

# RYAN'S NOTES

## *Ferrous and Nonferrous News and Prices*

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### FERROALLOYS

#### **Nucor buys pig iron at \$220 per mt**

Pig iron prices continue to escalate at a pace that is breaking all records, traders say, and while some are convinced the market is poised to become tighter still, others are nervous enough to be closing out positions at a rapid pace.

Nucor reportedly purchased a significant tonnage of Brazilian pig iron for July/August at \$220 per mt, c.i.f. Its previous purchases for March/April were booked at \$195 per mt, c.i.f. Not surprisingly, Nucor last week announced a \$20-per-ton raw material surcharge on all steel mill products, effective Jan. 1. "The surcharge has become necessary due to rapid and unprecedented raw materials price increases," Nucor stated.

Brazilian producers have successfully sold at \$190 per mt, f.o.b. southern Brazil and \$200 per mt, f.o.b. northern Brazil. Freight rates to the US have risen to \$28 per mt from the south and \$18 from the north. With the Nucor purchases and trader purchases for the Far East, Brazilian producers are pretty much sold out through July, sources agree.

Some traders believe that the sold-out position of the Brazilians will ensure that prices will stay high at least through July, while others are not so comfortable. Many buyers in Asia have bought twice what they need, commented a trader, and the first contract cancellation will set off a wave of cancellations. He is convinced that the market is set to collapse, possibly after the Chinese New Year in late January.

Other traders, however, point out that the smaller foundries have covered their needs for January/February only; from March onward they are likely to have a hard time finding iron units. "It is definitely going to be a seller's market for a while," said a trader. At the same time, he admits that some foundries might have a difficult time staying in business. Many foundries have entered into contracts with auto manufacturers that guarantee a 5%-per-year reduction in product prices.

The shaky state of the US foundry industry and the uncertainties about how long the phenomenal growth rates in Asia can be sustained are causing a good deal of heartburn, traders say. "The Chinese are buying everything in sight," said one mystified trader. Chinese buyers reportedly have paid \$245-250 per mt for pig iron. Russian pig iron is believed to have sold at the equivalent of \$220 per mt, f.o.b. Pig iron prices have been lagging scrap prices, which also have been increasing exponentially. January prices for No. 1 factory bundles are likely to rise \$10-15 per mt, sources say.

"I'm getting calls from buyers in India desperate for material," said another seller. There are indications that the Chinese government might slow the economic growth. Already, the government reportedly has cut back lending.

US pig iron imports in October were the second highest monthly total after August. Of the 497,194 mt imported, some 330,144 mt came from Brazil and 134,469 mt from the CIS. Through October, imports fell 3.2% to 3,388,847 mt, mostly because imports from Brazil dropped 11% to 1,282,844 mt. The second largest foreign supplier, the CIS, increased its exports to the US by 46% to 656,785 mt.

#### **Sual agrees to EC minimum Si price**

There was little movement in silicon prices last week. US suppliers raised their price ideas to 63-64¢, delivered, for 0.5% Fe metal. Buyers who were looking for low-calcium silicon (0.01% Ca) were asked to pay about a 1¢-per-lb premium. "There's no cheap metal out there," one buyer admitted. "Sellers are more selective with the remaining tonnage." The stalemate between GE and most of its US suppliers appeared to be holding. "There is no reason why GE should be able to buy chemical-grade metal below 60¢," one seller opined.

Chinese 5-5-3 prices were unchanged, but the premium for 4-4-1 grade increased. Chinese smelters were reluctant to quote forward. Canadian and Mexican buyers of Chinese 5-5-3 silicon received quotes around 50¢, delivered. "The Chinese are trying to figure out the impact of the reduction in the government's export tax rebate," one analyst noted. "Also, the Chinese New Year will make it even harder to find sellers." European standard-grade prices softened in reaction to the stronger euro against the dollar.

It's now officially over: The EC member states formally voted eight to seven to impose dumping duties on Russian silicon as well as keep the 40% duty on Chinese imports. While Bratsk did not sign a price undertaking that sets a minimum price, Sual did. Sual's minimum price is confidential and is thought to be fixed for five years but Sual can ask for adjustments. The decision should be published on Dec. 24 and be effective on Dec. 25. Bratsk chose not to negotiate a price undertaking, believing some member states would change their vote at the last minute.

The question now is whether the minimum duty is low enough to allow at least some shipments of Sual metal; Sual would be immediately subject to the 22.7% duty if it sells below the EC's minimum price.

The US imported 9,236 mt of 99-99.99% silicon metal in October compared with 9,198 mt in October 2002. The largest suppliers were Brazil (4,478 mt), South Africa (3,385 mt) and Canada (1,113 mt). Through October, total US imports were 95,449 mt vs. 86,698 mt for the same year-ago period. Imports of less than 99% silicon were 1,927 mt in October vs. 861 in October 2002 and 18,063 mt for the January-October period compared with 38,758 mt for the same year-ago period. South Africa accounted for 1,272 mt in October 2003.

Globe seems to be getting ready to exit from Chap. 11 and is in the process of securing energy supplies for its three remaining plants. First, Globe has entered into a swap agreement with Sempra Energy Trading covering its closed Niagara Fall, NY, silicon plant. Under the agreement, the reduced-rate power that would have gone to the Niagara Falls plant will go to Sempra, and Globe will receive a credit for the price difference between the contracted power and the prevailing market price.

Globe still is liable for the power even though the Niagara plant is closed. The swap assures the contract will remain in force and the electricity will be available to Globe if and when it decides to reopen the facility. The amount of power that could be assigned to Sempra is 43 MW from Dec. 1, 2003 to Oct. 31, 2006, and 23 MW from Nov. 1, 2006 to Oct. 31, 2007.

Globe also reached an agreement with American Electric Power to extend its electricity contract for one year, or until Nov. 30, 2004. Globe will continue to get discounted power from AEP for its Beverley, OH, plant but has to pay \$1,233,560.25 in past due charges over the 12-month period plus an 8% interest fee. Globe, however, has the option of switching to another supplier provided that the debt is paid in full prior to the switch.

