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U.S.-flag Great Lakes $65 million Upgrade

U.S.-flag Great Lakes vessel operators will spend $65 million maintaining and modernizing their vessels at Great Lakes shipyards this winter. When complete, the fleet will be ready to meet the needs of commerce come the spring break-out in March.

"Winter is the one opportunity our members have to renew and upgrade their vessels," said James H.I. Weakley, President of Lake Carriers' Association, the trade association representing the major U.S.-flag carriers. "They have just 10 months to deliver their customers' annual raw materials requirement, so the vessels are in service 24/7 during the shipping season."

The major focus this winter will be on normal maintenance such as overhauls of engines, cargo hold renewal and replacement of conveyor belts in the unloading systems. Depending on the trades it serves, a Great Lakes freighter can carry anywhere from 50 to 100 cargos in a season. A few vessels in the Cuyahoga River iron ore shuttle in Cleveland, Ohio, can carry even more cargos in a season.

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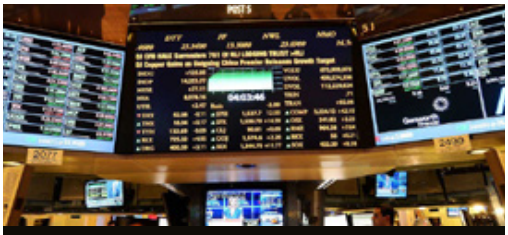
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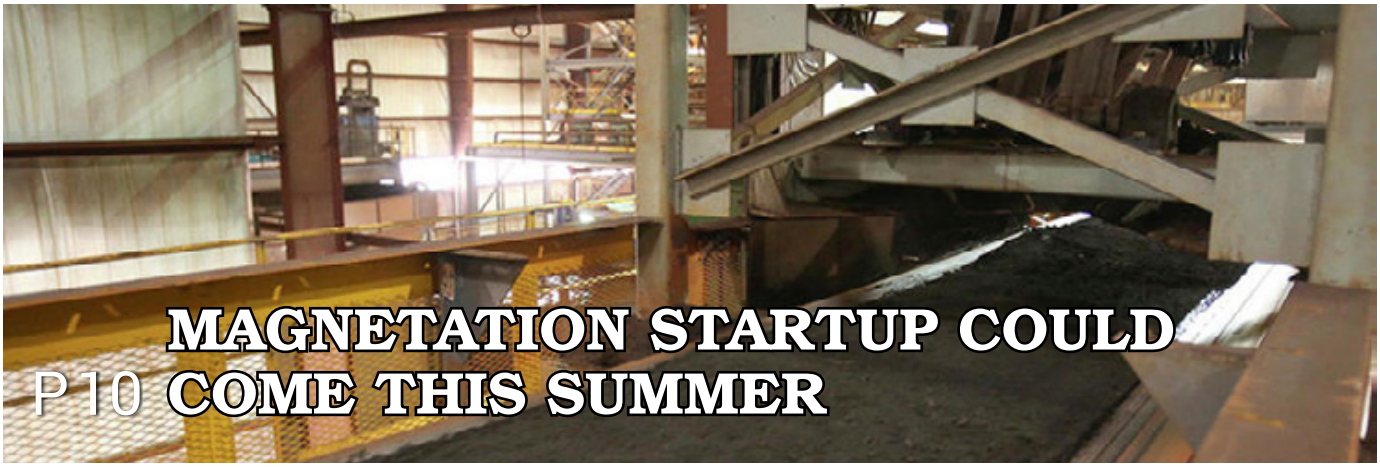
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State to deny water pollution waiver for Minntac mine

The Minnesota Pollution Control Agency plans to reject a request from U.S. Steel for temporary waivers of pollution standards, known as variances, at its Minntac facility, the largest taconite mine and processing facility on the Iron Range.

U.S. Steel had asked for a 20-year variance from water quality standards for sulfate and other pollutants in water from its massive tailings basin, some 11 miles around, that seeps into groundwater and nearby streams.

The company made the request as part of an ongoing process to draft a new water discharge permit for its facility in Mountain Iron, Minn. Instead, the MPCA has proposed a compliance schedule within a proposed draft permit for Minntac. Agency hydrologist Erik Smith said that would achieve similar goals to what the company wanted. "One of the main reasons that we're denying this variance is we think the compliance schedule in the permit does the same thing, and gives them relief," Smith said. "They don't have to meet some of the limits right away, because we know they can't. It gives them time and proposes a path to address that.

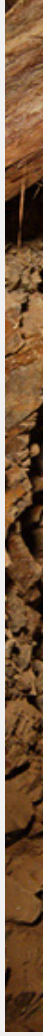
For example, the permit sets 5- and 10-year targets for U.S. Steel to reduce sulfate concentrations in its tailings basin, where leftover waste from the mining process is mixed with water and stored. The mine has operated with an expired permit for more than 25 years.











NEW MINING EQUIPMENT

TECHNOLOGY

Industrial explosives are high hazard blasting explosives which are mainly used in the construction and mining industries. As of 2017 global mining explosives accounted for a large market share in the industrial explosives market.

