

INSIDE TODAY

Spills and bills

NEW YORK — Phelps Dodge Corp. has agreed to pay a \$42,150 civil penalty to the New Mexico Environment Department over contamination resulting from pipeline spills at the company's Chino Mine in New Mexico. The company also agreed to replace the pipeline.

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Coil and water

RIO DE JANEIRO — Brazil's Cia. Siderúrgica de Tubarão plans to boost hot-rolled steel coil exports to between 280,000 and 300,000 tonnes in the second half of 2003, up from 44,000 tonnes in the first half, from the mill it brought on-stream last year.

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Zinc in the chain

NEW YORK — The zinc alloy market remains "dismal-ly slow" although there has been a small improvement since July, according to alloyers and die casters. Some alloyers said they'd seen "signs of life" in the market over the past two weeks, with improved order levels from a broad range of customers.

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Buick will make them

DETROIT — Suppliers of steel, aluminum, powder metals and other materials used in General Motors Corp.'s Buick vehicles will begin to benefit this fall from the Buick division's decision to increase the ratio of trucks to cars in its product line.

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British invasion

PHILADELPHIA — U.S. exports of titanium scrap jumped 44.2 percent in May after British buyers returned to the U.S. market and more than doubled their intake compared with the previous month.

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PRICING AT A GLANCE

NYMEX		LME	
Aluminum	66.40¢	Aluminum	1,459.50
Copper	81.30¢	Copper	\$1,783.00
Gold	\$350.80	Lead	\$519.00
Platinum	\$683.40	Nickel	\$9,190.00
Silver	503.40¢	Zinc	\$851.00

Click through for details.

Workers study new 'final' offer by Escondida **AK, Ohio tangle over Middletown costs**

Workers study new 'final' offer by Escondida

SANTIAGO, Chile — Workers at Chile's Minera Escondida Ltda. mine were considering a new "final" contract offer Thursday aimed at avoiding a strike at the world's largest copper operation.

If workers reject the latest offer, a strike is due to start at the mine Friday. The strike, originally scheduled to start Aug. 2, was put on hold after unions and management agreed to resume talks on a new contract. Optimistic industry sources this week speculated that the two sides were not far apart and a settlement was within reach (AMM, Aug. 5).

Unionized workers at Escondida had voted overwhelmingly in favor of a strike July 30, rejecting the company's previous "final" contract offer. That offer consisted of an immediate 1.5-percent pay hike, plus adjustments for inflation over the next three years, as (See **STRIKE LOOMING**, page 2)

PITTSBURGH — The high cost of pollution controls threatens the future of the hot end of the Middletown Works of AK Steel Corp., but sources close to negotiations between the company and the state of Ohio say those costs are not nearly as high as AK purports them to be.

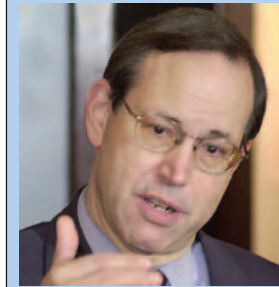
Officials from the Armco Independent Employees Federation (AIEF), which represents workers at the plant, and the office of Ohio Gov. Bob Taft have accused the company of misleading the public on its intentions for Middletown.

Richard Wardrop, chairman and chief executive officer of Middletown, Ohio,-based AK Steel, said recently that a decision on the plant's future must come within a year. Union and state officials, however, said they believed the decision already had been made—that by its actions, AK had decided to close the hot end within the next year at a cost of about 1,000 jobs. The plant currently employs around 3,700.

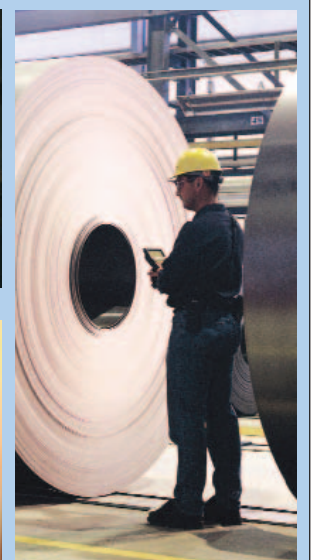
However, an AK Steel spokesman stated strongly Thursday that no decision had



RICHARD WARDROP



GOV. BOB TAFT



DONE DEAL: AIEF officials claim Middletown's fate is decided, with AK hanging its future on Rockport.

been made about the plant's future and reiterated the company's stance that it had not violated any pollution laws and should not face any fines.

AK is in court battles with both the federal and Ohio environmental protection agencies, both of which are seeking fines and penalties for what the agencies say were (See **MIDDLETOWN**, page 2)

Lights to go out at MPP's Mich. p/m parts plant

CHICAGO — Continuing its efforts to consolidate in the face of competitive market conditions, Metal Powder Products Co. said it will idle its Coldwater, Mich., plant.

The consolidation follows the company's purchase in June of the Lenheim, Ontario,-based Sinteris division of Dynagear Co. (AMM, July 10), which brought to seven its list of powder metal parts-making operations in California, Indiana, Michigan, Pennsylvania, Ontario and Mexico.

Elliott Archer, chief executive officer of Carmel, Ind.-based MPP, said Thursday that the shutdown of the Michigan plant would allow (See **MPP**, page 2)

Glencore suit targets woes at Australian nickel project

SINGAPORE — Glencore International AG is planning to file a long-threatened lawsuit against Anaconda Nickel Ltd., its partner in the Murrin Murrin nickel laterite project in Western Australia.

Swiss trading house Glencore owns a 47-percent stake in Anaconda.

Lawyers for Glenmurrin Pty Ltd., a wholly owned subsidiary of Glencore and a 40-percent shareholder in Murrin Murrin, informed Anaconda Thursday of the company's intention to sue Anaconda and associated companies for \$25.8 million, plus interest, damages and costs, in the Supreme Court of Western Australia.

Also subject to the lawsuit are Murrin Murrin Holdings Pty Ltd., the wholly owned subsidiary of Anaconda Nickel that holds the 60-percent balance in the Murrin Murrin project, and Anaconda Operations Pty Ltd., the project manager.

The claims by Glencore's subsidiaries are related to cost overruns and alleged breaches of various joint-venture agreements during construction of the Murrin Murrin project in 1997. The claim first was disclosed to shareholders in 1998, according to Peter Johnston, chief executive officer of Anaconda Nickel.

"Glencore wants to preserve its position by lodging its (See **ANACONDA**, page 3)

'Bad faith' trips contract talks at Wheatland

PITTSBURGH — Talks between Wheatland Tube Co. and the striking United Steelworkers union at the company's Wheatland, Pa., mill have broken off, with the company charging that the union was not bargaining in good faith.

The impasse has led to the cancellation of a meeting that tentatively had been scheduled for Thursday pending progress in talks Tuesday. The next bargaining session now is set for Aug. 20 after both William Kerins, Wheatland's vice president of operations, and Pat Mingarelli, federal mediator, return from vacations, sources said.

About 470 union mem- (See **HEALTH-CARE**, page 2)

Middletown fate remains an open issue: AK Health-care costs continue to stymie talks at Wheatland

(Continued from page 1)

violations of the Clean Air Act and Clean Water Act. AK said it had not violated the acts and, in fact, had made substantial efforts to clean up the environment surrounding its plants.

At issue for the Middletown Works are the costs of pollution controls, combined with potential fines from the federal Environmental Protection Agency (EPA) and the costs of a needed blast furnace relining at the plant. AK has estimated those costs to be around \$200 million—a number that would make raw steel production at Middletown “uneconomical,” the company said. Faced with those kinds of charges, AK said it would consider shutting down the hot end and bringing in slabs for steelmaking operations at the plant, which has the capacity to produce about 6 million tons per year.

According to AK, the \$200 million breaks down to about \$100 million for the blast furnace relining and \$80 million for pollution controls that would have to be installed at the plant under the EPA’s new maximum-achievable-control technologies. Add in expected fines the company said could total “tens of millions of dollars,” and the figure jumps to around \$200 million.

But sources close to the negotiations between the state of Ohio and the company said that AK’s numbers were misleading. They said the state had negotiated the fines down to well below \$1 million. Two sources told *AMM* that AK would be fined only about \$300,000 if the current deal on the table was accepted. In addition, the state had offered \$80 million in low-cost financing to the company to pay for the pollution control equipment.

“AK is misleading people,” said a source close to the negotiations. “The fines they are facing would be negligible. Financing has been made available from the gover-

nor’s office. What (AK) are saying is wrong. They are painting an entirely different picture than what really is going on.”

AK officials and those from Taft’s office are continuing to meet and discuss the matter. The company spokesman said the low-cost financing offer was a loan that would have to be repaid and, even absent fines, that meant the company still faced a bill of at least \$180 million to keep steelmaking operations open at Middletown.

“We’re working with the company,” a spokesman for Taft’s office said. “We are trying to understand their challenges. We are meeting to try to get this resolved.”

The spokesman for Taft’s office said he could not confirm the level of the fines the company was facing, but said the governor “does not want to see those jobs lost. We are working with the company to get this resolved.”

“We have said there is the potential for millions in fines,” the AK spokesman said. “That is assuming that we would lose every case we are facing in court, and the penalties and fines attached would be at their maximum levels. We have said many times that we do not believe fines are appropriate. We don’t think anything we’ve done is unlawful and deserving of fines or penalties.”

He went on to say that the company was not interested in getting into a back-and-forth discussion of costs with the union or the governor’s office. “We continue to talk (with the state),” he said. “I don’t think it would be appropriate to discuss the details. We would like to see this thing settled. We would like to get it done. It (the closure of the Middletown hot end) is not a foregone conclusion by any means. The environmental concerns are just one issue we have there.”

The AEIF said that even if a decision on Middletown had not been made, AK’s actions to this point indicated it was moving strongly in the direction of closing the site. Michael Bailey, former president of the AEIF, told *AMM* in the mid-1990s that when AK decided to build its Rockport (Ind.) Works, it was a sign that the company was leaving the Middletown plant “to die on the vine.”

Ed Shelley, current president of the AEIF, was unavailable for comment Thursday, but other union officials spoke out about the company’s plans.

“It’s pretty obvious that’s what they are going to do,” said one. “He (Wardrop) said as much in his conference call (July 18). He said then that he wants to de-integrate the company. What else could that mean? I’m sure that means the end for Middletown. It’s just a matter of when.”

Scott Robertson
srobertson@amm.com

Strike looming as Escondida awaits verdict on contract offer

(Continued from page 1)

well as various benefits and bonuses, such as a cash payment of around \$2,800 for signing the new contract.

The unions have been seeking a 3-percent wage increase.

The new offer from the company contains improvements to health-care plans, housing subsidies, reimbursements for schooling costs and production bonuses, according to an Escondida spokeswoman. She declined to reveal details of the new offer, however.

The mine has 2,374 workers, of which 1,346 are union members. The company, controlled by Anglo-Australian minerals group BHP Billiton, said that if a strike goes ahead, operations would be curtailed but Escondida would still aim to reach its production target of 1.1 million tonnes of copper this year. The union claimed that a strike would cut output by around 80 percent.

Last year, the open-pit mine produced 757,959 tonnes of the metal, mainly in concentrates. It recently completed a \$1.05-billion expansion project to boost its annual capacity to 1.25 million tonnes.

David Roberts

newsroom@amm.com

www.amm.com

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bers walked off the job April 27 after a contract expired and negotiations for a new three-year pact fell apart (*AMM*, April 30). At issue are health-care benefits and the company’s request for workers to pay a portion of health-care costs. Disagreements over proposed wage increases also have been a stumbling block in the negotiations.