Finally, Globe told the bankruptcy court that it plans to assume its power contract with Alabama Power covering its Selma plant and pay the utility \$1,363,258.30 for its past debt.

## Cobalt market holding its breath

In a normally slow time of year, cobalt prices have rebounded with a vengeance. Many sellers say they have stopped offering material in the hopes of having a better handle on where things are going at the start of the New Year. "We are receiving inquiries for December, but it is hard to believe these buyers have a real need because their plants are going to be closed for the next two weeks," said a seller. "We figure we are better holding off until January." A producer source echoed that statement, saying his company had little spot metal available, and was waiting until January to respond to spot inquiries from regular contract customers. "We have nothing to sell to our non-regular customers," he said.

WMC sold 10 mt for December delivery to Asia at \$17.90 per lb and four 5-mt lots for January delivery at \$18.30, \$18.50, \$18.90 and \$19.50. The producer raised its price for 99.8% Co. to \$20. Falconbridge confirmed that it had made spot sales above \$18 last week. Traders insisted that high-grade sales were made at \$20 and 99.3% Co was booked at \$18. DLA offered 99.2% Co and 99.8% Co under its BOA last week, and unsuccessful bidders said the agency was able to obtain over \$16.50 for 99.2% Co and over \$17.50 for 99.8% Co. US consumers said that they were no longer able to obtain fixed-price contracts from suppliers of Russian 99.3% Co for next year.

No one expects prices to collapse in January. "Even though buyers for battery manufacturers in Asia have soaked up a lot of material for 2004, there still are companies that have not covered their requirements. We're expecting pretty good demand," said a producer source.

Much of the price push in cobalt appears to be coming off the back of sky-rocketing nickel prices, but there is growing evidence that supply is less readily available. "In all my years, I've never seen this kind of tightness and the kinds of premiums we are getting on contracts," said a producer source. He noted that consumers are much more concerned about protecting themselves than they have been in previous bull markets. "In the past when prices went up, consumers would blame a few traders and say they still were receiving plenty of unsolicited offers," said an analyst. "Today they are not talking about material being a phone call away."

## Shieldalloy's FeV plant struck

USW workers who had been working since June without a contract at Shieldalloy's Cambridge, OH, ferrovanadium plant, walked off the job on Dec. 8. The company hired temporary, replacement workers and resumed operations on a slightly reduced level on Dec. 10 (*Ryan's Notes On-line*, Dec. 12). Shieldalloy is making shipments to customers.

Until Dec. 8, USW workers had been working under the provisions of the new contract offer that was rejected in June, and sources at Shieldalloy said they were surprised the workers struck. The sticking point reportedly is a proposed change

requiring workers to pay a portion of their health benefits.

Shieldalloy's Cambridge plant is believed to produce about 4-million ppy of 42-48% FeV. The situation at Shieldalloy is not likely to have a market impact unless a *force majeure* is declared, sources say. Still, sellers last week reported that they were receiving more requests from Shieldalloy's contract customers who are concerned about covering their needs.

Spot prices had been firming before the strike. Last week spot prices were \$6.00-6.20 per lb in the US and \$13.80-14.30 per kg in Europe. Spot material is extremely tight in Europe, sources say. The Chinese are not actively offering V<sub>2</sub>O<sub>5</sub>, and the Russians have stopped providing material to the trade.

## Low-carbon ferrochrome prices surge

While US high-carbon ferrochrome prices were static, tags for low-carbon ferrochrome showed significant gains. US prices for 0.10% C metal broke the 70¢-per-lb level and were heading to 75¢. Low-carbon prices in both Europe and Asia have also begun to firm to as high as 80¢ for 0.10% C grade.

Analysts predicted the move, saying the minimal differential between high- and low-carbon tags presaged the move. Also, the producers decision to take furnaces off-line had a significant impact. Serov stopped two low-carbon furnaces in early December, which reduced the Russian producer's output by about 2,500 mtpm; Serov, however, increased its high-carbon production by the same amount. Serov, which hardly sold any material into China, is now exporting 2,500-3,000 mtpm there. KazChrome recently closed one low carbon furnace that was producing 6,000 mtpy. And, there were reports that Chelyabinsk halted some low-carbon production in favor of more high-carbon output.

While most of the attention has been focused on how the increased rand has affected its return on charge chrome, Samancor's low- and medium-carbon ferrochrome operation has been an increasing drag on the unit's financial results.

Samancor raised its first-quarter price for IC-3 grade, max 2% C, is 72¢, c.i.f.; it is thought it costs Samancor at least 15¢ per lb over its charge chrome cost to produce medium carbon.

South African charge chrome producers finalized their 7¢ first-quarter price increase with European buyers last week. It is also thought that Samancor will continue its own pricing policy regardless of what actions that other ferrochrome producers take. A few ferrochrome producers nervously eyeing nickel prices, saying that the runaway nickel market could cause stainless steel end users to either cut back or find substitutes.

ASA started its second furnace at its Dilokong plant in Steelpoort on Dec. 13, or about a month and a half ahead of schedule. The new submerged arc furnace has a capacity of 72,000 mtpy and should reach full capacity in March. The company's other furnace, which was built in 1998, has 60,000-mtpy. With demand increasing, there is already talk of a third furnace based on the company's good ore reserves.

DLA offered an additional 1,000 tons of high-carbon ferrochrome at last week's BOA auction. The 65.019% Cr material is stored in Sharonville, OH.

US imports of high-carbon ferrochrome were 48,801 mt—the highest 2003 monthly amount—in October and 331,671 mt for the first 10 months of 2003 compared with 19,183 mt and 204,045 mt, respectively, in the same 2002 periods. Imports of up to 0.5% C ferrochrome were 258 mt in October and 16,820 mt for the first 10 months of 2003 compared with 2,886 mt and 17,095 mt, respectively, for the same year-ago period.

The Indian government reaffirmed its earlier decision not to increase its export quote of 400,000 mtpy of low-silicon friable

chrome ore this fiscal year (*Ryan's Notes*, Nov. 24, p1); the ceiling was hit by September. Tata Steel and OMC are now expected to start scaling down mining in the Sukinda Valley in Orissa. Tata has already exported 150,000 mt while OMC shipped about 160,000 mt this fiscal year. Attention has now shifted to India's exports of beneficiated materials which have been over 700,000 mtpy in recent times; most of the concentrates have gone to China.