The technology is extensively used in quarrying, mining, coal mining, metal mining, and non-metal mining. Coal mining still remains an essential application of mining explosives.

Increase in private and public investment in various kinds of infrastructural sectors that tap into the rich mineral resources is expected to drive the mining explosives market well into 2018. The mining explosives market is on track to exceed more than $22 billion USD by 2021 at a compound annual growth rate (CAGR) of 0.23% in the given forecast period. Key market vendors for the global mining explosives market include the standard list of central players; Orica, IPL (Dyno Nobel), MAXAM, AEL, Sasol, AUSTIN, ENAEX, BME Mining, Solar Explosives, NOF CORPORATION, EPC-UK, Anhui Jiangnan Chemical, Sichuan Yahua, Guizhou Jiulian, Gezhouba Explosive, Nanling-minbao and Leiming Kehua.

These companies are consistently using various strategies such as merger & acquisitions, collaboration, partnership and product launch to retain their majority market share. The modern global mining explosives market of 2018







The mining explosives market can also be segmented by into two categories or types; by application and by type. On the basis of application, the market is segregated by quarrying & non-metal mining, and metal mining.

is arranged into different sections on the premise of a few industry verticals. The industry is self-ordered in the terms of the market in light of the territorial distribution and circulation of the marketplace. Each market portion is then dissected considering its commitment as far as volume delivered (in kilo tons) and the income it produces (in US$).

The reasoning behind the improved evaluation is its internal aides sourcing from experts, i.e. calculate better classification techniques, upgrade investments, comprehend provider and market difficulties, and execute sourcing best practices. Growing demand for dynamite and ammonium nitrate is expected to drive the mining explosives market beyond the 2017 - 2018 forecast period. Prospects for growth in the mining explosives industry are highly reliant on the mining and metal extraction industry productivity.

Electronic detonators are an emerging technology which is gaining popularity in the mining explosives market while increasing infrastructural cost remains a constant restraint on the mining explosives sector. Increases in investments in the mining explosives market is expected to grow globally owing to the augmented significance of supply chain in expanding any governments' national interest and growth.

The mining explosives market can also be segmented by into two categories or types; by application and by type. On the basis of application, the market is segregated by quarrying & non-metal mining, and metal mining.

Quarrying and non-metal mining is expected to be the dominant segment in the mining explosives market over the upcoming 2018 to 2019 forecast period. Increase

demand and use of mining explosives for developmental projects and tunnel construction is driving the quarrying and non-metal segment. On the basis of type, the mining explosives market is segregated into ammonium nitrate explosives (powder form), emulsion explosives, and ANFO. Ammonium nitrate explosives is one of the large segments in the mining explosives market.

Geographically speaking, the mining explosives market is segmented by Europe, North America, Asia-Pacific, Latin America, and Middle East & Africa not necessarily by order of utilization and potential growth.

Middle East and the African continent accounted for the majority share of the explosive mining market in 2015 and it is expected to remain dominant over the forecast period. South Africa has one of the key market shares in Middle East & Africa. The rich mineral deposit in South Africa is propelling the growth of the mining explosives in the regional area as well.

North America and Europe also account for a considerable demand in the mining explosives market due to the rise in metal and mining industries in this part of the world market. As expected, the Asia-Pacific region is the most speedily growing region in the metal mining explosives globally.

Asia-Pacific countries, China and India show a tremendous potential for development while, specifically China stands out as one of the fastest overall growing countries globally in the mining explosives market due to the development of urban public facilities and rail network development anticipated in 2018. While not to be ignored, Latin America has a dormant share in the mining explosives market that is expected to expand once political and financial stability is rooted in key regions.



Some of the other prominent global manufacturers in the mining explosives market are BME Mining, ENAEX, NOF CORPORATION, Solar Explosives, EPC-UK, Sichuan Yahua, Guizhou Jiulian, Anhui Jiangnan Chemical, Nanlingminbao, TOD Chemical Industry, Gezhouba Explosive, LeimingKehua, Kailong Chemical,

Use of advanced technology is holding the largest global mining explosives market share in North America. Adoption of mining explosives in the distinct fields in Europe will help to increase the expansion of the explosive technology market globally. The current growth status in each of the regions indicates growth in these markets as the key to future expansion.

The Western market is keeping pace with the rest of the world while also has witnessed entrance of many local and regional vendors offering specific application products for multiple end-users. Various segments of United States Ammonium Nitrate Explosive market enables managers to monitor future profitability and make vital decisions for sustainable growth.

But new entrants are faced with cut throat competition due to innovative technology, quality services and diligence of international vendors.

Champion ramps up Bloom Lake activity

Activities are ramping up at the Bloom Lake mine, in near Fermont, Quebec, with preparations well under way towards the ultimate goal of sending off the first fully laden train of iron-ore by the end of February, or early March 2018.

