



# The UPM Market Informer



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## US Industrial Production Rises

US industrial production rose by 0.9% in January, the Federal Reserve reported. Furthermore, manufacturing output rose by 1.0%. Meanwhile, mining output picked up by 2.3%. Industrial sector capacity utilization reached 75.6%, up by 0.7 percentage point. The rate, however, is down 4.0% from the long-run average from 1972-2020. *Source: MetalMiner*

## Aluminum Output Picks Up

Global aluminum production totaled 5.71 million tons in January, the International Aluminum Institute reported this week. Furthermore, the total marked an increase from 5.47 million tons in January 2020. Meanwhile, China’s output reached an estimated 3.3 million tons, up from 3.09 million tons in January 2020.

Elsewhere, production in Western Europe reached 285,000 tons, up from 284,000 tons. In addition, Eastern and Central European production fell by 3,000 tons to 353,000 tons. After trending sideways to down in January, the aluminum price has picked back up this month, as the LME three-month aluminum price closed Monday at \$2,161 per metric ton, or up 9.39% from a month ago. *Source: MetalMiner*

## General Motors Hails Battery Cell Plant Milestone

Ultium Cells LLC is a joint venture of General Motors and South Korea’s LG Chem. The joint venture will produce Ultium battery cells at a new 2.8-million-square-foot facility in Lordstown, Ohio. General Motors reported ironworkers at the construction site installed the final beam at the site.

“Ultium Cells, a joint venture between General Motors and LG Chem, will mass-produce Ultium battery cells at the facility to advance the push for a zero-emissions, all-electric future,” GM said Feb. 19. “GM and LG Chem are investing \$2.3 billion in the facility to support EV manufacturing in the U.S., and in turn, local jobs, education, career training and infrastructure.” In addition, GM said the plant is slated for completion in 2022. *Source: MetalMiner*

## Surcharge Totals December 2020 - May 2021



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	Dec	Jan	Feb	Mar	Apr	May
15-5	0.5308	0.5934	0.6546	0.6720	*	*
15-7	0.7496	0.8202	0.9098	0.9716	*	*
17-4	0.5184	0.5799	0.6393	0.6553	*	*
17-7	0.6734	0.7428	0.8178	0.8472	*	*
201	0.5150	0.5748	0.6366	0.6650	*	*
301 7.0%	0.6641	0.7323	0.8063	0.8350	*	*
302/304/304L	0.7333	0.8058	0.8842	0.9170	*	*
304-8.5%	0.7636	0.8383	0.9189	0.9538	*	*
305	0.9798	1.0703	1.1665	1.2156	*	*
309	1.0107	1.0996	1.1956	1.2447	*	*
310	1.4518	1.5721	1.6987	1.7765	*	*
316/316L	0.9791	1.0648	1.1697	1.2459	*	*
316LS/316LVM	1.3500	1.4400	1.6200	*	*	*
317L	1.1283	1.2194	1.3374	1.4354	*	*
321	0.7849	0.8622	0.9486	0.9868	*	*
347	1.0947	1.1718	1.2543	1.2911	*	*
409/409 Mod	0.1852	0.2240	0.2704	0.2716	*	*
410/410S	0.1919	0.2305	0.2741	0.2741	*	*
430	0.2316	0.2682	0.3115	0.3115	*	*
434	0.2850	0.3228	0.3728	0.3860	*	*
439	0.2402	0.2762	0.3242	0.3260	*	*
440A	0.2316	0.2682	0.3115	0.3115	*	*
2205	0.8197	0.8833	0.9757	1.0520	*	*
263	5.0112	5.3020	5.4636	5.6679	5.9612	6.6693
276	5.0723	5.3060	5.4743	5.7359	6.1061	6.5901
A286	1.5397	1.6044	1.6546	1.7379	1.9045	2.1129
330	2.0237	2.1005	2.1668	2.2771	2.4934	2.7077
400	3.7780	3.9412	4.0608	4.3137	4.7668	5.1575
Custom 455	0.8200	0.8700	0.9500	*	*	*
Custom 465	0.9800	1.0500	1.2200	*	*	*
600	4.0314	4.1811	4.3195	4.5458	4.9519	5.3688
601	3.4642	3.5880	3.7014	3.8872	4.2284	4.5766
617	5.0047	5.2617	5.4271	5.6616	6.0103	6.5960
625	5.7021	5.8839	6.0267	6.2530	6.6094	7.0245
Custom 630	0.5900	0.6100	0.7200	*	*	*
718	5.6402	5.7691	5.8770	6.0513	6.3535	6.6898
X-750	4.5797	4.7254	4.8600	5.0801	5.4757	5.9189
825	2.5553	2.6628	2.7475	2.8876	3.1348	3.4186
HX	3.3957	3.5583	3.6791	3.8686	4.1640	4.5259
188	6.7100	7.0800	7.9400	*	*	*
CCM	7.5400	7.5600	9.5700	*	*	*
L-605	7.4800	7.8000	8.7700	*	*	*

\*Surcharge currently not available

## MDA Anticipates Next Generation Interceptor Contract Award This Month

The Pentagon is keeping the Next Generation Interceptor (NGI) program on track by allowing the Missile Defense Agency (MDA) to push ahead with its plans to award potential five-year design and development contracts to two defense contractors this month.