A few domestic ferrochrome producers have pointed out that India's installed capacity of chrome concentrate is considerably less than the country's exports. "The other producers want to make sure that lumpy ore hasn't been mislabeled as concentrates to avoid the export restrictions," one analyst pointed out. For the first nine months of 2003, China imported 921,288 mt of chrome-bearing ores and concentrates from India vs. 845,074.1 mt for all of 2002.

Tata Steel, which has the beneficiation capacity of 300,000 mtpy, said it has been producing considerably more by using multiple shifts to "open up hidden capacity." The company also has plans to double its output of chrome concentrates—50-56% Cr<sub>2</sub>O<sub>3</sub> and a Cr/Fe ratio of 2.6/1 to 3.5/1.

Allican Resources has signed a letter of intent with an undisclosed Asian chromite ore producer to be a supplier and investor in the CHROME C's low-carbon ferrochrome project. The letter of intent comprises a terms' sheet for a long-term ore supply contract and a C\$3-million investment by the producer in C\$100-million CHROME C's project. With the letter of intent, Allican says it found all partners required to complete the equity portion of CHROME C financing structure. The others partners, which Allican had previously concluded letter of intent, are SOQUEM (subsidiary of SGF), Pyromet and Hickman, Williams, subject to board approval.

Earlier, Allican was linked with Tata and Turkey's Dedeman, but nothing materialized. "It's strange that Allican would make a public announcement about a partner without saying who it is," one analyst opined.

## US HC FeMn tags break \$600 per lt

US bulk ferroalloy buying was winding down prior to the holidays. High-carbon ferromanganese tags breached the \$600-per-lt level last week, with buyers seeing prices around \$615, delivered. One mill was able to buy 76% Mn material at around \$607. Medium-carbon ferromanganese prices were divided. Large consumers were able to purchase material for around 50¢, while truckload buyers were forced to pay nearly 60¢. It was much the same case for silicomanganese, with some mills purchasing bargeload quantities at around 32¢, while others were forced to pay 35¢, delivered. Manganese metal was sold at 72¢, delivered.

US ferrosilicon tags remained around 45¢, though most sellers are predicting higher future prices.

Despite strong demand and high prices, South African manganese ore producers can't increase their exports, analysts say. "It's not a production problem, but a rail bottleneck," one explained. "The rail line to Port Elizabeth has reached its maximum of about 2-million mtpy, and can't accommodate any more. It is already operating seven days a week, and the situation won't be improved for three to five years."

US imports of high-carbon ferromanganese were 15,420 mt in October and 133,349 mt for the first 10 months of 2003 compared with 21,663 mt and 157,415 mt, respectively, for the same year-ago periods. South Africa shipped 7,990 mt in October while Brazil accounted for 6,513 mt. The US imported 1,939 mt of medium-carbon ferromanganese in October and

39,650 mt in the first 10 months of 2003 vs. 238 mt and 28,779 mt for the same 2002 periods. US imports of low-carbon ferromanganese fell to 826 mt in October—the lowest monthly amount in 2003—and 20,326 mt for the first 10 months of 2003. In 2002, the US imported 764 mt in October and 9,383 mt for the January-October period.

The US imported 25,138 mt of 55-80% ferrosilicon in October and 182,561 mt for the first 10 months of 2003 vs. 16,507 mt and 131,526 mt, respectively, for the same 2002 period. The largest suppliers in the first 10 months of 2003 (same 2002 period in parentheses) were: China, 38,669 mt (2,442 mt); Venezuela, 32,669 mt (46,354 mt); Kazakhstan, 28,199 mt (25,915 mt); Russia, 24,397 mt (227 mt); Iceland, 13,900 mt (15,211 mt); Canada, 12,287 mt (7,441 mt); Norway, 10,946 mt (3,489 mt); and South Africa, 3,723 mt (4,892 mt).

The US imported 39,215 mt of silicomanganese in October and 219,987 mt in the first 10 months of 2003 vs. 30,857 mt and 196,458 mt, respectively, in the same 2002 periods. The largest importers in October 2003 were South Africa (19,694 mt); Australia (6,420 mt); Norway (4,990 mt); Georgia (4,913 mt); and Mexico (2,400 mt).

The ITA has postponed until Feb. 26, 2004 its preliminary dumping decision on imports of electrolytic manganese dioxide from Australia, Greece, Ireland, Japan and South Africa. The decision was originally scheduled for Jan. 7.

## FERROALLOYS Notes

**LME nickel prices reached new 14-year** highs last week and even briefly climbed over \$15,000 per mt. Traders reported that premiums had risen to 23-25¢ per lb for melting and 33-35¢ per lb for plating. They said consumers were consistently buying, and they doubted that anyone was overbuying at current prices. Metal continues to be pulled out of LME warehouses, and is supposedly destined for India. "There is a danger that all the metal that has been removed could come right back after the start of 2004," said a trader. In the meantime, the funds seem enamored with nickel and continue to buy.

**All eyes are on the labor situation at Falconbridge's** Sudbury, Ont., operations where a three-year contract with the Canadian Auto Workers union local expires on Jan. 31, 2004. The last time a contract was renegotiated, workers at the site went on strike for seven months starting on Aug. 1, 2000, but during that time Falconbridge was able to operate the smelter at Sudbury at 60-65% capacity using feed from Raglan and some Sudbury feed. Its refinery at Kristiansand, Norway, operated at similar levels. Most analysts believe that if Sudbury is struck, it will be able to avoid declaring *force majeure* on shipments by making similar arrangements.

