negative factors

Some fabricators are shifting some capacities outside of China.
- GD tube mill in Mexico, commission end 2008
- Hailiang brass rod mill in Vietnam, commissioned end 2007
- Some Taiwanese connector producers: shifting from Kunshan to Vietnam. And also some sheet/strip mills are thinking to follow their customers.

Because of
- High cost of RMB
- Tighten power supply, transportation issues, increasing labor cost etc
- Export policy
## Out look of China’s refined copper usage in 2008~2010

### Forecast of China’s refined copper production and consumption

<table>
<thead>
<tr>
<th></th>
<th>2008(f)</th>
<th>2009(f)</th>
<th>2010(f)</th>
</tr>
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<tbody>
<tr>
<td>Cathode production</td>
<td>3949</td>
<td>4240</td>
<td>4464</td>
</tr>
<tr>
<td>YoY%</td>
<td>13%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Net Cathode import</td>
<td>975</td>
<td>970</td>
<td>1066</td>
</tr>
<tr>
<td>YoY%</td>
<td>-29%</td>
<td>-1%</td>
<td>10%</td>
</tr>
<tr>
<td>Cathode Consumption</td>
<td>4924</td>
<td>5210</td>
<td>5530</td>
</tr>
<tr>
<td>YoY%</td>
<td>8%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Data source: BGRIMM
BGRIMM’s work

- Built detailed database of mines, smelters, refineries, fabricators and some down-stream end users
- IWCC representative in China
- Detailed breakdown of China’s copper consumption
- Cost analysis of China’s mines, smelters and refineries
- Supplying services to many international organizations, mining companies, associations, copper fabricators, and trading companies

More than 10 years working experience for supplying research on China’s copper industry
Thank you for your attention!

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