Kerins said in a written statement that the union’s response Tuesday did not establish any effort to bargain in good faith. He also warned the union that contacting the company’s customers, as it had started to do, was irresponsible and potentially damaging.

Wheatland Tube has handled customers through its other tube mills in Sharon, Pa.; Warren and Howland, Ohio; Little Rock, Ark.; and Chicago.

The company, owned by John Maneely Co. of Collingswood, N.J., said that its health-care costs had gone up more than 62 percent in the past four years. Wheatland’s management and all of the company’s salaried employees have contributed to health-care insurance premiums since 1992.

In Tuesday’s bargaining session, the company offered to modify its 401(k) retirement proposal for new hires if the union would agree to discontinue retiree health-care benefits for new hires only. The company also would consider modifying the proposed health-care plan deductibles if the parties could agree on the new-hire issues, sources said.

The union is asking for a \$1-an-hour increase over three years while the company is offering 50 cents an hour in the second and third years.

John E. Sacco

jsacco@amm.com

MPP to consolidate production, idle Michigan p/m parts plant

(Continued from page 1)

the company to optimize its manufacturing capacity. He said most of the Coldwater plant’s production equipment would be left in place for future expansion that was expected to result from the company’s ongoing market development efforts.

“This is a decision we did not take lightly,” he said. “We have an obligation to evaluate our total customer and manufacturing needs to take the necessary steps to address competitive market conditions.”

He added that the company had a number of new products in development and that the word “idle” had been deliberately chosen. Of the 86 employees that work in the Coldwater manufacturing plant, some will be transferred to other MPP manufacturing facilities or the company’s Technical Resource Center in Coldwater.

Archer said that production at the Michigan plant would be transferred to the company’s six remaining plants under a new manufacturing plan that would result in more “market-focused” facilities. The company, which makes most of its parts from iron powders, is seeing rapidly growing usage of aluminum and stainless steel powders.

MPP’s Technical Resource Center will remain at the Coldwater facility, providing customer service and support to MPP’s other divisions serving the automotive, heavy-duty equipment, power tool, fluid power, architectural hardware and other markets, along with continuing research and development.

Philip Burgert

philip.burgert@pipeline.com

AWAC, Billiton agree on refinery expansion

SINGAPORE — Alcoa World Alumina & Chemicals (AWAC) and BHP Billiton will begin work immediately on a 250,000-tonne-per-year expansion of their Paranam alumina refinery in Suriname after finalizing details of the agreement.

The two companies, who both own stakes in the South American refinery, expect to complete the expansion by July 2005. The \$65-million upgrade will lift capacity by 12 percent to 2.2 million tonnes of alumina a year from around 2 million tonnes currently.

The refinery is running at full capacity, according to Bob Davies, chief financial officer of Alumina Ltd., the Melbourne-based company with a 40-percent stake in AWAC. Alcoa

Inc. holds the other 60 percent.

"The alumina will be sold into our existing network of customers," Davies said. Alcoa formerly ran a smelter, Suralco, in Suriname but it was closed several years ago.

The latest agreement between AWAC and BHP Billiton also secures the two companies' bauxite mining rights in eastern Suriname. An existing bauxite joint venture had been due to expire in 2006. "But it's been extended as part of this agreement for the life of the bauxite resources," Davies said. "That's at least 25 years." All of the bauxite will be consumed by the Paranam refinery.

The project in Suriname is the second major alumina

expansion to be finalized by AWAC in recent weeks. The company also plans to spend Australia \$400 million (\$263 million) on increasing capacity at its Pinjarra refinery in Western Australia to 4 million tonnes per year from 3.4 million tonnes currently (AMM, July 7). Pinjarra is the largest of three alumina refineries in Western Australia owned and operated by AWAC. The company also owns the 2.3-million-tonne-per-year Wagerup and 1.9-million-tonne-per-year Kwinana plants.

PD agrees to pay fine, replace pipeline at New Mexico facility

NEW YORK — Phelps Dodge Corp. has agreed to pay a \$42,150 civil penalty to the New Mexico Environment Department (NMED) over contamination resulting from pipeline spills at the company's Chino Mine in New Mexico.

The Phoenix-based copper producer also agreed to replace the pipeline and improve pipeline operating procedures.

"The measures, including a more robust schedule of visual inspection and a properly functioning automated leak-detection system, will help ensure that no future spills occur," NMED secretary Ron Curry said in a statement. "If they do, this agreement includes stipulated penalties of up to \$15,000 a day."

The settlement covers three spills of tailing slurry and process water from Chino pipelines—a 480,000-gallon spill Dec. 8, 2000; an 18,000-gallon spill Dec. 21, 2000; and a 20,000-gallon spill Jan. 19, 2001. According to the NMED, 45 spills occurred at Chino between 1990 and 2001.

Phelps Dodge recently agreed to acquire Heisei Minerals Corp.'s one-third interest in Chino Mines Corp., the operating company for the Chino open-pit mine, smelter and concentrator, which are all idle. Under the terms of the agreement with Heisei, Phelps will assume the liabilities relating to the transfer of interest relating to reclamation and environmental obligations in New Mexico.

It was unclear whether Phelps would have been fully liable for the environmental damages had Heisei not bowed out. Phelps Dodge Chino Inc., a wholly owned subsidiary of Phelps Dodge, owns the remaining two-thirds general partnership in Chino Mines Corp.

Calls to Phelps Dodge for comment were not returned Thursday.

Alison Guerriere
 aguerriere@amm.com

US prices for ferromoly rise; other alloys reported steady

NEW YORK — U.S. ferromolybdenum prices have perked up thanks to a summertime supply shortfall, market sources said.

Sources quoted prices in a range of \$6.20 to \$6.40 per pound, up from a previous range of \$6 to \$6.30 per pound.

"There appears to be some tightness in supply and demand is coming through," one trader said. However, sources were uncertain over whether the higher prices would hold.

In Europe, ferromolybdenum prices have received a lot of attention, with sales of Western duty-paid ferromoly now being concluded exclusively above the \$13-per-kilogram mark, up from \$12.80 to \$13.20 per kg only two weeks ago. Traders said prices could pass \$14 a kg but no sales had been reported at that level.

"It is still firming, and indeed is increasing steadily, almost daily," a European trader said.

Meanwhile, U.S. ferrovandium prices were reported steady in a range of \$5.25 to \$5.75 per pound. "There has not been a lot of activity, but prices have been firm and there appears to be a tightness in Europe and prices are reflecting that," one U.S. source said.

The source cited recent inquiries for material in the United States from European consumers, "so that indicates it's quite tight there," he said. He maintained that the lower end of the range for U.S. ferrovandium is closer to \$5.50 per pound, although other traders said they were seeing some business at \$5.25 per pound.

Another source said imports of ferrovandium to the United States remain at three-year lows, leaving the market a bit short with a possibility of prices increasing in the near future.

Ferrovandium prices in Europe are steadily firming, sources there said. Prices have risen to a range of \$10.80 to \$11 per kg from \$10.50 to \$10.80 per kg because of an ongoing tightness in prompt material. However, demand remains weak, they said.

In other metals, silicomanganese is holding in a 27-to-29-cent-per-pound range while ferrosilicon has also stayed between 45 cents and 47 cents per pound, market sources said.

Alison Guerriere
 aguerriere@amm.com

Anaconda vows to defend claim if Glencore proceeds with suit

(Continued from page 1)

claim before the six-year statute of limitations on such claims expires Friday (Aug. 8)," Johnston said. "Anaconda will defend the claim if the writ is served."

Market analysts in Western Australia predicted that the case may not go to court. The claims date back to Andrew Forrest's tenure as Anaconda Nickel's chief executive officer, said one industry observer in Perth, Australia, and would have little effect on the working relationship between Glencore and Anaconda's current management. "A commercial settlement outside of the courts is likely to be reached long before any effect on production would be felt," he said.

Anaconda Nickel and Glencore have been aiming to complete their Australian \$100-million (\$65.1-million)

capital expenditure program at Murrin Murrin by December, with hopes of reaching full capacity of 40,000 tonnes per year of nickel in 2004.

Murrin Murrin produced 27,683 tonnes of nickel in the fiscal year ended June 30, down from 28,529 tonnes a year earlier due to a series of shutdowns undertaken, in part, to facilitate the capital expenditure program.

In the most recent quarter ended June 30, Anaconda produced 5,358 tonnes of nickel and 355 tonnes of cobalt. About 2,100 tonnes of nickel production was lost in a 21-day shutdown in May for statutory safety inspections. "Throughput rates have returned to normal after the shutdown," a source close to the project said.

In the fiscal year ended June 2003, Murrin Murrin increased production of cobalt to 1,867 tonnes, up 19.1 percent from 1,568 tonnes the previous year.

Robin Paxton
 newsroom@amm.com

'A commercial settlement outside of the courts is likely to be reached long before any effect on production would be felt.'

—Australian industry source

R&B Manufacturing sets Oct. 16 sale of metalworking equipment

PITTSBURGH — The final sale of the manufacturing assets of R&B Manufacturing LLC, Fayetteville, Tenn., has been set for Oct. 16, according to Knott & Co. Inc., which has been engaged by the company to conduct a private sale of machinery and equipment.

R&B Wire & Steel, a unit of R&B Manufacturing, was a producer of custom parts for the automotive market operating out of an 80,000-square-foot facility in Fayetteville. The company cut, welded and converted steel bar and wire into racks, baskets, clips and braces used in automotive assembly operations, from staging components such as doors and hoods to transporting vehicle frames through the painting process.

Knott & Co., a Whitinsville, Mass.-based management consulting firm specializing in the steel and metal industries, said that assets for sale include seven punch presses, 53 welders, five milling machines and eight plate shears and press brakes. R&B Wire & Steel also has available a plasma cutting system, paint and finishing equipment, lift trucks and vehicles, as well as finished goods, work in process and inventory.

All bids must be received by Oct. 16, according to Knott & Co. Inspections are available by appointment.

KES paying less for steel assets

PITTSBURGH — KES Acquisition Co. LLC will receive a \$348,414 credit toward the \$2,998,414 it will pay for substantially all of the assets of Kentucky Electric Steel Inc., Ashland, Ky.

KES Acquisition's purchase price of the assets is now \$2.65 million.

Kentucky Electric signed

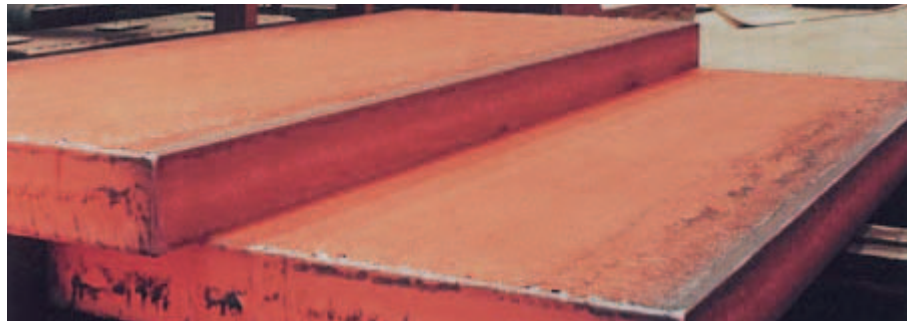
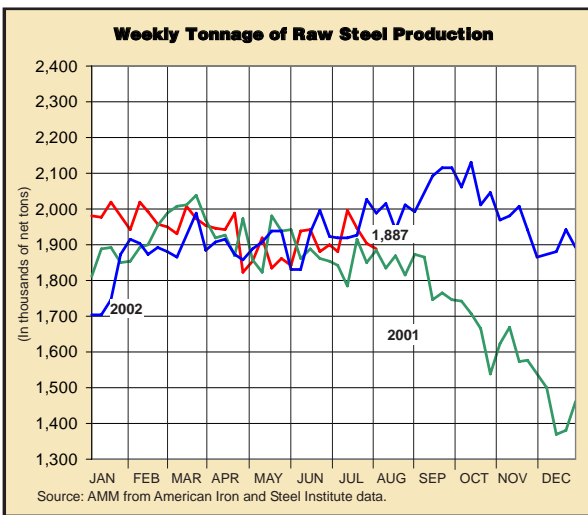
a letter of intent to sell its idled steel production to an investment bank—KES Acquisition—after failing to find an option to survive (AMM, June 23). An auction for Kentucky Electric's assets is scheduled for Aug. 13.