The current focus is to upgrade the mill, making use of the spare parts on hand when the company subsidiary Quebec Iron Ore (QIO) acquired the then-shuttered Bloom Lake in April 2016. Bloom Lake is positioned to capitalise on a growing premium for the high-grade iron-ore the mine will be producing, based on increased demand from Chinese smelters for higher-grade inputs to help cut pollution and drive down costs, while improving the quality of their products. Demand for higher-grade material is higher than previously expected, and Bloom Lake expects to attract markets between $80/t to $85/t. The concentrate, at 66.2% iron content, is obtained with an expected metallurgical recovery that averages 83.3% iron relative to plant feed at the 30% iron average feed grade.

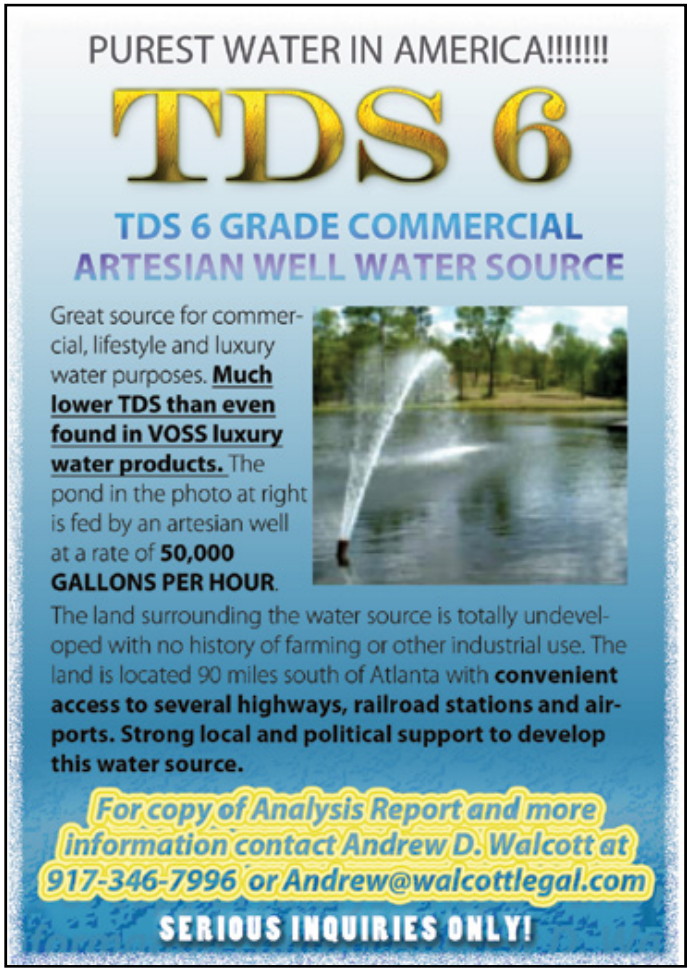
The revamped Bloom Lake operation stand to benefit from costs in the range of $40/t.Bloom Lake had been placed on care and maintenance since December 2014, when the mine could not compete with collapsed ore prices, which fell from a record high of $180/t to $50/t four years ago.

Adverse Industry Group Rank Make Cleveland-Cliffs a Sell

The market value of Cleveland-Cliffs Inc. is $2.4 billion which falls in the bottom half of its industry group. The ranking for CLF by Portfolio Grader places it 18 among the 25 companies in this industry group, giving it a below-average spot.

In recent action, the company has made a move of +23.56% over the last month of 2017, which has come on weak relative transaction volume. Over the trailing year, the stock is underperforming the S&P 500 by 21.1, and it arrived there by action that has been more volatile on a day-to-day basis than most other stocks on the exchange.

Cleveland-Cliffs Inc. remains an interesting player in the Basic Materials space, with a focus on Industrial Metals & Minerals. The stock has been active on the tape, last reported trading down. Given the stock recent action, it seemed like a good time to take a closer look at the company recent data.





Magnetation startup could come this summer

New owner Tom Clarke said he now has engineering plans ready and financing in place to complete an estimated $20 million in retrofitting work to the former Magnetation pellet plant in Reynolds, Ind. Clarke's ERP Iron Ore LLC, which now owns the former Magnetation operations, also will need to spend about $2 million to get the Grand Rapids concentrating and mining operations, idled for more than a year, back on track.



Tom Clarke

The Grand Rapids plant uses proprietary technology to separate valuable iron ore from old mine waste and turn it into iron ore concentrate. That concentrate is moved by rail to Indiana to be made into pellets used in steel mills.

The pellets made in Indiana are destined to make pig iron at a plant in Lorain, Ohio. "The goal is to be making iron by the end of this year," Clarke said.

The rebirth of the former Magnetation Plant 4 outside Grand Rapids has been on hold for months pending a reworking of the Reynolds plant to meet federal Clean Air Act standards. Clarke's ERP Iron Ore won the bankruptcy rights to Magnetation one year ago and had hoped to produce iron ore concentrate at Plant 4 by now, with most of the operation's 130 employees back on the job.