**Moly traders have raised their prices** significantly, but they are not reporting much business. Most of the business reported last week was inter-trade, and it was done at prices significantly below the \$8-per-lb moly oxide and \$19-per-kg FeMo being quoted. One trader admitted that he had had no success in booking briquettes at \$7.90 per lb early in the week. An online tender for 10 mt of oxide reportedly went at \$7.40. Consumers are making discreet inquiries about prices, traders say, and while they are not indicating that price ideas are crazy, they also are not rushing to buy. The lack of panic appears to be keeping a

lid on prices. A US mill is believed to have booked his first-quarter FeMo requirements at \$8.10-8.30 per lb. Prices in the US have been lagging those of Europe. Chinese suppliers who were offering FeMo at \$17 per kg have withdrawn all offers. Most sellers expect buying to pick up in January. China's moly exports probably will be reduced in the first quarter, said an analyst, but he cautioned, the reduction will not be sizable.

**DLA sold 240,000 lb of Ta<sub>2</sub>O<sub>5</sub> under its** November negotiated bid tender to DM Chemi-Met of Hessle, England, for an approximate market value of \$6-million (\$25 per lb). The price appeared high to traders who said they had offers of ore at \$21.

**Inco will lift its *force majeure*** on deliveries of nickel pellets and discs from Clydach, Wales on Jan. 1, 2004. The *force majeure* has been in effect since USW workers struck the Sudbury, Ont., facility on June 1. Even though the strike ended in late August, the company was not able to lift the *force majeure* on nickel products produced at Sudbury until early October. Inco lifted the *force majeure* on shipments of cobalt on Nov. 1.

**Ferrotungsten prices in Europe** have jumped to above \$7 per kg, traders say. In the US, spot prices have not budged because of the lack of business. Similarly APT prices are being quoted at higher levels in Europe, \$64-65 per mtu, but are unchanged in the US.

## LEAD & ZINC

### Delay seen for Exide Chap. 11 exit

LME lead stocks fell 7,525 mt last week to 119,275 mt on Dec. 19. Fund buying pushed settlement prices over \$700 per mt to \$707 (32.1¢) on Dec. 19, up from \$683.5 (31¢) on Dec. 15.

Exide won't be playing its "get-out-of-bankruptcy" card anytime in the near future. The company was forced to extend its DIP financing until Feb. 15, 2004, or the effective date of the company getting court approval for its reorganization plan. The pre-petition lenders have also agreed to extend the standstill agreement until Mar. 18, 2004.

Meanwhile, the unsecured creditors appear to have won an important battle against at least two of the secured creditors. The unsecured creditors said that a few of the secured creditors were "insiders" which could put them last in line to receive any money under the preferential transfer rule. The secured creditors in question, according to the unsecured creditors, initiated the GNB Dunlop acquisition even though they knew Exide was insolvent; the lenders possessed "material non-public information; in connection with the GNB acquisition, the creditors received substantial additional collateral; the lenders were instrumental in deciding the date of bankruptcy filing and which of the company's subsidiaries would be included; and the lenders exercised control over the selection of a CFO. Two of the secured lenders unsuccessfully asked the court to dismiss the insider preference claims.

C&D Technologies reported net sales for the third quarter of fiscal 2004 decreased \$2.8-million, or 3%, to \$84.9-million from \$87.6-million in the third quarter of fiscal 2003. This decrease resulted from lower sales in the Powercom and Power Electronics divisions, partially offset by higher sales in the Dynasty and Motive Power divisions. Sales by the Powercom

division declined \$7.1-million during the quarter, or 19%, primarily due to a drop in sales to the telecommunications market. Power Electronics sales decreased \$2.8-million in the three months ended Oct. 31, 2003, or 23%, with most of the reduction in DC to DC converters and custom power supplies. Sales of the Dynasty division increased \$5.7-million during the quarter, or 24%, primarily due to continued increased demand for sealed products in the North American UPS market. Dynasty UPS sales increased by \$3.6-million. Sales in the Motive Power division increased \$1.4-million or 10% in the three months ended Oct. 31, 2003.

Gross profit for the third quarter of fiscal 2004 decreased \$1.2-million or 6% to \$19.7-million from \$20.8-million in the third quarter of the prior year, resulting in a decrease in gross margin from 23.7% to 23.2%. Contributing to this decline was approximately \$1.5-million in higher lead costs. Gross profit declined in the Powercom division due to lower sales volumes, coupled with higher material costs, primarily lead) as a percentage of sales. Gross profit increased in the Dynasty, Power Electronics and Motive Power divisions. The increases in the Dynasty and Motive Power divisions were primarily the result of higher sales volumes, partially offset by higher material costs (primarily lead) as a percentage of sales. Additionally, in the comparable quarter of the prior year, the company experienced plant operational difficulties in the Motive Power division.

Gross profit increased in the Power Electronics division on lower sales as a result of favorable product mix and an improved cost position due to the recently completed move of considerable output from Nogales, Mexico to Guangzhou, China.

The Power Electronics division had its first operating profit since the quarter ended Oct. 31, 2002 driven by cost reduction initiatives, and modification to sales channels. Although the Motive Power business continues to fall short of profit expectations, sales were up and operating losses down during the quarter compared with last year's third quarter.

Total company backlog on Oct. 31, 2003 was about \$52-million up from the July 31, 2003 backlog of about \$47-million.

## MINOR METALS

### Indium Corp. raises its price to \$320

Indium Corp. of America raised its 99.97% indium price by \$55 per kg to \$320 per kg, effective Dec. 16. Its previous price was set on Nov. 10. The company has been slow to follow the spiraling spot market, and many people questioned what the published price means. "I can't imagine Indium Corp. is selling to anyone at \$320, given that spot prices at least \$50 higher," said a trader.

Spot indium prices have been climbing at a fast pace, and last week spot prices rose to \$360-380 per kg. Japanese traders and consumers received spot offers from Zhuzou at \$400 per kg. Some sources said Zhuzou was not offering any ITO-grade material, but one trader insisted that Zhuzou had successfully sold ITO-grade material at \$385 the previous week. Demand for flat TV panels and LCD monitors is active, and traders now expect prices to hit \$450 in the coming year.

**Antimony** showed a few signs of life. Traders reported consumer inquiries on both sides of the Atlantic. Prices haven't moved much, but with each concluded sale, the market seems a little firmer. European consumer sales were booked at slightly above \$2,300. In the US, traders reported business at \$1.05 per lb. **Selenium** prices jumped to \$9-9.50 per lb, following a surge of inquiries from the Chinese.