Calls to Kentucky Electric Steel were not returned Thursday.

Sale of Voestalpine stake discussed

LONDON — There is more speculation on the sale of Austria's 34.7-percent stake in Voestalpine AG after Rainer Wieltch, an Österreichische Industrieholding AG (ÖIAG) board member, said that 20 percent of the steelmaker could be floated on the stock exchange. It is likely that the balance would be placed with financial investors.

Voestalpine is said to want the sale concluded before Nov. 14 so that it can be included in the company's fiscal half-year report.



GLOWING: The U.S. took 43 percent of the 2.4 million tonnes of slab CST produced in the first half of 2003.

CST posts \$198M profit on higher steel prices

RIO DE JANEIRO — Brazil's Cia Siderúrgica de Tubarão (CST) reported earnings of 590 million reais (\$198 million) for the first half of 2003, its best six-month result in several years. The steel slab producer based in Vitória in Espírito Santo state lost 172 million reais in the same period last year.

The first-half earnings accompanied rising steel prices in the international market as well as the company attaining operational stability following last year's installation of a 2-million-tonne-per-year hot-rolling mill.

Revenue of 1.91 billion reais (\$639 million) was up 87 percent from the comparable 2002 period.

Slab production was stable at 2.4 million tonnes but slab shipments declined 19 percent to 1.97 million tonnes. The company produced 492,000 tonnes and sold 462,000 tonnes of hot-rolled coil from its new mill, which started up in the second half of 2002. The performance was achieved despite a planned maintenance outage of the No. 1 blast furnace in April, which increased the use of scrap and briquettes, the company said.

Asia took 46 percent of the slab produced by CST in the first six months of the year and the United States took 43 percent. Slab export prices rose to an average of \$238 a tonne f.o.b. in the second quarter from \$229 a tonne in the first three months of the year. By comparison, export prices a year earlier had averaged \$154 a tonne in the first quarter and \$168 a tonne in the second quarter.

CST said it expected slab export prices of \$240 to \$245 a tonne f.o.b. in the third and

fourth quarters of 2003.

The company attributed the rise in international slab prices to Chinese demand, and expectations of continuing strong demand from China should help CST maintain an average slab price of between \$230 and \$240 for the whole of 2003.

CST said its first-half hot-rolled coil production was in line with expectations. Of the 462,000 tonnes sold, 44,000 tonnes were exported to 13 international customers.

Commercial exports started in May following a period of test shipments earlier in the year. Coil exports will be increased in the second half of 2003, the company said.

CST sold hot-rolled coil to about 50 domestic clients, including Vega do Sul SA in southern Santa Catarina state, which started galvanizing operations in July and in which CST holds a 25-percent stake.

Diana Kinch
newsroom@amm.com

Hot-rolled coil exports expected to soar in 2d half; efforts intensify to make premium-quality metal

RIO DE JANEIRO — Brazil's Cia. Siderúrgica de Tubarão (CST) plans to boost hot-rolled steel coil exports to between 280,000 and 300,000 tonnes in the second half of 2003, up from 44,000 tonnes in the first half, from the mill it brought on-stream last year.

The company is intensifying efforts to produce premium-quality material to compete directly with cold-rolled coil and heavy plate, said Leonardo Horta, investor relations director.

"Coil exports are expected to grow as we made 13 trial shipments in (the first half) to customers which may take up orders in the second half. Our coil business has been very experimental until now," Horta said. "In addition, nobody expected the Brazilian economy to be as weak as it is at present. This also means we should sell more hot-rolled coil for export in 2004."

The new mill is expected to produce 1.2 million tonnes of coil this year and reach full capacity of 2 million tonnes in 2004. About 20 percent of production was earmarked for export, Horta said.

CST foresees average coil export prices of \$280 to \$300 a tonne f.o.b. this year. The company will start publishing quarterly average prices for coil sales in 2004.

CST has a contract to supply a minimum of 90 percent of the hot-rolled steel required by new cold-roll and galvanized steel producer Vega do Sul SA in southern Santa Catarina state, whose total annual capacity of 880,000 tonnes of galvanized, cold-rolled and pickled products should be reached in 2005. Vega do Sul, in which CST has a 25-percent stake, started its galvanizing line in July and already has shipped its first coils. It is expected to process 100,000 tonnes of hot-rolled coil in 2003 and 420,000 tonnes in 2004.

Horta said the company was not planning to take an "immediate" decision on whether to double capacity of its hot-rolling mill, which could be achieved via a \$30-million to \$40-million investment to install a reheat furnace. "We want to see our differentiated rolled product types accepted by the market first. The market will decide if we go for the mill expansion," he said.

Diana Kinch

newsroom@amm.com

AMM Steel Base Prices

STAINLESS STEELS

Market prices, f.o.b. mill, by grade, not including extra charges for size, finish, gauge, width, temper, packaging, shipping and other specifications.

COILED PLATE

Plate produced on a continuous mill.

Grade	\$/cwt	
304		57.00
304L		60.25
316		80.00
316L		81.50

UNCOILED PLATE

Plate produced on a plate mill.

Grade	\$/cwt	
304		82.50
304L		84.50
309		NA
310		NA
316		100.50
316L		103.25

BAR

Smooth-turned round bar, 1" diameter, mostly in 10,000-lb quantities.

Grade	\$/cwt	
303		111.00
304		104.50
316		134.00
416		105.00
17Cr4Ni		NA

COLD-ROLLED SHEET

Grade	\$/cwt	
301		62.50
302		65.75
304		64.25
304L		67.50
316		86.00
316L		84.00

COLD-ROLLED STRIP

Grade	\$/cwt	
304L		73.00
316L		84.00

NA—Not available

TOOL STEELS

Estimated market prices per lb, f.o.b. mill or warehouse. Most prices were effective 10/08/01

COLD WORK DIE STEELS

(decarb free)

Grade	Shape	Size	Price
A-2	Flat	1/2"x1"	\$3.17
A-2	Flat	3"x4"	\$2.20
D-2	Round	20"	\$1.23

HOT WORK DIE STEELS

(decarb free)

Grade	Price
H-14 (2" Round).....	\$1.21

SHEETS

Market prices per hundredweight, f.o.b. mill, for hot-rolled and cold-rolled sheets on a theoretical minimum weight basis.

HOT-ROLLED SHEET

Midwest	\$14.00
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COLD-ROLLED (Class I)

Midwest	\$18.00
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HOT-DIPPED GALVANIZED SHEET

Midwest	\$19.00
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GALVALUME SHEET

Midwest	\$42.00
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ELECTROGALVANIZED SHEET

Midwest	\$29.00
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ALUMINIZED SHEET

Midwest	
Type 1	\$29.00

MOTOR LAMINATION SHEET

Midwest	\$26.50
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ROD

Market prices per hundredweight, delivered.

Low-carbon grade 1006	
Industrial quality	\$16.00
Cold-finishing quality	\$18.00
Cold-working quality	\$23.25
High-carbon grade 1050	
Industrial quality	\$16.50
Cold-finishing quality	\$18.25
Cold-working quality	\$24.00

PLATE

Market prices per hundredweight, f.o.b. mill.

CARBON GRADE PLATE

National mills	
Cut-to-length	\$15.50
Coiled	\$15.50

STRIP MILL PLATE

48-inches	\$15.50
60-inches	\$17.00
72-inches	\$18.00

ALLOY PLATE

National mills	\$33.00
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SAFETY PLATE

(also known as floor plate)

National mills	\$46.80
NA—Not available	

OIL COUNTRY TUBULAR GOODS

Average monthly market prices per ton from distributors surveyed in the Houston area by Pipe Logix, Inc.

	Jul \$/ton	Jun \$/ton	Percent Change
TUBING			
Carbon—annealed ERW	\$790	\$786	0.5
Carbon—seamless	\$878	\$878	0.0
N80- ERW	\$1,015	\$1,017	-0.2
N80- seamless	\$1,080	\$1,077	0.3
CASING			
Carbon—annealed ERW	\$612	\$611	0.2
Carbon—seamless	\$744	\$740	0.5
N80- ERW	\$781	\$776	0.6
N80- seamless	\$776	\$780	-0.5

Prices are subject to the Disclaimer appearing on the "AMM Scrap Iron & Steel Prices" page.

BARS

Market prices per hundredweight, f. o. b. mill.

MERCHANT PRODUCTS

(base prices)

Reinforcing bar, Grade 60, No. 5	\$15.60
2 x 2 x 1/4" angle	\$15.80
3x3x1/4-inch angles	\$15.75
8x11.5 channels	\$16.75
1/2 x 4" flat	\$13.75

COLD-FINISHED

1" round, 1018 (carbon)	\$24.70
1" round, 12L14 (carbon)	\$32.00
1" round, 4140 (alloy)	\$38.20

HOT-ROLLED

(special bar quality)

1" round, 1000 series (carbon)	\$18.50
1" round, 4100 series (alloy)	\$23.25

TIN

Single-reduced, per base box;

Mill list prices,(rev. 01/03/03)

Electrolytic .25 lb	\$61.89
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Calendar of Events

AUGUST

Aug. 13-15

Institute for Supply Management
CFO of the Supply Chain Program
Scottsdale Conference Center Resort
Scottsdale, Ariz.
www.ism.ws

Aug. 17-20

American Foundry Society
15th Environmental Health and Safety
Conference
Marriott East
Indianapolis
www.afsinc.org

Aug. 21

Metals Service Center Institute
Manufacturing Town Hall Meeting
Drury Lane
Oak Brook Terrace, Ill.
copland@msci.org
www.msci.org

www.amm.com

SEPTEMBER

Sept. 4-6

American Institute of Steel Construction
Annual Meeting
Hyatt Regency
Kauai, Hawaii
galvin@aisc.org
www.aisc.org

Sept. 8-10

American Wire Producers Association
Government Affairs Conference
Loews L'Enfant Plaza Hotel
Washington, D.C.
info@awpa.org
www.awpa.org

Sept. 8-11

Aluminum Anodizers Council
12th Annual International Anodizing
Conference and Exposition
Grand Hyatt
San Francisco
mail@anodizing.org
www.anodizing.org

Sept. 8-12

Society of Automotive Engineers
Aerospace Congress and Exhibition
Palais des Congres
Montreal
www.sae.org

Sept. 9-11

American Machine Tool Distributors'
Association, Association for Manufacturing
Technology and Society of Manufacturing
Engineers
Midwest Machine Tool Show
Novi Expo Center
Novi, Mich.
service@sme.org
www.sme.org

Sept. 10-12

Concrete Reinforcing Steel Institute
Great Lakes Regional Meeting
Embassy Suites Downtown
Indianapolis
info@crsi.org
www.crsi.org

For inclusion in Calendar of Events,
e-mail details to mholman@amm.com

Nonferrous

Aluminum prices decline on LME; copper, other metals show gains

LONDON — Aluminum prices dropped amid quiet morning trading on the London Metal Exchange, while the other base metals made gains after slipping Wednesday.