ERP had been thwarted by two violation notices filed by the federal Environmental Protection Agency in 2016 against the Indiana plant, alleging the former Magnetation owners didn't have proper pollution control equipment in several areas of operation. The EPA has an effective hold an any restart of the operations until the new equipment is installed, said Rob Bigelow, ERP's managing director. ERP found out late last year that it will cost at least $20 million to retrofit the plant and any fix was thought to be many months away. Bigelow said ERP is working with the EPA and Indiana Department of Environmental Management to resolve the issue. The company late last year said it could be the end of 2018 before the Grand Rapids operations restarted, but now has moved that target far forward.

Clarke said ERP acquired the bankrupt Magnetation without knowing the extent of the problem in Indiana, noting the EPA was still conducting its investigation. He said the plant apparently never met permit standards.

Copper Outlook and Performance

As copper producers from Freeport-McMoRan Inc. to BHP Billiton Ltd. ponder what to do with the windfall from surging prices, First Quantum Minerals Ltd. has no such dilemma.

Unlike most of its peers, Quantum copper sales are fully hedged -- at an expected average price of $2.37 a pound\\u00a0for the second half of the year. The Vancouver-based company began hedging in 2015 to lock in the value of its output so as to avoid breaching debt covenants while developing a project in Panama. But as copper has risen more than 30 percent in the past year, the trade has proven to be a liability: the company posted a net loss of $35 million in the second quarter as its hedge book lost $97 million.

FQM is not a strategic long-term hedger of the copper price as we believe really in the positive fundamentals of copper, President Clive Newall told analysts. For copper sales in the first half of 2018, First Quantum is only 30 percent hedged and plans to use mechanisms to secure a greater benefit if prices remain strong, Chief Financial Officer Hannes Otto Meyer said during a recent earnings call. Currently the 2018 hedge book is structured so that the company will never get less than $2.59 a pound for its copper or more than $2.80. When copper trades between those two levels, it receives the market price.

First Quantum is the third-worst performer in the S&P/TSX Global Base Metals Index in the past six months, slumping 27 percent. The stock fell 4.6 percent when it announced plans to shutter a nickel mine in Australian because of persistently low prices.





Hecla Mining Deserves Closer Look

Shares of Hecla Mining Company are on a recovery track as they have regained 28.57% since bottoming out on Dec. 07, 2017. Thanks to a rise of almost 8.89%. The stock price is now up 11.08% so far on the year still in strong territory. Brokerage houses, on average, are recommending investors to hold Hecla Mining Company shares projecting a $5.29 target price.

Currently, Hecla Mining Company net profit margin for the 12 months is at 4.21%. The profit margin measures the amount of net income earned with each dollar worth of revenue.

Looking further at shares of Hecla Mining Company, industry analysts noticed that the current consensus target price is $6.22. Wall Street has the ability to create price target estimates for where they think the stock will be moving in the near-term.

Because price target projections can differ from one analyst to the next, they may span a wide range of values. Over the last two days, insiders of Hecla Mining Co. acquired some shares of their own company. Hecla Mining senior vice president and CFO, purchased 13,000 shares of his own company at a price of $3.807 on Dec. 15. And now holds a total volume of 139,481 shares in Hecla Mining. The day before, Hecla Mining president and CEO, purchased 13,000 shares of Hecla Mining for a total direct holding of 3,151,137 shares.

Hecla Mining, as a U.S. mining company engaged in the production and sale of gold and silver, can annually use roughly 17 million ounces of silver from its reserves of 172 million ounces and 235,000 ounces of gold from its reserves of 2 million ounces of gold. Thanks to a fierce commitment of its exploration team in enhancing shareholders long-term value through acquisitions of mineral resources and other mining-related activities, Hecla Mining silver and gold reserves have substantially grown over the last decade and according to a hefty 235% rate.

Operating mines are in Canada, U.S. and Mexico, while pre-development and exploration projects are being undertaken by the miner in the U.S. Hecla Mining has approximately 399.02 million shares outstanding, of which about 394.84 are float. The percentage of the company shares outstanding held by insiders is 1.41% and by institutions is 68.25%. Among the top institutional holders, Van Eck Associates Corp. stands out with 38,531,381 shares of Hecla Mining held or about 9.66% of the company total shares outstanding as of 2017.

Mining Stocks to Watch in 2018

Understanding how 2018s stock risk and return characteristics can impact your portfolio is important.

With a five-year beta of 0.2, Montezuma Mining Company Limited appears to be a less volatile company compared to the rest of the market. Based on this beta value, MZM appears to be a stock that an investor with a high-beta portfolio would look for to reduce risk exposure to the market. Depending on the composition of your portfolio, MZM may be a valuable stock to hold onto in order to cushion the impact of a downturn.

Canadian Klondex Mines Ltd. announced a reduction of underground mining operations and workforce at the True North mining complex. In 2016, the mine was scheduled to produce between 35,000-45,000 ounces of gold; instead it produced about 24,000-27,000 ounces, Klondex also recently acquired another property, called Ogama-Rockland. True North and the recently acquired Bison Gold Resource properties continue to be valuable assets and we are taking the necessary steps to build the foundation

Not much went right for Hecla Mining in 2017. Much of the company's recent woes could be chalked up to a self-inflicted wound stemming from management's handling of a labor dispute, which resulted in the shutdown its coveted Lucky Friday mine in mid-March 2017. While removing the entire contribution from a major asset would be bad enough on its own, the company's remaining three mines all reported significant year-over-year declines in operating income through the first nine months of 2017.