# RYAN'S NOTES

Twice-Weekly PRICES

Volume 9, No. 51

December 22, 2003

		Tuesday Dec. 16		Friday Dec. 19		Week Avg	4-Week Avg	6-Week Avg
Chrome Metal								
RN Aluminothermic Imported	\$/lb	1.85	- 1.95	1.90	- 2.05	1.875	1.831	1.808
Chrome Ore								
RN Turkish Ore 38-40%	\$/mt	120.00		125.00		122.500	106.250	102.500
RN Turkish Ore 44%	\$/mt	140.00		150.00		145.000	125.000	120.000
Cobalt								
RN 99.8% NA Transaction	\$/lb	17.50	- 18.00	18.50	- 19.00	18.000	16.913	16.067
RN 99.65% NA Transaction	\$/lb	16.25	- 16.75	18.00	- 18.50	17.125	15.375	14.646
RN 99.3% NA Transaction	\$/lb	15.50	- 16.00	16.50	- 17.00	16.000	14.375	13.425
Ferrochrome								
RN 50-52% HC Imp. NA Transaction	€/lb	56.00	- 60.00	56.00	- 60.00	56.000	52.125	50.625
RN 50-52% European Transaction	€/lb	56.00	- 60.00	56.00	- 60.00	56.000	51.625	50.250
RN 60-65% HC Imp. NA Transaction	€/lb	54.00	- 56.00	54.00	- 56.00	54.000	51.063	49.396
RN 60-65% European Transaction	€/lb	57.00	- 60.00	57.00	- 60.00	57.000	52.500	50.833
RN 0.05% LC Imp. NA Transaction	€/lb	75.00	- 76.00	80.00	- 85.00	77.500	74.250	73.500
RN 0.1% LC Imp. NA Transaction	€/lb	67.00	- 69.00	72.00	- 75.00	69.500	65.281	64.188
RN 0.15% LC Imp. NA Transaction	€/lb	64.00	- 66.00	68.00	- 70.00	66.000	62.500	61.667
RN FeCr/Si NA Transaction	€/lb	40.20		40.20		40.200	39.025	38.125
Ferromanganese								
RN 78% Imported NA Transaction	\$/lt	595.00	- 610.00	610.00	- 625.00	602.500	580.625	567.083
RN Medium Carbon NA Transaction	€/lb	52.00	- 55.00	50.00	- 57.00	51.000	48.500	46.979
RN Low-Carbon NA Transaction	€/lb	60.00	- 65.00	60.00	- 65.00	60.000	58.000	57.000
Ferromolybdenum								
RN Chinese FeMo	\$/kg	16.30	- 16.50	16.50	- 17.00	16.400	15.713	15.408
RN US FeMo	\$/lb	7.75	- 7.95	8.00	- 8.30	7.875	7.438	7.308
RN Western FeMo	\$/kg	17.80	- 18.00	18.20	- 18.80	18.000	16.850	16.192
Ferrosilicon								
RN 50% NA Transaction	€/lb	46.00	- 49.00	46.00	- 49.00	46.000	45.000	44.125
RN 75% NA Transaction	€/lb	45.00	- 46.00	45.00	- 46.00	45.000	44.375	43.479
RN SiC	\$/st	475.00	- 490.00	475.00	- 490.00	475.000	465.625	458.750
Ferrotitanium								
RN 68-72% Ti NA	\$/lb	2.88	- 2.95	3.00	- 3.05	2.940	2.794	2.733
Ferrotungsten								
RN NA Transaction	\$/lb	3.40	- 3.55	3.40	- 3.55	3.400	3.400	3.400
Ferrovanadium								
RN European Transaction	\$/kg	13.00	- 16.50	13.80	- 14.50	13.400	11.938	11.492
RN NA Transaction	\$/lb	5.75	- 5.90	6.00	- 6.20	5.875	5.619	5.538
Manganese								
RN NA Transaction, Electrolytic Metal	€/lb	72.00	- 75.00	72.00	- 75.00	72.000	69.750	68.167
Molybdenum								
RN Worldwide Oxide	\$/lb	7.00	- 7.35	7.20	- 7.70	7.100	6.600	6.379
RN Worldwide Oxide Mean	\$/lb	7.175		7.450		7.313	6.759	6.517
Nickel								
Melting Premium	€/lb	20.00	- 22.00	22.00	- 25.00	21.000	21.000	21.333
Plating Premium	€/lb	25.00	- 27.00	33.00	- 35.00	29.000	26.000	25.667
Pig Iron								
RN Steel-Making Grade	\$/lt	222.00	- 225.00	222.00	- 225.00	222.000	200.750	194.417
Silicomanganese								
RN NA Transaction	€/lb	32.25	- 34.00	32.25	- 34.50	32.250	31.563	30.875
Silicon Metal								
RN 0.5% Fe NA Transaction	€/lb	62.00	- 64.00	62.50	- 64.00	62.250	61.781	61.938
RN 0.5% Fe NA Transaction Mean	€/lb	63.000		63.250		63.125	62.891	62.969
RN 0.5% Fe European Transaction	€/mt	1220.00	- 1250.00	1200.00	- 1250.00	1210.000	1245.000	1256.250
RN Chinese 5-5-3	\$/mt	1000.00	- 1010.00	1000.00	- 1010.00	1000.000	985.625	973.750
RN Chinese 4-4-1	\$/mt	1040.00	- 1050.00	1050.00	- 1060.00	1045.000	1028.750	1018.750
Tantalum								
RN Ore	\$/lb	20.00	- 25.00	20.00	- 25.00	20.000	20.000	20.000
Tungsten								
RN Ore	\$/stu	36.00	- 45.00	36.00	- 45.00	36.000	36.000	36.000
RN APT NA	\$/stu	53.00	- 56.00	53.00	- 56.00	53.000	53.000	53.000
Vanadium								
RN V <sub>2</sub> O <sub>5</sub> Transaction	\$/lb	2.35	- 2.40	2.35	- 2.40	2.350	2.325	2.254