Aluminum dipped \$2 a tonne from Wednesday's close to \$1,430 per tonne, basis three months, at the end of the second ring. The aluminum backwardation, currently the focus of an LME investigation, narrowed significantly. Cash to August had been trading at a backwardation of \$18 per tonne Wednesday but narrowed Thursday to \$10, while the cash to three-month spread was \$28 to \$34 over lunch Thursday, having peaked at \$75 on Aug. 1.

"The shorts are quite well covered at the moment," one ring dealer said. "The market is getting quieter as the week goes on." He believed the backwardation on nearby dates might narrow further, although he added that he doubted they would disappear completely.

Copper gained \$4 from Wednesday to reach a settlement of \$1,766 per tonne, basis three months. The red metal's cash to three-month backwardation widened to \$14.50 to \$16 over lunch Thursday.

Tin made a \$30-per-tonne gain with a settlement price of \$4,850 per tonne, basis three months. Lead's move into a contango from a cash to three-month backwardation looked stronger as the spread settled at \$3 contango after the three-month price hit \$522 per tonne.

Zinc made further small gains to end the session with a three-month price of \$862 from Wednesday's close at \$858.50 per tonne.

CBH plans immediate production restart at Elura lead-zinc mine

SYDNEY, Australia — Consolidated Broken Hill Ltd. (CBH) plans to resume production of lead and zinc concentrates from the Elura Mine Sept. 13, immediately after completing the acquisition of the mine and associated assets from Pasminco Ltd.

CBH will make an initial payment to Pasminco, which is in administration, of Australian \$2.2 million (\$1.4 million) and enter a A\$6.6-million (\$4.3-million) lease agreement on the mine's shiploading terminal at Newcastle, New South Wales. A further payment of A\$3.2 million (\$2.1 million) will be made nine months later.

The funds will be made available out of equity proceeds of A\$7.5 million (\$4.9 million) provided by Japan's Toho Zinc and debt financing from a number of banks with which CBH currently is negotiating. The placement to Toho will raise the Japanese company's interest in CBH to more than 20 percent.

CBH aims to more than double the existing mine life to at least nine years at a capital cost of about A\$9.5 million (\$6.2 million), to be funded from the proceeds of a A\$6.7-million (\$4.4-million) rights issue. A further A\$3.5 million (\$2.8 million) will come from the sale of surplus assets. The mine upgrade will be staged in such a way that it will not interfere with production schedules, CBH said.

At current throughput rates, Elura can yield sufficient concentrate to produce 73,000 tonnes of zinc, 42,000 tonnes of lead and 880,000 ounces of silver a year.

To avoid complications arising from prior claims against Pasminco, Elura will be operated exclusively by a number of specialized industry contractors. In order to compensate mining contractor Clough Engineering Ltd., which has been working with CBH on Elura for some time, Clough will increase its stake in CBH until the first anniversary of the completion of the Elura acquisition, unless otherwise agreed with CBH.

Jo Clarke

newsroom@amm.com

www.amm.com

Limited signs of life in dismal zinc alloy market

NEW YORK — The zinc alloy market remains "dismally slow," although there has been a small improvement since July, alloyers and die casters said this week.

Some alloyers said they'd seen some "signs of life" in the market over the past two weeks, with improved order levels from a broad range of customers, particularly on the West Coast.

"It was very quiet and then picked up a fair amount in the last two weeks," one alloyer on the West Coast said. "Last week was one of the busiest of the year." The alloyer was at a loss to explain the recovery and acknowledged that he had little confidence it would continue. "I've heard others say it's a bit better, too, but no one has any confidence that it will be sustained and we're still at low levels compared with where we used to be."

Others, especially those in the competitive Midwest, said they'd seen little sign of improvement other than a few customers returning to work after extended shutdowns in July. "Because of the (Independence

Day) holiday, July is always a little worse than August," one Midwest alloyer said. "The overall economic picture is not any rosier than it was a year ago and premiums for alloys are still pretty low."

Premiums for alloys No. 2 and 7 are between 9.75 and 11 cents a pound, with the West Coast seeing the higher end of the range. No. 5 alloy is a cent higher at 10.75 to 12 cents a pound, with No. 2 another cent above that at 11.75 to 13 cents a pound. Foundry alloy No. 8 is fetching a premium of between 13 and 14.5 cents a pound currently, with No. 12 at 16 to 18.5 cents a pound and No. 27 at 23 to 26 cents a pound. Special high-grade zinc premiums are 2.75 to 3.25 cents a pound.

Most alloyers noted that natural gas prices were continuing to cause a problem, although rates had fallen a little in recent weeks. One alloyer said his company was taking the opportunity to hedge some of its natural gas requirements to lock in the lower prices.

David Brooks

dbrooks@amm.com

'The overall economic picture is not any rosier than it was a year ago and premiums for alloys are still pretty low.'
— West Coast alloyer

Las Cristinas study increases gold reserves

RIO DE JANEIRO — Canadian gold miner Crystallex International Corp. said the feasibility study being conducted at the Las Cristinas project in Venezuela will establish greater gold reserves at the site than previously estimated.

The feasibility study being carried out by SNC-Lavalin Group Inc., now in its final stage, will be presented to Venezuelan development company Corporacion Venezolana de Guayana (CVG), the owner of the Cristinas deposit, in mid-September—in line with the timetable established in last year's contract under which CVG granted mining rights to Crystallex.

Proven and probable reserves at the site have risen from 224 million tonnes of gold-bearing ore to 243 million tonnes with a gold content of 1.33 grams per tonne, increasing total gold reserves to 10.1 million ounces from 9.6 million ounces, according to the findings of the current study.

Crystallex said the project should use a conventional carbon leaching circuit allowing 89-percent gold recovery, according to the results established at a pilot

plant investigated by SGS Lakefield Research Ltd.

Preliminary economic data indicates that operating, capital and cash costs at the project may all be achieved at lower levels than originally estimated, Crystallex said. Once the feasibility study is completed and approved, the company said it would set in motion the financing scheme already established.

Crystallex reported earlier this year that it already had established financing through Deutsche Bank AG for development of the deposit, which is estimated to cost \$500 million.

Despite the progress being made by Crystallex, final clearance for the deposit's development may still be some time off due to last month's creation of a

five-party commission by Venezuela's national congress to investigate the project.

There is an ongoing debate over who legally holds the development rights at the deposit. Between 1992 and 2001 the rights were held by Minera Las Cristinas CA (Minca), a subsidiary of Canada's Vanessa Ventures Ltd., whose rights were cancelled by CVG due to a failure to meet schedules.

The cancellation of Vanessa Ventures' rights over Las Cristinas and the granting of a new contract to Crystallex are being challenged by Vanessa Ventures in the Venezuelan Supreme Court.

Diana Kinch
newsroom@amm.com

MARKET PRICES

Prices are in €/lb except as otherwise noted.

	August 7	Revised	Prior Price
AMM free-market copper cathode	84.55-85.05	08/07/03	83.50-84.00
AMM free market zinc	41.05-41.55	08/07/03	41.09-41.59
AMM free market aluminum	68.89-69.04	08/07/03	69.19-69.34
AMM free market lead	26.91-27.26	08/07/03	27.03-27.38
AMM free market nickel, melting	441.33-451.33	08/07/03	441.78-451.78
AMM free market nickel, plating	451.33-461.33	08/07/03	451.78-461.78
AMM free market tin, \$/tonne	5,035.00-5,080.00	08/07/03	5,010.00-5,055.00
Cornex copper settlement	81.30	08/07/03	80.25
No. 2 copper scrap	70.00*	08/07/03	70.50*
Silver — per troy oz. Handy & Harman	509.00	08/07/03	498.00
No. 1 steel scrap Pitts. (gross tons)	127.00-128.00	08/01/03	127.00-128.00

* Nominal for spot sales

AMERICAN METAL MARKET

AUGUST 8, 2003 6

Dateline Detroit

Rainier provides roadmap for Buick strategy to boost truck business

DETROIT — Suppliers of steel, aluminum, powder metals and other materials used in General Motors Corp.'s Buick vehicles will begin to benefit this fall from the Buick division's decision to increase the ratio of trucks to cars in its product line.

Buick's first-ever sport utility vehicle (SUV), the Rainier, is slated to enter the market next month. SUVs and other light-duty trucks tend to use significantly more metals compared with regular cars and car-based crossover vehicles, and Buick's Rainier will be no exception.

The Rainier, with body-on-frame construction and rear-wheel-drive/all-wheel-drive, is thought to have around 1,300 pounds of flat-rolled steel in its body, frame and closure components—several hundred pounds more than the body, structural and closure applications in Buick's biggest car: the Park Avenue.



STEEL HEAVY: The Rainier, Buick's first SUV, has around 1,300 pounds of flat-rolled steel, several hundred pounds more than Buick's biggest car, the Park Avenue.

In addition, the standard V-6 engine in the Rainier will have more aluminum in its cylinder block and heads alone than the entire engine—also a V-6—in the Park Avenue. The Rainier engines also will have a much higher content of powder metal components than the engines in

the big sedan, according to GM sources here.

The Rainier models, which are being built at GM's assembly plant in Moraine, Ohio, are expected to help Buick move deeper into the light-truck market. Until now, only about 15 of every 100 Buick vehicles built and sold

in North America have been trucks. Only one Buick product line, the Rendezvous, is classified as a truck, but it is actually a crossover vehicle combining some of the features of minivans with those of cars and SUVs. Buick's stable of regular sedans and coupes includes the Century, LeSabre and Regal, along with the Park Avenue.

In addition to making greater use of flat-rolled steel than any of Buick's cars, the new Rainier also will have a higher content of components made from tubular steel—including the hydroformed frame side rails and engine radiator supports—and tailored steel blanks, such as the body side panels.

Buick officials previously have stated that they were hoping to boost the ratio of trucks to cars produced by their division to at least 40/60 without cutting into the car volumes (AMM, May 9).

Al Wrigley ammDET@aol.com

New Ford V-6 expected to boost steel bar demand

DETROIT — A new high-volume automotive application for forging-grade steel bar stock will open up late in 2005, when Ford Motor Co. begins producing its next generation of V-6 engines for cars and light-duty trucks in Lima, Ohio.

The new V-6s are expected to consume at least 24 million pounds of crankshaft forgings per year, according to Ford sources here. Eventually, as the automaker increases its output of the engines, the crankshaft applications for steel bar could quadruple.

Ford currently uses iron crankshafts in most of its North American-built engines, so the V-6 applications will be of considerable interest to the steel bar industry. Unfortunately for domestic steel producers, however, Ford intends to buy the crankshafts initially from a big forgings manufacturer in India, Bharat Forge Ltd., which will select its own bar supplier.

Bharat Forge is expected to furnish Ford with up to 325,000 crankshafts annually. As Ford increases the engine production volumes, however, other crankshaft suppliers will have a chance to get in on the business, sources said.

Even though an overseas supplier has captured the contract for the initial forging vol-

umes, Ford's decision to use steel instead of iron for the new V-6 components is regarded as a plus for the entire steel industry, domestic mills included. Iron has been the material of choice for decades in most of the engine crankshafts used by the Big Three North American automakers.

This has started to change, however. General Motors Corp. is bringing out three new engines this year—engines made in the United States, Canada and Mexico—with steel crankshafts, touching off hopes in the steel bar industry of a favorable trend. A growing number of powertrain engineers within the Big Three favor steel over iron in such applications, saying the use of steel can provide weight-reduction and improved strength, stiffness, durability and vibration-resistance.

On their own, as well as through the American Iron and Steel Institute (AISI), North American steel bar producers have been working hard to provide automakers with better steels for crankshafts, which are regarded as major applications because of their size and high production volumes.