Hecla's other major mines haven't exactly pulled their weight. After record operations in 2016, Hecla Mining posted a 13% drop in total revenue and 43% drop in operating income through the first three quarters of 2017. These results illustrate the classic risks involved in precious metals stocks. Atlas Sand Co. LLC. is in the process of building more plants. With at least 11 companies building mines, Ben Brigham, chairman and investing founder said the market will have to become educated on the quality of the reserves.

He thinks demand for frac sand will be sufficient to take all the sand supplied by the in-basin plants and still not displace the higher-cost sand coming in from elsewhere.





Trump orders boost in production of critical minerals

In his executive order signed on Wednesday, December 20, 2017, US President Trump directed federal agencies to find ways to increase exploration, mining and processing of critical minerals and streamline permits for private mining companies.

The comprehensive order aims to identify new sources of critical minerals, ensure miners and producers have access to the best data, and streamline the leasing and permitting process to expedite production, reprocessing and recycling of minerals at all levels of the supply chain, according to a statement from the White House. The United States has been reliant on China, Russia, and other nations for the majority of the rare earth or what the government is calling critical minerals, such as platinum, manganese, cobalt, lithium and several others.

The president's order states that all but two of 23 minerals identified as critical are produced by other nations. Pascua-Lama is an open-pit mining project of gold, silver, copper and other minerals located in the Andes mountains, in the southern Atacama Desert, over the border between Chile and Argentina. President Trump said that this order will reduce the nation's vulnerability to disruptions in the supply of critical minerals caused by hostile government actions, natural disaster or other events.

The President stated, "The United States must not remain reliant on foreign competitors like Russia and China for the critical minerals needed to keep our economy strong and our country safe."

Greater and quicker access to mineral commodities are crucial for enhancing U.S. global position. One quietly growing problem in the U.S. energy sphere is the rapidly growing reliance on foreign nations for commodities that are

crucial to economic growth and national security. Back in the mid 1950s, the United States was fully reliant on foreign sources for just 8 minerals. Today, that number has more than doubled to 20, most importantly including "rare earth" elements, manganese, and niobium.

The US dependence on foreign minerals has doubled in the past 20 years, spending $7-8 billion a year on imported minerals, and costs are steadily increasing. There are 17 rare earths and their price can skyrocket by 5 to 6 fold in a single year. For example, the price of lithium and cobalt, both essential for lithium ion batteries continues to rise. Global lithium demand for electric cars, smart phones, and tablets is expected to double or triple by 2020 alone.

Not just for energy storage batteries, computer chips, and satellites, many of these minerals are critical to the required technological improvements for more wind turbines and solar panels.

By 2040, estimates of over 500 million electric cars will be on world roads, a staggering expansion of the few million today. Some industry analyst call lithium, key element to battery power, the new oil. China, of course, realizes the increasing importance of these minerals, which is why they have been hoarding their own reserves, leading to trouble with the World Trade Organization. China's influence in the minerals sphere dwarves Saudi Arabia's influence on the global oil market. China generally accounts for 80-90% of rare earth production; including almost all of the "heavy" rare earths.

he US move could increase and create new streams of growth and companies may be less inclined to seek out properties in foreign countries. The order directs Interior Secretary Ryan Zinke to develop a strategy to reduce reliance on foreign minerals within six months.

Iron ore capping a tumultuous year

Iron ore is capping a tumultuous year that has seen wild swings as China's unprecedented crackdown on its noxious smog by cutting steel supply and curbing other activity has become one of the most important factors shaping the global market.

The campaign has buffeted prices, roiled shares of miners including BHP Billiton Ltd., Rio Tinto Group and Vale SA and blown out the spreads between high and low-quality ore. Moreover, the new policy that has blue skies may remain a feature for years to come. Curtailing steel supply to clean the environment will become standard practice.

The shift, driven by state-mandated curbs on steel mills and industrial plants to fight pollution, matters a great deal for the global iron ore industry. China remains the largest importer of iron ore, shipping in more than 1 billion tons a year to feed the country mammoth steel industry.



2017 ANNUAL INDEX OF SKILLINGS MINING REVIEW

Perusing through our 2017 annual index will give the reader a good retrospective of 2017. New headings reflect trends unique to what has been an extremely interesting year. There is an increasing emphasis on sustainability - clean technologies, waste water management, re-vegetation and adherence to legislation.

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Weight Reduction in Automotive Design and Manufacture

Weight reduction is again a priority across the automotive industry, as strict new regulations push for greater vehicle efficiency/CO2 reduction in the US and Europe.