# RYAN'S NOTES

## Daily Prices

Volume 9 No. 51

December 22, 2003

		Dec. 15	Dec. 16	Dec. 17
<b>Base – Aluminum</b>				
COMEX Cash	¢/lb	73.55	73.95	73.60
COMEX 2nd Position	¢/lb	73.80	74.20	74.00
COMEX 3rd Position	¢/lb	73.70	74.05	73.95
LME HG Cash	\$/mt	1549.00 - 1549.50	1555.00 - 1556.00	1560.00 - 1560.50
LME HG Settlement	\$/mt	1549.50	1556.00	1560.50
LME HG 3-Month	\$/mt	1561.00 - 1562.00	1571.00 - 1571.50	1579.00 - 1580.00
LME HG 15-Month	\$/mt	1533.00 - 1538.00	1535.00 - 1540.00	1545.00 - 1550.00
LME HG 27-Month	\$/mt	1512.00 - 1517.00	1508.00 - 1513.00	1515.00 - 1520.00
LME Alloy Cash	\$/mt	1425.00 - 1435.00	1430.00 - 1435.00	1455.00 - 1465.00
LME Alloy Settlement	\$/mt	1435.00	1435.00	1465.00
LME Alloy 3-Month	\$/mt	1455.00 - 1460.00	1459.00 - 1460.00	1480.00 - 1490.00
LME Alloy 15-Month	\$/mt	1485.00 - 1495.00	1485.00 - 1495.00	1510.00 - 1520.00
LME Alloy 27-Month	\$/mt	1485.00 - 1495.00	1485.00 - 1495.00	1510.00 - 1520.00
LME NASAA Cash	\$/mt	1515.00 - 1518.00	1520.00 - 1525.00	1525.00 - 1535.00
LME NASAA Settlement	\$/mt	1518.00	1525.00	1535.00
LME NASAA 3 Month	\$/mt	1538.00 - 1543.00	1545.00 - 1550.00	1550.00 - 1560.00
LME NASAA 15-Month	\$/mt	1540.00 - 1550.00	1545.00 - 1555.00	1550.00 - 1560.00
LME NASAA 27-Month	\$/mt	1525.00 - 1535.00	1535.00 - 1545.00	1540.00 - 1550.00
<b>Copper</b>				
COMEX HG Cash	¢/lb	99.80	100.75	99.70
COMEX HG 2nd Position	¢/lb	99.45	100.40	99.65
COMEX HG 3rd Position	¢/lb	98.95	99.95	99.25
LME Grade A Cash	\$/mt	2178.50 - 2179.00	2207.00 - 2208.00	2203.00 - 2204.00
LME Grade A Settlement	\$/mt	2179.00	2208.00	2204.00
LME Grade A 3-Month	\$/mt	2174.00 - 2175.00	2198.00 - 2199.00	2201.00 - 2202.00
LME Grade A 15-Month	\$/mt	2108.00 - 2113.00	2130.00 - 2135.00	2133.00 - 2138.00
LME Grade A 27-Month	\$/mt	2063.00 - 2068.00	2082.00 - 2087.00	2082.00 - 2087.00
<b>Lead</b>				
LME Cash	\$/mt	683.00 - 683.50	699.50 - 700.00	694.00 - 695.00
LME Settlement	\$/mt	683.50	700.00	695.00
LME 3-Month	\$/mt	676.00 - 677.00	691.50 - 692.50	688.00 - 690.00
LME 15-Month	\$/mt	600.00 - 605.00	610.00 - 615.00	603.00 - 608.00
RN US Lead Oxide	¢/lb	42.528	43.314	43.076
RN NA Solder Transaction	¢/lb	50.974	51.810	51.621
RN HG	¢/lb	36.003	36.752	36.525
RN SG	¢/lb	35.003	35.752	35.525
<b>Nickel</b>				
LME Cash	\$/mt	13410.00 - 13420.00	14150.00 - 14160.00	15090.00 - 15095.00
LME Settlement	\$/mt	13420.00	14160.00	15095.00
LME 3-Month	\$/mt	13400.00 - 13410.00	14130.00 - 14140.00	15050.00 - 15100.00
LME 15-Month	\$/mt	11805.00 - 11855.00	12110.00 - 12160.00	12715.00 - 12815.00
LME 27-Month	\$/mt	10280.00 - 10330.00	10310.00 - 10360.00	10675.00 - 10775.00
RN NA Melting	\$/lb	6.297	6.633	7.057
RN NA Plating	\$/lb	6.347	6.683	7.107
<b>Ferronickel</b>				
RN 40% FeNi NA Reference	\$/mt	5490.356	5786.356	6160.356
RN 25% FeNi NA Reference	\$/mt	3507.946	3692.946	3926.696
<b>Tin</b>				
LME Cash	\$/mt	5985.00 - 5995.00	6025.00 - 6030.00	6080.00 - 6085.00
LME Settlement	\$/mt	5995.00	6030.00	6085.00
LME 3-Month	\$/mt	5940.00 - 5950.00	5975.00 - 5980.00	6035.00 - 6040.00
LME 15-Month	\$/mt	5805.00 - 5815.00	5850.00 - 5860.00	5910.00 - 5920.00
RN NA Solder Transaction	¢/lb	393.042	395.034	398.502
RN NA Dealer	¢/lb	282.135	283.722	286.217
KLTM	¢/lb	266.71	272.16	271.25
<b>Zinc</b>				
LME Cash	\$/mt	978.00 - 978.50	982.50 - 983.00	978.50 - 979.00
LME Settlement	\$/mt	978.50	983.00	979.00
LME 3-Month	\$/mt	992.00 - 992.50	997.50 - 998.00	993.50 - 994.00
LME 15-Month	\$/mt	988.00 - 993.00	988.00 - 993.00	983.00 - 988.00
LME 27-Month	\$/mt	982.00 - 987.00	980.00 - 985.00	975.00 - 980.00
RN NA Dealer	¢/lb	47.134	47.338	47.157
RN NA #3 Alloys	¢/lb	56.580	56.799	56.637
<b>Precious – Gold</b>				
COMEX Cash	\$/oz	409.20	407.70	412.00
COMEX 2nd Position	\$/oz	409.90	408.40	412.70
COMEX 3rd Position	\$/oz	410.80	409.40	413.70
London Final	\$/oz	407.50	408.00	408.25
London Initial	\$/oz	404.50	409.70	407.50
<b>Palladium</b>				
NYMEX Cash	\$/oz	206.75	203.00	203.05
<b>Platinum</b>				
NYMEX Cash	\$/oz	822.70	824.30	839.80
NYMEX 2nd Position	\$/oz	813.90	817.30	833.30
<b>Silver</b>				
COMEX Cash	¢/oz	563.90	562.90	569.20
COMEX 2nd Position	¢/oz	565.70	564.50	570.80
COMEX 3rd Position	¢/oz	566.60	565.30	571.60
London Spot US Equiv.	¢/oz	555.50	566.00	563.00
Handy & Harman Unfab.	¢/oz	562.50	566.00	567.50