Ford is developing its new engines under a program code-named Cyclone. The engines

are expected to enter the market in the automaker's 2007 models as 3.5-liter dual-overhead-cam (DOHC) units with four valves per cylinder. They will be marketed as the company's Duratec 35 engines. Other displacements and configurations are being developed for the new product line, and Ford is studying other plant sites in addition to Lima for building the additional engine models.

The engines will have aluminum blocks and heads, and powder metal main bearing caps and connecting rods (AMM, Nov. 6, 2001). The engines' pistons, water pumps, alternator housings and chain-case covers also are expected to use aluminum.

Ford will build up to 325,000 V-6s annually in Lima before expanding its production of the new family of engines there and at other plants. Some Ford sources said the annual production volumes could eventually reach 1.2 million units.

Another new Ford engine that is ticketed to make use of steel crankshafts is the 500-horsepower, 32-valve, 5.4-liter DOHC V-8 that's scheduled to be introduced next year in the company's new GT supercar line.

Al Wrigley ammDET@aol.com

Next-generation Focus catches suppliers' eye

DETROIT — Ford Motor Co. expects its next-generation Focus small cars and their derivatives to be built in annual volumes of 1.6 million to 2 million units globally, with at least one-fourth produced at its North American facilities, catching the attention of steel, aluminum, copper, powder metals, iron and other material suppliers.

The North American-built units, which will enter the market in the 2005 model year, will consume at least 200,000 gross tons of flat-rolled steel a year at full production volumes, according to sources at Dearborn, Mich.-based Ford.

Most of the steel—in the form of electro-galvanized and hot-dipped galvanized, cold-rolled and hot-rolled sheet—will be used to make the body and structural components of the redesigned cars, which will be built in Wayne, Mich., and Hermosillo, Mexico, where the current Focus models are built.

If North American demand for the cars amounts to 400,000 or more units annually, as Ford expects, it is estimated that the vehicles will consume more than 100 million pounds of aluminum a year in engine, transmission, driveline, braking system and other applications. The engines will be the domestic versions of the company's aluminum-block/aluminum-head world I-4s.

The new cars will be smaller than the midsize Futura sedans Ford is planning to introduce one year after the next-generation Focus models are unveiled, and Ford executives said they believed both car lines would do well.

Al Wrigley ammDET@aol.com

US Exports of Titanium Scrap

(in short tons)

				Year to date		Percent change
	May	April	March	2003	2002	
Belgium	0	0	16	38	59	-35.6
Canada	10	13	4	52	47	+10.6
France	0	4	0	4	139	-97.1
Japan	1	5	10	79	0	—
Netherlands	0	77	62	285	72	+295.8
Taiwan	10	5	26	90	25	+260.0
U.K.	403	182	262	1,511	2,810	-46.2
Others	20	22	79	172	146	+17.8
Totals	444	308	459	2,231	3,298	-32.4

Source: Compiled by AMM from data released by the U.S. Commerce Department.

Titanium scrap exports get boost from Britain

PHILADELPHIA — U.S. exports of titanium scrap jumped 44.2 percent in May after British buyers returned to the U.S. market and more than doubled their intake compared with the previous month.

Shipments rose to 444 short tons in May from 308 tons in April, the low point in off-shore sales of titanium scrap for the past three years, according to U.S. Commerce Department figures.

British importers took 403 tons in May compared with 182 tons the previous month, accounting for all of the increase and all but 41 tons of the high-temperature metal sold overseas in May. The only other destinations that month were Spain (20 tons), Canada and Taiwan (10 tons each)

and Japan (1 ton).

Although up sharply in May, U.S. exports of titanium scrap to Britain have been lagging in 2003. Through the first five months of this year, shipments of 1,511 tons were down by 46.2 percent from 2,810 tons in the same period last year and 51.9 percent below the 3,144 tons shipped there in the first five months of 2001.

The lower demand from Britain reduced overall offshore sales of secondary titanium. Through the first five months of this year, exports of 2,231 tons were down by almost one-third from 3,298 tons a year earlier and 38.1 percent below the 3,606 tons shipped abroad in the same period of 2001.

Michael Marley

mmarley@amm.com

J.L. French posts \$3.7M loss on 9.2% sales decline in 2d qtr.

NEW YORK — J.L. French Automotive Castings Inc., a major die caster and aluminum scrap user, posted a net loss of more than \$3.7 million in the second quarter, in contrast to earnings of nearly \$2.8 million a year earlier, on sales that fell 9.2 percent.

"As a result of both lower production volumes and productivity improvements, we have open capacity at our Sheboygan (Wis.) facilities," said Anthony Barone, chief financial officer. "We are aggressively seeking new business to utilize this available capacity."

John Falcon, who joined the company three weeks ago as president, told analysts Wednesday that he

had begun talks with a major transplant automaker that might become a J.L. French customer.

Carl Nelson, representing the investment group that holds most of French's stock, told analysts that the company had finished its turnaround phase and Falcon's priority as president would be to develop new business.

Falcon has been an auto components executive for more than 25 years. From 1999 to 2002 he was president and chief executive officer of Shiloh Industries Inc. following stints at Lear Corp. and General Motors Corp., taking on assignments in Italy and Britain.

Responding to questions, Falcon and Barone

J.L. FRENCH AUTOMOTIVE CASTINGS INC.		
(in thousands)		
	2003	2002
2nd qtr. ended June 30		
Net sales	\$132,963	\$146,421
Net income (loss)	(3,716)	2,752
6 months ended June 30		
Net sales	\$276,584	\$281,135
Net income (loss)	(9,276)	(199,975)

said the extra Sheboygan capacity might provide a major outsourcing opportunity for some domestic automaker still engaged reluctantly in foundry activity. However, J.L. French might consider eliminating another U.S. plant if the excess persisted, analysts were told.

J.L. French has been expanding its European role with Renault and probably will have a major European contract to announce in early fall, Falcon said. The company operates plants in Britain, Spain and Mexico.

Falcon's predecessor,

David Hoyte, was described by Barone last month as having done "a good job in a turnaround situation." Hoyte's departure, although referred to as planned, surprised outsiders and wasn't portrayed as a retirement.

Barone recently took a post with French's controlling shareholder, Hidden Creek Industries Inc., Minneapolis. His primary role at French has been as a board member and his stint as chief financial officer is short-term.

J.L. French's financial figures included a large year-to-date 2002 loss due entirely to a rules change in accounting for intangible assets. The company's bonds are publicly traded but not its stock. The company is based operationally in Sheboygan, Wis., and financially in Minneapolis.

Paul Schaffer

pschaffer@amm.com

Fax facts . . .

Fax numbers for AMM editorial offices are as follows:

Detroit	(248) 642-5954	Philadelphia	(610) 337-7672
Los Angeles	(310) 914-4020	Pittsburgh	(412) 471-7203
New York	(212) 213-1804	Washington	(202) 393-7752

AMM WEEKLY SCRAP COMPOSITES

Averages calculated each Friday, based on data effective from the previous Friday - Thursday. Prices are in US\$/gross ton.

NO. 1 HEAVY MELT			
	— calculation date —		
	08/01/03	Prior Wk	Year Ago
Chicago	\$102.50	\$102.50	\$97.50
Philadelphia	119.00	119.00	97.00
Pittsburgh	114.50	114.50	110.50
Composite	\$112.00	\$112.00	\$101.67

SHREDDED SCRAP

— calculation date —

	08/01/03	Prior Wk	Year Ago
Birmingham	\$127.50	\$127.50	\$108.00
Chicago	129.00	129.00	113.00
Houston	114.50	114.50	107.00
Philadelphia	131.00	131.00	115.00
Pittsburgh	123.00	123.00	115.00
Composite	\$125.00	\$125.00	\$111.60

Three charged with dumping waste at former scrapyard

PHILADELPHIA — Three men have been charged with illegally dumping hazardous waste at former Reading Industrial Scrap Yard in Reading, Pa., after a local landfill turned them away last year.

Berks County businessman Frederick Snyder was charged Tuesday with multiple counts of illegal dumping after he allegedly ordered an independent contractor to bury about 195 steel drums and other hazardous wastes at the former scrapyard. Dale Smith, a Snyder employee, and independent waste hauler Gary Lee Gerber of Schuylkill County were charged with two felony counts of illegally disposing and storing hazardous wastes and two counts of violating the state's Solid Waste Management Act.

"They weren't paying their bill at the landfill," Heather Castellino, deputy attorney general, told reporters. "They decided to save the money, dig big pits and bury (the waste). It's a money-saving scheme."

Court documents said Snyder and his business, Group Two Properties, were charged with two felony counts of illegal disposing and storing of hazardous wastes and three counts of unlawful conduct under the state waste laws.

According to the court documents, agents from the state Department of Environmental Protection (DEP) unearthed the dump last year. Some of the drums—believed to contain hazardous wastes, including lead and silver residue—were leaking. The DEP also discovered asbestos, lead-acid batteries and a car crusher buried in the scrapyard.

Snyder purchased the scrapyard in 2001, but it was

unclear if he bought the property with the drums or if he received them after he took possession of the yard.

Gerber was contracted to transport the trash to neighboring landfills, but after 12 days of dumping Snyder was turned away for not paying his bills, according to a spokesman for BFI Waste Services, a waste collection service.

Gerber allegedly told state investigators that he was instructed by Snyder and Smith to dig a pit and bury the remaining materials at the site. According to Gerber, Smith verified that the material was not hazardous and claimed that Snyder had obtained permits from the state to bury the drums. During court proceedings Tuesday, state prosecutors said Snyder was never granted such permits.

Snyder sold the property to an unnamed third party in March 2002. During the property's transfer, Snyder allegedly signed documents stating that the property was free of contaminants and the facility passed all environmental inspections.

Joseph McCann

jmccann@amm.com

AMM Nonferrous Scrap Prices

Thursday, August 7, 2003

Estimated dealer buying prices, in €/lb, delivered to yard. Montreal and Toronto prices are in Canadian currency.