From the smallest fasteners to entire vehicle architectures, engineers are wringing excess weight out of new components and systems, while looking for new ways to lighten existing designs. Although the motivations for and benefits of automotive weight reduction are plentiful, a number of barriers exist to the development of lighter, more streamlined and mass-efficient vehicles. Magnesium Extrusions for Automotive Engineers has become a central focus. Long-term Outlook: The global magnesium metal market is anticipated to increase at a CAGR of 7.1% during 2016-2026, reaching US$ 6.2 Bn in revenues by 2026.

China's national refined magnesium exports in 2017 are forecast to be around 400,000 mt, up 12% from realized export volume of 356,400 mt last year, the China Nonferrous Metals Industry Association.

CNIA said primary products such as magnesium ingot, magnesium alloy and magnesium powder currently accounted for the bulk of China's national magnesium exports.



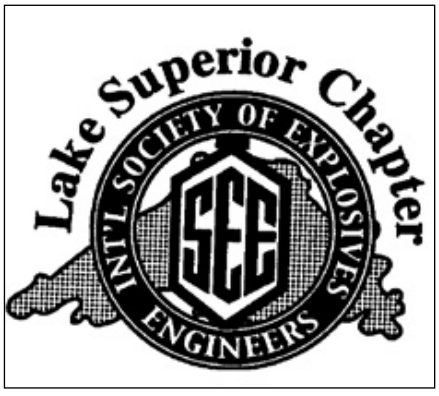
IRON ORE PRICE REPORT

NORTH AMERICAN MARKET (LTU)

Company	Ore Type	Per Iron Unit	Per Gross Ton at 64%	Per Ton at 64% Reporting Date
Cleveland-Cliffs Inc.	Pellets, FOB Michigan Mines	$1.28	$81.92	12/31/17
Cleveland-Cliffs Inc.	Pellets, FOB Minnesota Upper Lakes Port	$1.42	$90.88	12/31/17

Source: CLEVELAND-CLIFFS INC.







UA Team Tests Mining Technology Designed To Save Lives

Known as the SMART Suite 5.0, the University of Arizona startup GUIA has licensed a mining communication and sensor platform developed by faculty in the UA's College of Engineering and Lowell Institute for Mineral Resources.



THE TECHNOLOGY FEATURES SENSORS THAT CAN DETECT AND REPORT ON COMPONENTS OF WORKER HEALTH AND SAFETY, MINE AIR QUALITY, GEOLOCATION ASSET TRACKING, COMMUNICATION AND GROUND STABILIZATION DETECTION.

SMART, which stands for System for Managing Advanced Response Technology, is designed for minewide distributed sensing, monitoring and real-time communication across all mining operations.

At the core of the system is the ability to sense a miner's location and body temperature, predict potential problems and recommend steps to avert health risks. There were 430 deaths from mining incidents between 2007 and 2017, according to the U.S. Department of Labor Mine Safety and Health Administration.

SMART Suite 5.0 is the first unified, comprehensive, internet-of-things platform technology to integrate mine safety, miner health monitoring and asset tracking. According to Momayez, the total direct and indirect cost of a single work site accident in the mining and construction industries can be devastating, with a possible economic impact of over $5 million per incident.

This includes expenses such as basic financial costs, human costs (including rehabilitation, death benefits, bodily injury indemnities and income replacement) and a significant, potentially crippling loss of productivity.



MINING INDUSTRY PEOPLE

Graphite One Resources Inc. appointed **Kevin Greenfield** and **Jerry Birch,** co-owners and senior executives of Taiga Mining Company, to its Advisory Board. Kevin and Jerry formed Taiga Mining Company in 1990, operating in remote interior Alaska, building Taiga from its modest beginning with a 6-cubic foot bucket line dredge into a company that was recognized this year as the Alaska Miners Association's "Corporate Member of the Year" for the company's contributions to the Alaskan mining community.

Aldridge Minerals Inc. appointed **Jeremy South** and **Gage Jull** as independent directors to the Company's board of directors. Mr. South is currently Managing Partner of a Canadian-based private equity group. He has over 30 years of experience in M&A, capital markets and private equity in Europe, North America and Australia, including senior positions in investment banking at Deutsche Bank, NatWest Markets and Deloitte. Mr. Jull is a co-founder and Principal of Bordeaux Capital. He has over two decades of experience in corporate finance covering the oil and gas, fertilizer and agriculture, mining, technology and industrial sectors.

Sierra Metals Inc. appointed **Alberto Beeck** as an Adviser to its Board of Directors and Alejandro Perellón as an Observer to its Board of Directors. Alberto Beeck is an investor and entrepreneur who combines his time between different businesses and social impact activities in the education sector. He is Managing Partner of Cranley Investments Holdings, Managing Partner of VH Properties, and Chairman of Lumni and of Sin Limites. Alejandro Perellón is a Vice President with the private equity firm Arias Resource Capital Management LP.■

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November 2017 Crude Steel Production

By John Edward, Associate Publisher

World crude steel production for the 66 countries reporting to the World Steel Association (worldsteel) was 136.3 million tonnes (Mt) in November 2017, a 3.7% increase compared to November 2016.