# RYAN'S NOTES

## Daily Prices

Volume 9, No. 51

December 15, 2003

		Dec.18	Dec. 19	Week Avg	4-Week Avg	6-Week Avg
<b>Base – Aluminum</b>						
COMEX Cash	¢/lb	74.20	74.20	73.9000	72.6308	71.9956
COMEX 2nd Position	¢/lb	74.30	74.40	74.1400	72.9200	72.2083
COMEX 3rd Position	¢/lb	74.25	74.40	74.0700	72.9017	72.3361
LME HG Cash	\$/mt	1556.00 - 1557.00	1567.00 - 1567.50	1557.4000	1539.9500	1528.9333
LME HG Settlement	\$/mt	1557.00	1567.50	1558.1000	1540.6750	1529.6333
LME HG 3-Month	\$/mt	1571.00 - 1572.00	1583.00 - 1584.00	1573.0000	1549.2750	1536.7500
LME HG 15-Month	\$/mt	1545.00 - 1550.00	1553.00 - 1558.00	1542.2000	1519.5000	1508.5333
LME HG 27-Month	\$/mt	1518.00 - 1523.00	1525.00 - 1530.00	1515.6000	1496.2500	1488.3000
LME Alloy Cash	\$/mt	1462.50 - 1472.50	1460.00 - 1461.00	1446.5000	1419.2250	1404.6500
LME Alloy Settlement	\$/mt	1472.50	1461.00	1453.7000	1424.9250	1410.6833
LME Alloy 3-Month	\$/mt	1490.00 - 1500.00	1489.00 - 1490.00	1474.6000	1444.1500	1428.8333
LME Alloy 15-Month	\$/mt	1520.00 - 1530.00	1515.00 - 1525.00	1503.0000	1467.2500	1446.8333
LME Alloy 27-Month	\$/mt	1520.00 - 1530.00	1515.00 - 1525.00	1503.0000	1467.2500	1446.8333
LME NASAA Cash	\$/mt	1535.00 - 1545.00	1555.00 - 1557.00	1530.0000	1495.4000	1484.8333
LME NASAA Settlement	\$/mt	1545.00	1557.00	1536.0000	1500.4000	1489.7667
LME NASAA 3 Month	\$/mt	1560.00 - 1570.00	1580.00 - 1585.00	1554.6000	1521.1500	1510.0667
LME NASAA 15-Month	\$/mt	1565.00 - 1575.00	1585.00 - 1595.00	1557.0000	1523.0000	1515.1667
LME NASAA 27-Month	\$/mt	1550.00 - 1560.00	1570.00 - 1580.00	1544.0000	1517.5000	1511.8333
<b>Copper</b>						
COMEX HG Cash	¢/lb	101.70	102.60	100.9100	96.2983	95.0689
COMEX HG 2nd Position	¢/lb	101.50	102.40	100.6800	96.4933	95.2056
COMEX HG 3rd Position	¢/lb	101.10	102.05	100.2600	96.2583	95.2489
LME Grade A Cash	\$/mt	2207.00 - 2207.50	2246.00 - 2246.50	2208.3000	2135.7750	2110.1833
LME Grade A Settlement	\$/mt	2207.50	2246.50	2209.0000	2136.6250	2111.0167
LME Grade A 3-Month	\$/mt	2202.00 - 2203.00	2240.00 - 2241.00	2203.0000	2120.6750	2097.9500
LME Grade A 15-Month	\$/mt	2138.00 - 2143.00	2170.00 - 2175.00	2135.8000	2066.6000	2048.6333
LME Grade A 27-Month	\$/mt	2087.00 - 2092.00	2118.00 - 2123.00	2086.4000	2031.0500	2016.4333
<b>Lead</b>						
LME Cash	\$/mt	685.50 - 686.00	706.00 - 707.00	693.6000	669.4500	651.0333
LME Settlement	\$/mt	686.00	707.00	694.3000	670.2750	651.9167
LME 3-Month	\$/mt	680.00 - 681.00	695.00 - 696.00	686.1000	661.9500	646.8000
LME 15-Month	\$/mt	600.00 - 605.00	615.00 - 620.00	605.6000	602.6500	595.4667
RN US Lead Oxide	¢/lb	42.647	43.647	43.0424	41.8984	41.0240
RN NA Solder Transaction	¢/lb	51.167	52.039	51.5222	50.2374	49.3914
RN HG	¢/lb	36.116	37.069	36.4930	35.4032	34.5705
RN SG	¢/lb	35.116	36.069	35.4930	34.0532	32.8371
<b>Nickel</b>						
LME Cash	\$/mt	14840.00 - 14850.00	14990.00 - 15020.00	14496.00	13087.0000	12767.1667
LME Settlement	\$/mt	14850.00	15020.00	14509.00	13097.0000	12776.6667
LME 3-Month	\$/mt	14860.00 - 14870.00	14950.00 - 14980.00	14478.00	13075.7500	12753.6667
LME 15-Month	\$/mt	12465.00 - 12565.00	12350.00 - 12450.00	12289.00	11625.5000	11458.0000
LME 27-Month	\$/mt	10405.00 - 10505.00	10190.00 - 10290.00	10372.00	10319.5000	10319.6667
RN NA Melting	\$/lb	6.946	7.023	6.7912	6.1632	6.0221
RN NA Plating	\$/lb	6.996	7.073	6.8412	6.2007	6.0554
<b>Ferronickel</b>						
RN 40% FeNi NA Reference	\$/mt	6062.356	6130.356	5925.9560	5354.5423	5219.7952
RN 25% FeNi NA Reference	\$/mt	3865.446	3907.946	3780.1960	3418.9285	3330.5777
<b>Tin</b>						
LME Cash	\$/mt	6370.00 - 6380.00	6390.00 - 6400.00	6170.0000	5810.2500	5651.1667
LME Settlement	\$/mt	6380.00	6400.00	6178.0000	5777.7500	5632.1667
LME 3-Month	\$/mt	6290.00 - 6295.00	6350.00 - 6355.00	6118.0000	5755.0000	5605.6667
LME 15-Month	\$/mt	6165.00 - 6175.00	6225.00 - 6235.00	5991.0000	5634.0000	5496.1667
RN NA Solder Transaction	¢/lb	414.104	417.055	403.5474	382.1960	373.2529
RN NA Dealer	¢/lb	299.598	300.505	290.4355	271.7022	264.7622
KLTM	¢/lb	275.33	290.30	275.1500	260.0792	253.3772
<b>Zinc</b>						
LME Cash	\$/mt	976.50 - 977.50	986.50 - 987.50	980.4000	956.9500	941.7167
LME Settlement	\$/mt	977.50	987.50	981.1000	957.7250	942.4667
LME 3-Month	\$/mt	991.00 - 991.50	1001.50 - 1002.00	995.1000	972.3250	957.2167
LME 15-Month	\$/mt	983.00 - 988.00	990.00 - 995.00	986.4000	977.8500	967.2333
LME 27-Month	\$/mt	975.00 - 980.00	980.00 - 985.00	978.4000	978.5000	971.1000
RN NA Dealer	¢/lb	47.089	48.292	47.4020	46.3042	45.5746
RN NA #3 Alloyers	¢/lb	56.554	57.764	56.8668	55.7901	55.0719
<b>Precious – Gold</b>						
COMEX Cash	\$/oz	410.40	409.20	409.7000	403.4583	400.1456
COMEX 2nd Position	\$/oz	411.10	409.90	410.4000	404.2717	400.7111
COMEX 3rd Position	\$/oz	412.10	410.90	411.3800	405.2217	401.7144
London Final	\$/oz	407.50	409.75	408.2000	402.8800	399.4417
London Initial	\$/oz	410.75	408.75	408.2400	402.7850	399.3667
<b>Palladium</b>						
NYMEX Cash	\$/oz	200.10	198.75	202.3300	199.2225	199.5017
<b>Platinum</b>						
NYMEX Cash	\$/oz	823.00	831.50	828.2600	794.8700	785.0633
NYMEX 2nd Position	\$/oz	815.10	821.50	820.2200	787.2417	777.4378
<b>Silver</b>						
COMEX Cash	¢/oz	571.20	572.90	568.0200	551.0000	542.6100
COMEX 2nd Position	¢/oz	572.80	573.80	569.5200	552.9033	544.0122
COMEX 3rd Position	¢/oz	573.60	574.70	570.3600	554.0433	545.4422
London Spot US Equiv.	¢/oz	570.00	566.50	564.2000	548.0250	539.3333
Handy & Harman Unfab.	¢/oz	568.50	571.50	567.2000	551.5583	543.5889