COPPER

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P-burgh	S.F.	St. Louis	Montreal	Toronto
No. 1 heavy copper & wire	62-64	53-55	48-50	47-49	58-60	63-65	51-53	60-62	49-51	58-60	49-51	56-58	59-61	42-44	104-106	92-94
NO. 2 HEAVY COPPER & WIRE	54-56	43-45	38-40	40-42	46-48	54-56	40-42	50-52	39-41	48-50	39-41	46-48	51-53	32-34	94-96	82-84
Light copper	50-52	38-40	37-39	35-37	41-43	49-51	34-36	45-47	31-33	43-45	37-39	45-47	46-48	27-29	89-91	77-79
RED BRASS SOLIDS	43-45	34-36	35-37	37-39	34-36	42-44	32-34	39-41	33-35	37-39	33-35	42-44	45-47	26-28	70-72	65-67
Red brass turnings, borings	40-42	38-40	32-34	35-37	32-34	39-41	31-32	35-37	30-32	37-39	31-33	32-34	39-41	26-28	69-71	61-63
Cocks & faucets	40-42	32-34	31-33	30-32	34-36	36-38	35-37	30-32	27-29	33-35	31-33	32-34	40-42	26-28	63-65	50-52
Brass pipe	46-48	34-36	33-35	30-32	34-36	36-38	35-37	32-34	29-31	31-33	32-34	35-37	40-42	26-28	64-66	50-52
YELLOW BRASS SOLIDS	40-42	32-34	31-32	30-32	34-36	38-40	32-34	30-32	29-31	32-34	28-30	35-37	40-42	26-28	63-65	50-52
Mixed yellow brass turnings, borings	25-27	24-26	18-20	19-21	15-17	20-22	10-12	18-20	16-18	20-22	20-22	20-22	21-23	17-19	44-46	30-32
Yellow brass rod ends	46-48	43-45	38-40	39-41	41-43	50-52	40-42	41-43	33-35	41-43	44-46	43-45	44-46	38-40	73-75	63-65
Yellow brass rod turnings	44-46	40-42	36-38	37-39	39-40	49-51	38-40	40-42	27-29	34-36	41-43	43-45	41-43	37-39	71-73	60-62
70-30 brass clips	48-50	48-50	45-47	41-43	47-49	50-52	45-47	42-44	46-48	44-46	43-45	44-46	39-41	77-79	70-72	68-70
AUTO RADIATORS (UNWEATED)	36-38	31-32	30-32	27-29	33-35	36-38	30-32	31-33	27-29	31-33	26-28	31-33	36-38	28-30	59-61	48-50
High-grade bronze gears	46-48	49-51	43-45	47-49	49-51	50-52	47-49	48-50	45-47	51-53	46-48	58-60	56-58	43-45	79-81	68-70
High-grade low lead bronze	44-46	46-48	42-44	43-45	NA	49-51	NA	41-43	41-43	43-45	40-42	45-47	54-56	39-41	66-68	.....
Manganese bronze solids	36-38	29-31	24-26	30-32	23-25	24-26	15-17	27-29	25-27	30-32	30-32	28-30	24-26	21-23	59-61	46-48
Miscellaneous nickel-"silver" solids	40-42	29-31	25-27	30-32	23-25	35-37	15-17	30-32	25-27	32-34	30-32	31-33	34-36	21-23	63-65	.....
Manganese bronze turnings	18-20	21-23	13-15	15-17	13-15	12-14	5-7	17-19	17-19	21-23	20-22	18-20	19-21	15-17	44-46	24-26

ALUMINUM

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P-burgh	S.F.	St. Louis	Montreal	Toronto
Segregated low copper clips	41	40	44	43	42	41	41	40	41	44	45	43	41	44	41	41
Mixed low copper clips	40	37	42	36	39	39	39	40	37	40	40	40	37	41	32	32
Mixed clips	37	34	38	33	35	37	35	36	35	38	40	39	35	39	31	31
Aluminum borings, turnings, clean & dry	30	26	28	30	32	28	30	33	29	31	22	25	29	29	32	32
Old aluminum, sheet & cast	30	31	35	26	33	36	31	34	33	35	35	36	33	35	33	33
Used beverage cans, clean & dry	39	NA	34	29	34	40	NA	NA	NA	37	40	40	NA	38	.....	.....
Industrial castings	43	39	42	.....	.....	.....	39	.....	.....	.....	NA	.....	.....	45	.....	.....
63S aluminum solids	45	41	49	40	.....	.....	45	.....	.....	.....	47	.....	.....	48	46	46
75S aluminum clips	39	35	40	.....	.....	.....	39	.....	43	NA	43	.....	NA	.....	.....	.....
75S borings, turnings, as is	30	.....	28	.....	.....	.....	.....	.....	27	NA	26	.....	NA	.....	.....	.....
Aluminum utensils	NA	NA	40	NA	.....	.....	NA	.....	.....	.....	NA	.....	.....	NA	31	31
Painted aluminum siding	36	33	38	34	.....	.....	35	.....	.....	.....	38	.....	.....	36	.....	43

(a) Appraisal price

LEAD

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P-burgh	S.F.	St. Louis	Montreal	Toronto
HEAVY SOFT LEAD	5-6	6-7	6-7	6-7	6-7	6-7	6-7	6-7	3.5-4.5	5	5	6-7	5-6	6-7	16-18	15-17
Mixed hard lead	6.5-7.5	.....	.....	.....	8.5	.....	8.5	.....	.....	.....	.....	9	8-10	.....	17-19	15-17
Undrained, whole old batteries	.....	.....	.....	.....	.....	.....	3	3	2.5-3.5	3	2	3-4	4	3-4	4-6	4-5
WHEEL WEIGHTS	7-9	8-10	8-9	10-11	11	.....	11	6-8	6-7	.....	4	8	9-11	.....	15-16	10-12

ZINC

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P-burgh	S.F.	St. Louis	Montreal	Toronto
New zinc die cast	28-29	28-29	29-31	27-28	.....	30-32	31-32	27-28	29	.....	30-32	27-28	29-31	40-42	40-42
OLD ZINC DIE CAST	26-27	26-27	27-28	23-24	.....	24	30-31	26-27	26	25	28-29	25-26	.....	38-40	38-40
Old zinc scrap	21-23	21-23	25-26	21-23	.....	24	.....	20-21	24	25	23-25	.....	.....	38-40	38-40
NEW ZINC CLIPPINGS, ENGRAVERS' ZINC & LITHO SHEETS	31-32	31-32	34-35	24-25	.....	29	.....	28-29	31-32	38	29-31	27-28	31-32	38-40	38-40
Zinc die cast automotive grilles	23-24	.....	23	.....	.....	NA	NA	NA	23	.....	40-42	40-42

NICKEL

	Atlanta	Boston	Buffalo	Chicago	Cincinnati	Cleveland	Detroit	Houston	L.A.	N.Y.	Philly	P-burgh	S.F.	St. Louis	Montreal	Toronto
New nickel clips & solids	310-315	305-310	305-310	310-315	310-315	310-315	310-315	310-315	305-310	310-315	310-315	315-320	305-310	305-310	380-390	380-390
Nickel turnings	290-295	.....	285-290	290-295	.....	290-295	290-295	290-295	.....	.....	.....	295-300	.....	.....	360-370	.....
New nickel-copper alloy (e.g., Monel®) clips & solids	150-155	145-150	145-150	150-155	150-155	150-155	145-150	145-150	140-145	145-150	145-150	150-155	140-145	145-150	.....	.....
Nickel-copper alloy (e.g., Monel®) turnings & shavings	140-145	135-140	135-140	140-145	140-145	140-145	135-140	130-135	130-135	135-140	135-140	140-145	130-135	.....	.....	.....
Nickel-copper alloy (e.g., Monel®) castings	145-150	145-150	145-150	150-155	145-150	145-150	140-145	140-145	140-145	.....	145-150	150-155	.....	145-150	.....	.....
Nickel-chrome-iron alloy (e.g., Inconel®) solids	225-230	225-230	225-230	230-235	220-225	220-225	230-235	230-235	220-225	220-225	220-225	230-235	225-230	225-230	310-315	310-315

Monel® and Inconel® are registered trademarks of Inco Alloys International Inc.

SCRAP METALS

Estimated buying prices (carload lots, delivered buyers' works)			SMELTERS' LEAD SCRAP		Mixed high zinc clips		50.00-51.00
BRASS MILL SCRAP			Buying prices heavy soft lead (cwt), including delivery to smelter		1-1-3 sows		53.00-54.00
No. 1 copper	80.00*			(rev.03/21/03)	Siding, painted		48.00-49.00
REFINERS' COPPER SCRAP					Mixed clips		50.00-51.00
No. 1 copper	75.50*	Scrap lead		\$11.50-\$12.00	Old sheet and cast		46.00-47.00
No. 2 copper	70.00*	Remelt lead		\$12.50-\$13.00	Turnings, clean & dry		48.00-49.00
Light copper	61.00*	Whole batteries		\$4.25-\$4.50	Aluminum-copper radiators		53.00-54.00
Refinery brass†	NA	Cable lead		\$16.00	Nonferrous auto shred (90% alum.) *50.50-51.50		
† Shippers' price for dry copper content assaying a min. 61.3% copper and a max. 5% iron.			SMELTERS' ZINC SCRAP		* Unmixed full truckload, "twitch" grade		
BRASS INGOT MAKERS' SCRAP			(rev. 04/07/03)		DOMESTIC ALUMINUM PRODUCERS		
Copper	East	Midwest	New zinc clippings		26.00-27.00	Buying prices for processed used aluminum cans in carload lots, f.o.b. shipping point (rev. 08/05/03)	
No. 1	71.50*	70.50*	Old zinc (clean)		24.00-25.00	Used beverage can scrap	
No. 2	66.00*	65.00*	Die cast slab		26.00-27.00	50.50-52.00	
Light copper	57.00*	56.00*	Galvanizers' dross		20.00-21.00	MILLS, SPECIALTY CONSUMERS' BUYING PRICES	
No. 1 comp. solids (rev. 07/25/03)	56.50	58.00	SECONDARY SMELTERS' ALUMINUM SCRAP		(rev.8/7/2003)		
Comp., borings, turnings (rev. 07/25/03)	55.50	57.00	Buying prices delivered to the smelter in full truckloads containing several grades				
Radiators (rev. 07/25/03)	44.50	47.00	(rev.7/31/2003)				
Yellow brass solids (rev. 07/25/03)	42.00	46.00	Mixed low copper clips		53.00-54.00	Segregated low copper alloy clips	
Turnings (rev. 07/25/03)	32.00	36.00	Mixed high copper clips		52.00-53.00	59.50-60.50	
						56.50-57.50	
						53.50-54.50	
						* Nominal for spot sales.	

Scrap Price Changes Today
Nonferrous scrap price changes were made for these cities:
None

Prices are subject to the Disclaimer appearing on the "AMM Scrap Iron & Steel Prices" page.

WANTED
75/25 Cupro Nickel
Mill Quality, Top Price, Prompt Settlements
(410) 355-8220 Fax: (410) 355-0513
ANSAM

AMM Scrap Iron & Steel Prices Thursday, August 7, 2003

CONSUMER BUYING PRICES

Estimated domestic consumer buying prices in US\$/gross ton; delivered mill price.

	Birmingham	Carolinas	Chicago	Cleveland	Detroit	Houston area	N.Y	Philly	P-burgh	Seattle/ Portland	St. Louis	Youngstown	Hamilton, Ontario†	Montreal†
NO. 1 HEAVY MELT	106-107	92-94	117-118	117-118	116	83-85	123-125	125-127	127-128	70-72	97-98	122-123	106	130
No. 2 heavy melt	99-100	84-85	109-110	109-110	.....	73-75	113-115	115-117	119-120	67-69	87-88	114-115	.....	108
No. 1 bundles	142	.....	153	152	148	141	NA	143-145	163-164	NA	127-129	NA	153-155	.....
No. 2 bundles	86	63(a)	95	.....	NA	70	NA	78-80	80	52-55	NA	95	.....	NA
No. 1 busheling	122-123(a)	119-121	153	151	153	147	140	143-145	158-160	.....	126	152	157-159	150
No. 1 factory bundles	.....	.....	157-158	162-163	158-159	.....	.....	NA	164-165	.....	.....	.....	.....	.....
Shredded auto scrap	148-150	135	140	143	138	132-134	140-142	142-143	143	85-87	126	143	134	157
MACHINE SHOP TURNINGS	60-61	54	53	48(a)	33(a)	77-78	63-65(a)	77-78	65-67(a)	45-46	45-47	45-47	63	85
Shoveling turnings	NA	.....	58	56(a)	.....	43(a)	NA	83-84	71-73(a)	.....	45-47	.....	73	.....
Cast iron borings	NA	.....	52	56(a)	.....	.....	.....	.....	.....	NA	44-46	.....	.....	.....
Mixed borings, turnings	NA	.....	45	NA	.....	.....	.....	.....	.....	40-41	.....	.....	.....	.....
CUT STRUCTURAL/PLATE,														
2' MAX.	NA	129	163	.....	.....	149-151	NA	149-150	NA	NA	NA	.....	NA	157
Cut structural/plate, 3' max.	128	119	NA	.....	.....	139-141	NA	131-132	152	.....	114-116	.....	.....	.....
Cut structural/plate, 5' max.	113-114	107	138	132-133	124	130-132	130-132	130-131	144-145	83-85	104-106	143-145	125	138
Foundry steel, 2' max.	107	.....	98	102(a)	90	112	.....	130-131	102(a)	.....	.....	105	.....	.....
CUPOLA CAST	100	113	155	NA	120	120	140-142	122-124	106	NA	.....	.....	.....	140
Clean auto cast	125	NA	140	130	125	.....	.....	132	135	.....	.....	.....	.....	.....
Unstripped motor blocks	80	76	95	83	76	85	NA	92-94	85	.....	.....	.....	.....	.....
Heavy breakable cast	60	.....	82	50(a)	55	.....	.....	68-70	65	NA	.....	.....	.....	.....
Drop broken machinery cast	.....	132	146	135	125	.....	.....	138-140	130	104-105	.....	.....	150	160
NO. 1 RR HEAVY MELT	114	113	138	136	.....	134-136	.....	130-131	144	109-110	116-118	143	.....	.....
Rail crops, 2' max.	108(a)	143(a)	178	155	.....	.....	.....	140-142	140(a)	.....	.....	.....	.....	.....
Random rails	90	.....	73	.....	.....	.....	.....	108	108	105-107	.....	.....	.....	.....
Steel car wheels	121	125	150	.....	.....	.....	.....	152-154	152-154	.....	.....	.....	.....	.....
Other track material (OTM)	125	125	126	130	.....	.....	.....	138-140	130-132	128-130	.....	.....	.....	.....
CLEAN USED DENSIFIED CANS	.....	.....	129	105	85(a)	.....	.....	NA	123-125	.....	.....	.....	.....	.....

