Outlook 2006

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Crude Oil Prices
Price of Copper

From London Metal Exchange
Economic Trends in US Capital Equipment Investment
15 to 40 years

• Excess Capacity 80-90’s
  – Prices stable or decline
  – Cost cutting required
  – Reduce inventory
  – Minimum staff
  – Low profitability
  – Liquidation of capacity
  – Low interest rates, inflation, inventories, lead times
  – Fewer captive operations

• Limited Supply 60-70’s
  – Prices increase
  – Production required
  – Inventory asset
  – Staff required
  – New products and processes
  – Increases in capacity
  – Increases in interest rates, inventory, inflation, lead times
  – New captive operations
Consumer Price Index and Moody's Corporate Bond Rate  Aaa

CPI Annual Percentage change from prior Year and Moody's Percent

Year

Investment

Percent Change, Annual Rate

Real Private Investment - Equipment and Software

Percent Change, Annual Rate

Real Private Investment - Structures

Billions Chained 2000$, Annualized

Real Change in Private Inventories
Investment Drivers

Industrial Production

Corporate Profits

Purchasing Managers' Index

Inventory-to-Sales Ratio: Total Business
Economic Trends in US Secular Trends

- Declining
  - heavy
  - make
  - traditional
  - local
  - West
  - North
  - young

- Increasing
  - fast
  - know
  - modern
  - global
  - East
  - South
  - old
U.S. Foundry Plants
Operating
Steel Foundries in US
Labor Productivity and Costs 1987-2003

- Output/hr
- Cost/hr

Foundries
Fabrications
Forging
Machining
Products

% / yr
World Statistics 2004

- 1129 million tons of steel production
- 6.595 million tons of steel castings
- 6.3 billion people
- 179 kg steel per person
- 1.05 kg steel castings per person
All Steel and Steel Casting Production per Capita

kg of all steel/person

kg of castings/person

Czech
South Africa
Belgium
UK
Canada
Mexico
Spain
Taiwan
France
Turkey
Italy
Brazil
Ukraine
India
Germany
South Korea
Russia
US
Japan
China

Steel Castings
All Steel
The Impact of the U.S. Dollar on Exports

U.S. Share of World Manufacturing Exports

Value of Dollar

* trade weighted exchange real index (broad currencies)

Source: OECD, U.S. Department of Commerce, Federal Reserve
Economic Trends in US

- Normal business cycle
  - Lasts 3 to 8 years
  - Depends on consumer spending
  - Result of political and financial actions
  - Most visible
- Capital equipment investment trends
- Secular changes
Forecast Summary

- Strong demand in 2005
- Should continue strong through all of 2006
Cost to add Capacity

- Incremental capacity can be cheap- labor, heat treat, materials handling; or expensive melting, molding, physical plant
- Estimates of cost of an added annual ton ranged from $600 to $2800 with half the responses being between $1500 and $2000