## LME Warehouse Stocks (mt)

	Friday Dec. 19	Week Change	Friday Dec. 12	Sept. 26
Aluminum	1,420,225	+23,200	1,397,025	1,360,250
Aluminum Alloy	61,480	+1,520	59,960	46,720
Copper	447,175	-13,250	460,425	585,100
Lead	119,275	-7,525	126,800	156,700
Nickel	24,792	-6,288	31,080	35,622
Tin	14,505	+140	14,365	14,950
Zinc	740,700	+2,275	738,425	696,925

## LIBOR Rates (BTM)

	12/15	12/16	12/17	12/18	12/19	Week Avg
Avg Offered 1-Mo	1.190000	1.190000	1.170000	1.170000	1.170000	1.178000
Avg Offered 3-Mo	1.190000	1.190000	1.180000	1.180000	1.180000	1.184000
Avg Offered 6-Mo	1.230000	1.230000	1.220000	1.230000	1.230000	1.228000

## Exchange Rates

	Dec. 15	Dec. 16	Dec. 17	Dec. 18	Dec. 19	Wk. Avg	4-Wk Avg	6-Wk Avg
LME Sterling	1.742700	1.746900	1.753700	1.170000	1.765000	1.6357000	1.7017000	1.6968000
LME Yen	108.070000	107.580000	107.670000	1.180000	107.650000	86.430000	103.10950	104.97630
Euro	1.222000	1.233800	1.232800	1.230000	1.241300	1.232000	1.211300	1.198700

## Minor Metals

Antimony				
RN Spot Transaction \$/lb	1.03-	1.07	10-Dec-03	
Bismuth				
RN Spot Transaction \$/lb	3.00-	3.20	16-July-03	
Cadmium				
*RN Spot Transaction \$/lb	0.55-	0.60	26-Nov-03	
Indium				
RN Spot Transaction \$/kg	360.00-	380.00	17-Dec-03	
Selenium				
RN Spot Transaction \$/lb	9.00-	9.50	17-Dec-03	

(\*Cadmium price is 99.95%, sticks, in warehouse Rotterdam)

## Producer Prices

Chrome Metal				
NA Producer \$/lb	4.500			28-May-97
Ferrovandium				
Stratcor/Spot 80% \$/lb	6.25			12-Dec-03
Indium				
Indium Corp. (99.97%) \$/kg	320.000			16-Dec-03
Lead				
NA Primary c/lb	45.000			19-Oct-98
NA Secondary c/lb	41.000	45.000		3-Sept-99

## Notes:

# RYAN'S NOTES

*Ferrous and Nonferrous News and Prices*

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