(a) Appraisal price
NA—Not available
† Canadian currency; in net tons

STAINLESS STEEL SCRAP

	Boston	Buffalo	Chicago	Cleveland	Detroit	Houston	LA	N.Y	P-burgh	S.F	Montreal†
DEALERS' BUYING PRICES (¢/lb.)											
18-8 bundles, solids, clips	28-29	28-29	29-30	29-30	29-30	29-30	29-30	29-30	29-30	28-29	35-37
18-8 turnings	24-25	24-25	25-26	25-26	25-26	25-26	25-26	25-26	25-26	23-24	30-32
18-8 new clips	.....	29-30	30-31	30-31	30-31	.....	30-31	30-31	30-31	29-30	36-38
430 new clips	4.5-5.0	.....	4.5-5.0	4.5-5.0	4.5-5.0	.....	.....	4.5-5.0	5.0-5.5	.....	.....
BROKER/PROCESSOR BUYING PRICES (\$/gross ton)											
18-8 bundles, solids, clips	.....	.....	880-900	880-900	880-900	880-900	.....	880-900	880-900	.....	.....
18-8 turnings	.....	.....	780-800	780-800	780-800	780-800	.....	780-800	780-800	.....	.....
430 bundles, solids	.....	.....	140-150	.....	140-150	140-150	.....	.....	140-150	.....	.....
430 turnings	.....	.....	85-95	.....	.....	.....	.....	.....	90-100	.....	.....
409 bundles, solids	.....	.....	130-140	.....	130-140	130-140	.....	.....	130-140	.....	.....
409 turnings	.....	.....	.....	.....	.....	.....	.....	.....	90-100	.....	.....

† Canadian currency

EXPORT YARD BUYING PRICES

Estimated prices an export dealer, broker or processor will pay for items delivered to his yard, in US\$/gross ton.

	Boston	LA	N.Y	Philly	S.F
No. 1 heavy melt	103-105	40-42	108-110	108-110	45-47
No. 2 heavy melt	88-90	32-34	93-95	93-95	40-42
No. 2 bundles	70(a)	NA	73-75	73-75	40-42
No. 1 busheling	105	.....	123-125	.....	.....
Shredded auto scrap	115	.....	.....	.....	.....
Machine shop turnings	NA	25	28-30	.....	25-27
Mixed cast	95	.....	103-105	103-105	.....
Unstripped motor blocks	93-95	78-80	98-100	98-100	93-95
Auto bodies	65-67	63-65	68-70	68-70	68
Cut structural/plate 5' max.	113-115	.....	118-120	118-120	.....

STAINLESS STEEL SCRAP PRICES (\$/ton)

18-8 bundles, solids, clips	.....	850-875	850-875	850-875	850-875
18-8 turnings	.....	750-775	750-775	750-775	750-775
430 bundles, solids	150	145	145	145	.....

(a) Appraisal price

BROKER BUYING PRICES

Estimated prices in US\$/gross ton, f.o.b. car*

	Atlanta	Boston	Buffalo	Cincinnati	Detroit
NO. 1 HEAVY MELT	90-92	100	100	94	105
No. 2 heavy melt	82-84	90	90	86	.....
No. 1 bundles	122	115	112	105	125
No. 2 bundles	75	65	72	72	85
No. 1 busheling	122	115	115	101	128
Shredded auto scrap	133	120	117	115	127
MACHINE SHOP TURNINGS	.....	NA	40	46	55
Shoveling turnings	.....	NA	45	48	55
Cast iron borings	.....	NA	52	53	65
Mixed borings, turnings	.....	.....	42	.....	50
CUPOLA CAST	.....	.....	100	135	100
Cut structural/plate, 5' max.	100-102	.....	120	125	125
Cut structural/plate, 2' max.	.....	.....	125	135	130
Clean auto cast	.....	.....	.....	140	123
Unstripped motor blocks	.....	100	90	.....	75
Heavy breakable cast	.....	NA	80	.....	60
Drop broken machinery cast	.....	NA	140	.....	115
Rail crops, 2' max.	.....	.....	140	140	.....
Random rails	.....	.....	110	115	.....

* F.o.b. (free on board at the shipping point) from dealer to broker where freight rate is absorbed by broker; freight rate based on single-car shipments.

STAINLESS CONSUMER BUYING PRICES

	(\$/gross ton) Pittsburgh
18-8 bundles, solids, clips	..... 930-940
18-8 turnings	..... 830-840
430 bundles, solids	..... 210-220
430 turnings	..... 160-165
409 bundles, solids	..... 190-200
409 turnings	..... 155-160

ADDITIONAL GRADES

	Birmingham	Chicago
Electric furnace, 3' max.	..... .114	.....
Cut structural/plate, 4' max.	..... .142	.....
Stove plate	..... .105	.....
No. 1 industrial heavy melt	..... .138	.....
Rail crops, 18" max.	..... .183	.....
Rerolling rails	..... .140	.....
Steel axles	..... .130	.....
Heavy forge bar crops	..... .128	.....
Stove plate	..... .159	.....
Punching & plate, 12" max.	..... .181	.....

Scrap Price Changes Today

Ferrous scrap price changes were made for these cities:
Birmingham, Boston, Buffalo, Chicago, Cleveland, Detroit, Hamilton, Houston, Los Angeles, Montreal, New York, Philadelphia, Pittsburgh, San Francisco

Disclaimer

Prices and other information contained in this publication have been obtained by American Metal Market ("AMM") from sources believed to be reliable. Pricing information is collated through regular contact with producers, traders and purchasers, and represents an approximate evaluation of current levels based upon dealings (if any) that may have been disclosed to AMM prior to publication. Actual transaction prices will reflect quantities, grades and qualities, credit terms and many other parameters. The prices are in no sense comparable to the quoted prices of commodities in which a formal futures market exists. Efforts are made to ensure that pricing information is representative, but because of the possibility of human or mechanical error by our sources, AMM or others, AMM does not guarantee the accuracy or completeness of any published information. AMM is not responsible for errors or omissions, or for the results obtained by the use of such information, and disclaims any liability to any person for any loss or damage caused by such errors or omissions, including those arising from the negligence of AMM, its employees or representatives.

Free Market Price Guide

Thursday, August 7, 2003

MINOR METALS

ANTIMONY		
AMM free market, \$/tonne	(rev. 07/24/03)	\$2,250.00-\$2,380.00
BISMUTH		
AMM free market, \$/lb	(rev. 04/24/03)	\$2.85-\$3.10
CADMIUM		
AMM free market		
min 99.95%, cents/lb in warehouse	(rev. 05/29/03)	60.00¢-75.00¢
min 99.99%, cents/lb in warehouse	(rev. 05/29/03)	85.00¢-90.00¢
COBALT		
MB free market		
min 99.8% \$/lb in warehouse	(rev. 08/01/03)	\$10.30-\$11.50
min 99.3% \$/lb in warehouse	(rev. 08/06/03)	\$8.60-\$11.45
GERMANIUM		
AMM free market, \$/kg	(rev. 05/29/03)	\$290.00-\$310.00
INDIUM		
AMM free market, \$/kg	(rev. 08/04/03)	\$190.00-\$210.00
MAGNESIUM		
MB Europe free market, \$/tonne	(rev. 06/06/03)	\$2,000.00-\$2,050.00
AMM free market (US), \$/lb	(rev. 01/23/03)	\$1.00-\$1.05
MERCURY		
MB free market, \$/flask	(rev. 05/07/03)	\$175.00-\$200.00
SELENIUM		
MB free market, \$/lb	(rev. 08/06/03)	\$5.00-\$6.00
ZIRCON		
MB free market, foundry grade bulk, \$/tonne	(rev. 08/01/03)	\$370.00-\$375.00

FERROALLOYS

Spot market prices in cents/lb, f.o.b. warehouse, in truckload quantities unless otherwise indicated.

FERROCHROME

High Carbon		
AMM free market	(rev. 07/24/03)	46.00¢-48.00¢
Low Carbon		
AMM free market		
0.05%C-65% min Cr	(rev. 11/07/02)	73.00¢-77.00¢
0.10%C-62% min Cr	(rev. 06/25/03)	60.00¢-64.00¢
0.15%C-60% min Cr	(rev. 06/25/03)	60.00¢-63.00¢

CHROMIUM METAL

Aluminothermic Standard	(rev. 07/24/03)	\$1.75-\$1.80
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FERROMANGANESE

High carbon		
AMM free market, \$/long ton	(rev. 07/24/03)	\$460.00-\$480.00
Medium carbon		
AMM free market	(rev. 07/24/03)	40.00¢-43.00¢

SILICOMANGANESE

AMM free market	(rev. 08/07/03)	27.00¢-29.00¢
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FERROSILICON

AMM free market	(rev. 07/24/03)	45.00¢-47.00¢
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SILICON METAL

AMM free market	(rev. 03/26/03)	60.00¢-62.00¢
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FERROCOLUMBIUM

AMM free market, \$/lb	(rev. 07/24/03)	\$6.45-\$6.70
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NOBLE ALLOYS

MOLYBDENUM

AMM free market		
Canned molybdic oxide, \$/lb	(rev. 07/24/03)	\$5.50-\$5.70

Ferromolybdenum

AMM free market, \$/lb	(rev. 07/24/03)	\$6.00-\$6.30
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TUNGSTEN

MB US free market APT, \$/STU	(rev. 02/18/03)	\$60.00-\$66.00
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VANADIUM PENTOXIDE

AMM free market, \$/lb	(rev. 12/10/02)	\$1.50-\$1.60
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FERROVANADIUM

AMM free market, \$/lb	(rev. 07/24/03)	\$5.25-\$5.75
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NICKEL

MELTING MATERIAL

Premium (cents/lb)		25.00¢-35.00¢
AMM free market (cents/lb)	(rev. 08/07/03)	441.33¢-451.33¢

PLATING MATERIAL

Premium (cents/lb)		35.00¢-45.00¢
AMM free market (cents/lb)	(rev. 08/07/03)	451.33¢-461.33¢

ORES

TANTALITE

MB 25/40% basis 30% Ta2O5 cif max 0.5%		
U ₃ O ₈ and ThO ₂ combined, \$/lb	(rev. 08/12/02)	\$20.00-\$30.00
MB free market Greenbushes 40% basis, \$/lb	(rev. 03/08/02)	\$40.00

URANIUM

Weekly exchange value per lb of U ₃ O ₈ as quoted by TradeTech, Delivery date spot		
U ₃ O ₈	(rev. 05/31/03)	\$10.90

TITANIUM

Estimated market prices in \$/lb, f.o.b. shipping point.