China's crude steel production for November 2017 was 66.2 Mt, an increase of 2.2% compared to November 2016. Japan produced 8.7 Mt of crude steel in November 2017, an increase of 1.0% compared to November 2016. In the EU, Italy's crude steel production for November 2017 was 2.2 Mt, up by 3.3% on November 2016. France produced 1.2 Mt of crude steel in November 2017, a decrease of -8.7% compared to November 2016.

Spain produced 1.3 Mt in November 2017, an increase of 18.0% on November 2016. Turkey's crude steel production for November 2017 was 3.1 Mt, up by 7.0% on November 2016.

The US produced 6.7 Mt of crude steel in November 2017, an increase of 8.5% compared to November 2016. Brazil's crude steel production for November 2017 was 3.0 Mt, up by 15.3% on November 2016.

The crude steel capacity utilisation ratio of the 66 countries in November 2017 was 70.7%. This is 1.5 percentage points higher than November 2016. Compared to October 2017, it is 2.2 percentage points lower.

Statistics based on World Steel Association Report released on December 20, 2017. ■

Preliminary USGS Iron Ore Statistics for June 2017

By John Edward, Associate Publisher

According to the U.S. Geological Survey (USGS) report by Mineral Commodity Specialist Christopher A. Tuck, U.S. mine production and shipments of iron ore in June 2017 were 4.05 million metric tons (Mt) and 5.12 Mt, respectively.

Average daily production of iron ore was 135,000 metric tons (t), 9% more than that of May 2017 and 8% more than that of June 2016. Average daily shipments of iron ore were 171,000 t, 10% more than those in May 2017 and 13% more than those in June 2016.

Mine stocks at the end of June 2017 were 10% less than those held at the end of May 2017 and slightly less than those held at the end of June 2016. U.S. exports of iron ore totaled 1.09 Mt in June 2017, 10% greater than those in May 2017 and 45% greater than those in June 2016. U.S. imports of iron ore totaled 210,000 t in June 2017, 33% less than those in May and 28% less than those in June 2016.. ■



CRUDE STEEL PRODUCTION, NOVEMBER 2017. *Source – World Steel Association*

COUNTRY	NOV 2017	OCT 2017	NOV 2017	% CHANGE NOV – 17/16
Canada	1,315 e	1,085 e	996	32.0
Cuba	20 e	20 e	21	-3.0
El Salvador	10 e	10 e	8	21.3
Guatemala	25e	25 e	26	-2.4
Mexico	1,600 e	1,650 e	1,651	-3.1
Trinidad and Tobago	0	0	0	...
United States	6,709	6,976	6,185	8.5
Total - North America	9,679	9,766	8,886	8.9
Argentina	434	437	359	20.9
Brazil	3,030	3,045	2,628	15.3
Chile	95 e	100 e	93	2.7
Colombia	105 e	110 e	104	1.2
Ecuador	45 e	45 e	48	-5.3
Paraguay	5 e	5 e	3	64.4
Peru	100 e	105 e	103	-3.1
Uruguay	5 e	5 e	6	-16.7
Venezuela	15 e	15 e	58	-74.0
Total - South America	3,834	3,867	3,401	12.7
Egypt	586	585 e	428	36.9
Libya	51	37	45	13.1
Morocco	-	-	-	-
South Africa	551 e	566 e	500	10.1
Total - Africa	1,187	1,188	973	22.0
Iran	1,952	1,980 e	1,570	24.4
Qatar	190	239	171	11.1
Saudi Arabia (HADEED only)	269	470 e	496	-45.8
Total - Middle East	2,698	2,973	2,540	6.2
China	66,151	72,362	64,723	2.2
India	8,350 e	8,629	8,017	4.2
Japan	8,702	8,971	8,619	1.0
South Korea	5,650 e	6,200 e	5,701	-0.9
Taiwan, China	1,900 e	1,965 e	1,750	8.6
Total - Asia	92,388	99,817	89,913	2.8
Australia	482	440 e	458	5.2
New Zealand	55	57	55	1.2
Total - Oceania	538	497	513	4.8

COUNTRY	NOV 2017	OCT 2017	NOV 2017	% CHANGE NOV – 17/16
Total - European Union (28)	**13,983**	**14,747**	**13,550**	**3.2**
Total - Other Europe	**3,388**	**3,529**	**3,167**	**7.0**
Total - C.I.S. (6)	**8,585**	**8,870**	**8,515**	**0.8**
Total (66 countries)	**136,280**	**145,254**	**131,458**	**3.7**

e – estimate | r – revised

Monthly Crude Steel Production in the 67 Countries included in the report, in thousands of metric tons. The 67 countries included in this table accounted for approximately 99% of total world crude steel production in 2016.