Sponge, per pound, imported for consumption, including tariff

C.I.S (Commonwealth of Independent States)

standard aerospace quality	(rev. 04/10/03)	\$3.24
Japan, rotor quality	(rev. 04/10/03)	\$4.17
Ingot, 6Al-4V	(rev. 11/22/02)	\$4.80-\$5.00
Plate, alloy, AMS 4928		
1/2 inch x 48-in x 120-in	(rev. 12/09/02)	\$15.00-\$15.25
Bar, alloy, AMS 4928		
1-in. dia. round	(rev. 12/09/02)	\$13.00-\$13.50
Plate, commercially pure, ASTM-B265 Grade 2,		
1/2-in x 96-in x 240-in	(rev. 02/20/02)	\$7.50-\$8.00
Sheet, commercially pure, ASTM-B265 Grade 2,		
1/8-in x 36-in x 96-in	(rev. 02/20/02)	\$7.75-\$8.25

AMERICAN METAL MARKET

AUGUST 8, 2003 11

LONDON METAL EXCHANGE

Settlement price (*) is the same as the first-session cash asking price. Prices in US\$/tonne. Stocks represent total metric tons in LME warehouses.

	August 7, 2003		August 6, 2003	
	Bid	Ask	Bid	Ask
ALUMINUM — HIGH GRADE				
1st session				
Cash	1,459.00	1,459.50*	1,475.50	1,476.00*
3 mos.	1,429.00	1,430.00	1,435.00	1,435.50
	STOCKS 1,312,075		STOCKS 1,310,700	
ALUMINUM — ALLOY (380-1, DIN 226, ADC 12)				
1st session				
Cash	1,363.00	1,365.00*	1,367.00	1,372.00
3 mos.	1,365.00	1,370.00	1,367.00	1,370.00
	STOCKS 34,580		STOCKS 33,980	
ALUMINUM-ALLOY (North American Special)				
1st session				
cash	1,335.00	1,337.00	1,330.00	1,332.00
3mos	1,365.00	1,375.00	1,360.00	1,370.00
	STOCKS 97,420		STOCKS 97,620	
COPPER — GRADE A				
1st session				
Cash	1,782.50	1,783.00*	1,783.50	1,784.00*
3 mos.	1,765.00	1,766.00	1,771.50	1,772.00
	STOCKS 608,450		STOCKS 609,500	
LEAD				
1st session				
Cash	518.50	519.00*	521.00	521.50*
3 mos.	521.50	522.00	520.00	521.00
	STOCKS 163,650		STOCKS 163,650	
NICKEL				
1st session				
Cash	9,180.00	9,190.00*	9,190.00	9,195.00*
3 mos.	9,160.00	9,170.00	9,150.00	9,155.00
	STOCKS 18,264		STOCKS 18,510	
TIN				
1st session				
Cash	4,815.00	4,825.00*	4,790.00	4,795.00*
3 mos.	4,840.00	4,850.00	4,815.00	4,825.00
	STOCKS 17,220		STOCKS 17,865	
ZINC — SPECIAL HIGH GRADE				
1st session				
Cash	850.00	851.00*	851.00	852.00*
3 mos.	861.50	862.00	863.00	863.50
	STOCKS 687,775		STOCKS 688,500	

NEW YORK FUTURES

COMEX COPPER

(Cents/pound)

Comex, high grade, electrolytic cathode	
Settlement (eff. 08/07/03)	
Spot (Aug)	81.30
Sep	81.50
Oct	81.60
Nov	81.70
Opening stocks, short tons	310,625

COMEX ALUMINUM

(Cents/pound)

Comex Aluminum Settlement (eff.08/07/03)	
Spot (Aug)	66.40
Sep	66.60
Oct	66.80
Nov	67.00
Opening stocks, short tons on warrant	192,390
Previous trading day	192,390
Opening stocks, pieces, other	176,481
Previous trading day	171,647

GOLD

(\$/troy ounce)

Comex settlement (99.5%, eff.08/07/03)	
Aug	\$352.50
Oct	\$353.30
Dec	\$354.10
Feb	\$354.90
† High this year \$382.10	Low \$319.90

SILVER

(Cents/troy ounce)

Comex settlement (99.9%, eff.08/07/03)	
Aug	503.40¢
Sep	503.80¢
Dec	505.20¢
Mar	506.50¢
‡ High this year 522.00	Low 439.50

NY MERCANTILE EXCHANGE

(\$/troy ounce)

(settlement prices, eff. 08/07/03)	
Platinum (99.95%), Oct	\$681.50
Platinum (99.95%), Jan	\$671.80
Estimated volume	NA
Palladium (99.95%), Sep	\$180.00
Palladium (99.95%), Dec	\$179.90
Estimated volume	NA

EXCHANGE RATES

Selling prices in US dollars at 11:00 am in NY, based on Reuters quotes.

	\$ per	per \$
Britain (pound)	1.6172	0.6184
(3 mos.)	1.6106	0.6209
Japan (yen)	0.008398	119.0700
Switzerland (franc)	0.7423	1.3472
Canada (dollar)	0.7167	1.3953
Euro	1.1396	0.8775
Australia (dollar)	0.6517	1.5346
Mexico (peso)	0.0934	10.7060
South Africa (Rand)	0.1379	7.2525
Russia (Ruble)	0.0330	30.3441

GOLD AND SILVER

GOLD

(\$/troy ounce)

London A.M.	\$350.15
London P.M.	\$351.60
Handy & Harman (bullion base)	\$351.60
(fabricated form)	\$379.73
Engelhard bullion base price	
(unfabricated)	\$352.85
Engelhard selling fabricated form	\$370.49
SILVER	
(¢/troy ounce)	
Engelhard bullion base price	507.00¢
Engelhard selling fabricated form	588.10¢
Handy & Harman (bullion base)	509.00¢
(fabricated form)	590.40¢
Heraeus Precious Metals	507.00¢
Metalor USA Refining	505.00¢
London fix	493.50¢

PLATINUM GROUP

(\$/troy ounce)

PLATINUM	
Engelhard (Unfab.)(eff. 08/07/03)	\$683.00
Engelhard (Fab.)	\$783.00
Johnson Matthey (eff. 08/07/03)	\$683.00
PALLADIUM	
Engelhard (Unfab.)(eff. 08/07/03)	\$179.00
Engelhard (fab.)	\$279.00
Johnson Matthey (eff. 08/07/03)	\$179.00
IRIDIUM	
Johnson Matthey (eff. 04/04/03)	\$90.00
RUTHENIUM	
Johnson Matthey (eff. 05/21/03)	\$33.00
RHODIUM	
Johnson Matthey (eff. 08/07/03)	\$550.00
LONDON PM FIX	
Platinum 08/07/03	\$681.00
Palladium 08/07/03	\$177.00
TIN	
Kuala Lumpur spot tin price	
\$/tonne	4,810.00
¢/lb	218.18
Grade A Premium (\$/tonne)	\$220.00-\$265.00
AMM free market price	
\$/tonne	\$5,035.00-\$5,080.00

OTC AND PHYSICAL

ALUMINUM

UNALLOYED INGOT

LME(99.7%) unofficial prices	
spot (¢/lb)	66.66
3-month (¢/lb)	65.16
Midwest Premium	2.25¢-2.40¢
AMM free market	68.89¢-69.04¢

ALLOYED INGOT

(rev. 08/01/03)

Domestic producer estimated prices	
355 (355.2)	90.00
356 (356.2)	90.00
6061 (extrusion hom.)	86.00
6063 (extrusion hom.)	82.00

AMM SECONDARY INGOT INDICATOR

(rev. 08/05/03)

The following prices are based on a formula factoring in smelters' fixed and raw materials costs, plus variables. It is intended to reflect a price for secondary aluminum ingot in minimum 40,000-lb lots, delivered buyer's plant. List and transaction prices may vary from producer to producer. The indicator reflects Aluminum Association designations for secondary ingot.

A380.1 (380 3% Zn.)	75.53
B380.1 (380 1% Zn.)	77.73
384.1 (384 3% Zn)	77.04
A360.1 (360)	82.45
A413.1 (13)	82.29
443.1 (43)	83.75
319.1 (319)	80.93
356.1 (356 commercial)	87.59
332.1 (F132)	80.77
B390.1	77.80

COPPER

Premium	3.25¢-3.75¢
AMM free market cathode	84.55¢-85.05¢

LEAD

Premium	3.40¢-3.75¢
AMM free market price	26.91¢-27.26¢

ZINC

Special high grade premium	2.50¢-3.00¢
AMM free market price	41.05¢-41.55¢
SHG Average.	
Week ending (08/01/03)	41.44

ZINC - DIE CASTING ALLOYS

No. 3 & 7	48.55-49.55
No. 5	49.55-51.05
No. 2	50.55-52.05
Zinc-aluminum foundry alloys (eff.08/07/03)	
No. 8	50.55-54.80
No. 12	51.55-56.80
No. 27	60.80-65.55

Prices are subject to the Disclaimer appearing on the "AMM Scrap Iron & Steel Prices" page.



AMERICAN METAL MARKET

www.amm.com

1250 Broadway, 26th Floor,
New York, N.Y. 10001-3705
(212) 213-6202
Fax: (212) 213-1804
Subscriber Services:
(800) 947-9553
(818) 487-4500

MARTIN ABBOTT, publisher,
(646) 274-6250

NEWS DESK

JO ISENBERG-O'LOUGHLIN, senior
managing editor,
(646) 274-6230

MICHAEL R. HOLMAN, news desk editor,
(708) 418-5859

RENATE FOSTER MAS, news desk editor,
(516) 293-1683

DIANNE A. McLARTY, associate editor,
(646) 274-6242

EDITORS

TOM BALCEREK, Americas steel news editor,
(412) 824-5069

FRANK HAFlich, West Coast editor,
(310) 914-4030

NANCY E. KELLY, Washington bureau chief,
(202) 393-7750

MICHAEL MARLEY, secondary materials
editor,
(610) 337-7670

SCOTT ROBERTSON, North American steel
editor,
(412) 281-4407

AL WRIGLEY, manufacturing materials editor,
(248) 642-4950

REPORTERS

DAVID BROOKS, senior reporter, nonferrous,
(646) 274-6241

ALISON GUERRIERE, nonferrous
(646) 274-6243

JOSEPH McCANN, secondary materials,
(610) 337-7671

ALYSSON PISCULLI, nonferrous,
(646) 274-6249

JOHN E. SACCO, steel, (412) 281-4408

JESSICA SCARBOROUGH, pricing director,
(646) 274-6234

PAUL SCHAFFER, secondary materials,
(646) 274-6246

AMM INTERNET SERVICES

BOB MANAS, managing editor,
(646) 274-6236

DEREK LUNDQUIST, news editor,
(646) 274-6247

EDITORIAL PROJECTS

MICHAEL GABRIELE, managing editor,
(646) 274-6231

GRAPHICS

DANIEL MORANGE, artist,
(646) 274-6233

CONFERENCES

JILL HOFFMAN, manager, special projects,
(646) 274-6212

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