U.S. RAW STEEL PRODUCTION

WEEK ENDING	Weekly Production			Year-to-Date Production		
	Production	Percent Change*	Capability Utilization Rate	Production	Percent Change*	
December 23, 2017	1,718	1.2	73.7	88,469	4.4	74.4
Previous Year	1,607	6.9	67.8	84,772	-	70.5
December 16, 2017	1,698	1.6	72.8	86,751	4.3	74.4
Previous Year	1,607	5.7	67.8	83,165	-	70.5
December 9, 2017	1,672	- 2.8	71.7	85,053	4.3	74.5
Previous Year	1,607	4.0	67.8	81,558	-	70.5
December 2, 2017	1,720	1.0	73.8	83,381	4.3	74.5
Previous Year	1,595	7.8	67.3	79,951	-	70.8

In thousands of Net Tons – Source - American Iron and Steel Institute

* Percent Change is a comparison between a given week and the previous week. The % change figure in the previous year row refers to the change from a given week compared with the corresponding week of the previous year.

AISI's estimates are based on reports from companies representing about 50% of the Industry's Raw Steel Capability and include revisions for previous months.

WEEKLY U.S. RAW STEEL PRODUCTION BY DISTRICT

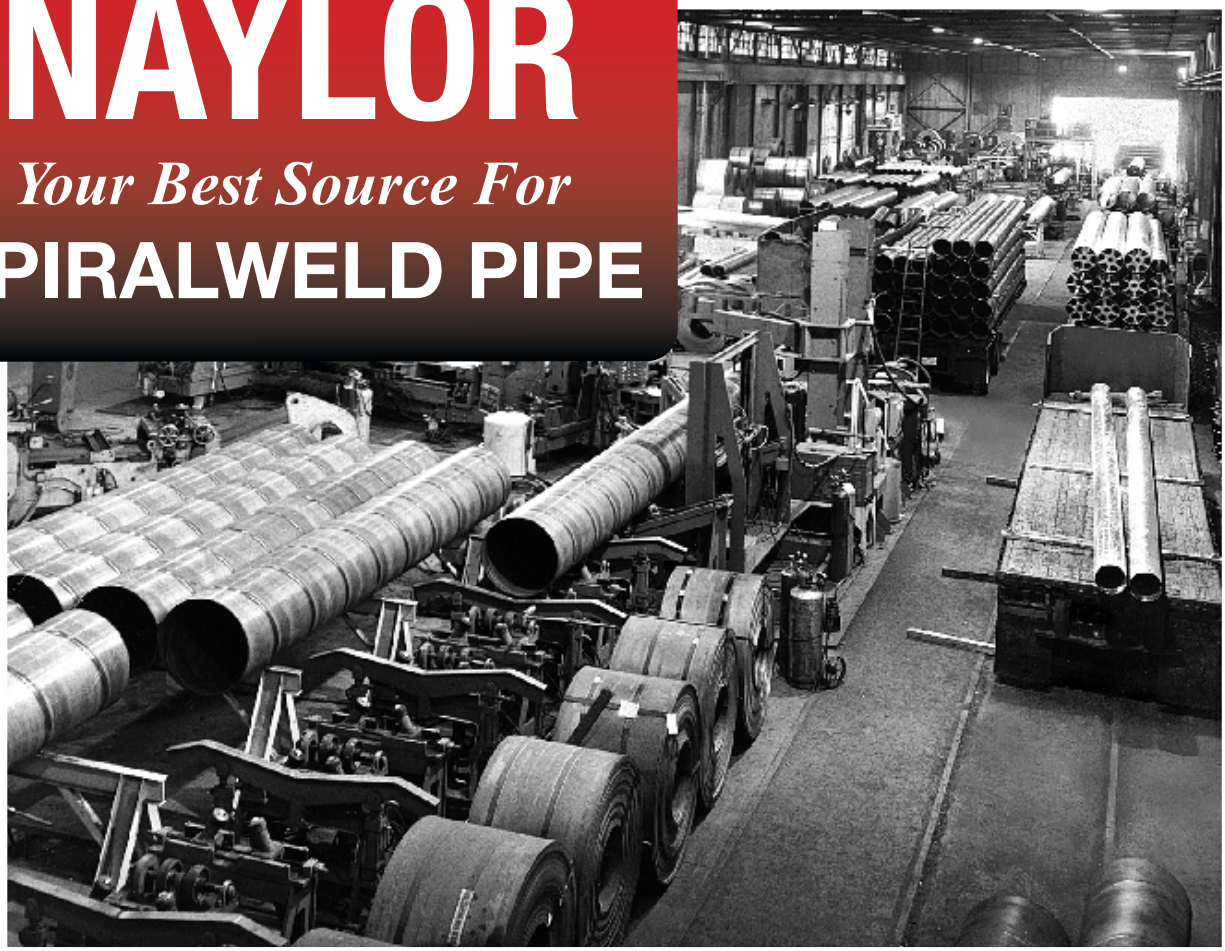
DISTRICT	WEEK ENDING			
	12/23	12/16	12/9	12/2
North East	207	213	202	210
Great Lakes	639	628	607	631
Midwest	162	167	169	168
Southern	640	623	621	641
Western	70	67	73	70
Total	1,718	1,698	1,672	1,720

In thousands of Net Tons – Source – American Iron & Steel Institute.

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