NGI replaces the Redesigned Kill Vehicle program and seeks to modernize the ground-based missile defense platform to protect the U.S. from incoming missile threats. RKV was canceled in August 2019 due to technical issues.

Boeing, Northrop Grumman and Lockheed Martin are leading three industry teams that are competing for the two contracts. Northrop is collaborating with Raytheon Technologies, while Boeing is working with General Atomics' electromagnetic systems. Lockheed has partnered with Aerojet Rocketdyne.

MDA "continues to adhere to established source selection processes as they evaluate each of the proposals and anticipates being ready for contract award this month," Jessica Maxwell, a spokeswoman for the Department of Defense, said in an email. She added that DOD's independent cost analysis unit should conclude its program estimate prior to the award. *Source: Jane Edwards for ExecutiveGov*



## Automakers, Medical Device Firms Ask Biden for U.S. Chip Factory Subsidies

More than a dozen business groups representing automakers, medical device makers and manufacturers sent a letter to President Joe Biden on Thursday calling on him to work with U.S. lawmakers to provide federal funding for the construction of new chip factories.

The groups, which include the U.S. Chamber of Commerce as well as industry-specific associations representing General Motors Co, Caterpillar Inc and Medtronic PLC, among others, sent the letter as a shortage of semiconductors continues to disrupt U.S. automobile factories and threatens to lower the automakers' profits by billions of dollars.

A group of chipmakers last week sent a similar letter. Congress authorized programs last year to provide subsidies for chip research and factory construction, but U.S. lawmakers still need to provide specific funding for the program.

"To be competitive and strengthen the resilience of critical supply chains, we believe the U.S. needs to incentivize the construction of new and modernized semiconductor manufacturing facilities and invest in research capabilities," the business groups wrote in their letter on Thursday.

The majority of chip production, especially for advanced computing chips, now occurs in Asia, where major contract manufacturers such as Taiwan Semiconductor Manufacturing Co Ltd (TSMC) and Samsung Electronics Co Ltd handle production for hundreds of different chip companies. Both TSMC and Samsung are planning new U.S. chip factories in the next few years that could benefit from the program if it is funded.

In addition to funding existing programs, the business groups also called for an "investment tax credit" that could help defray the cost of semiconductor manufacturing tools, which can cost billions of dollars for new factories and typically far outstrip the cost of buildings.

American toolmakers such as Applied Materials Inc, Lam Research Corp and KLA-Tencor Corp dominate the industry, though Netherlands-based ASML Holding NV and Japan's Tokyo Electron Ltd are also major players in some segments.

*Source: Stephen Nellis for Reuters*

## Aerospace Manufacturing Firm Announces New Plant in Corona

An El Monte-based aerospace parts manufacturer will be opening a satellite plant in Corona, bringing new jobs to western Riverside County, it was announced Friday. Amro Fabricating Corp. is slated to start operations in April or May within the city's north industrial zone, though the specific location was not disclosed.

"We are thrilled to welcome Amro to our thriving community of more than 400 manufacturers that call Corona home," Mayor Jacque Casillas said. "We are proud they've chosen to expand to Corona and look forward to supporting their growth." According to a city statement, the expansion "brings the potential to add hundreds of jobs in the coming years," and most of those will be blue-collar positions.

Amro makes lightweight metallic panels and parts that are used in space vehicles, missiles and other launch platforms. In addition to the El Monte hub, it also has a facility at the March Air Reserve Base in Riverside. The move to Corona comes on the heels of a partnership agreement between Amro, Aerospace Engineering Corp. AAE Aerospace and Trive Capital, involving creation of Karman Missile & Space Systems, a conglomerate venture that will focus on manufacturing a range of components — from engine nozzles to heat shields — for a variety of space endeavors.

"We are honored to be operating in the city of Corona," Amro President John Hammond said. "In addition to our South El Monte campus, our new Corona facility will add over 75,000 square feet of manufacturing space and over 20,000 square feet of office space. "This will further help optimize our work centers, increase our capacity for throughput, as well as the breadth of our capabilities — all of which allows us to better serve our key customers and their programs," he said.

Corona Economic Development Director Jessica Gonzales hailed the company's arrival as a huge boost to the area's employment base and a reflection of the benefits businesses can reap by taking advantage of the city's services, which include aiding private sector entities "with access to regional, state and federal incentives to reduce operational costs and support hiring needs." *Source MyNewsLA.com*

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## Google Spinoff Malta Nabs \$50M Series B for Thermal Long-Duration Storage

Malta has raised a \$50 million Series B round to bring its super-long-duration energy storage to market, the company said Wednesday.

The startup spun out of Google parent company Alphabet's moonshot factory, X, in 2018. Many startups tackling energy storage breakthroughs have looked to batteries and other electrochemical devices.

Malta turned instead to thermal energy: It uses grid power to compress air for storage in hot molten salts and cold antifreeze liquid. A heat engine later converts the energy back to electricity for consumption. This apparatus, in theory, allows for storing power economically on much longer timescales than is feasible with the lithium-ion batteries prevalent today.



The funding news came after an extreme winter storm blacked out the Texas grid for days on end, highlighting the value of power sources that can ride through multiday shortages of natural gas or renewable generation. *Continued on page 5.*

## Pratt & Whitney Positions Itself for Single-Aisle Recovery



Bolstered by a spate of geared turbofan orders and near to completing a series of key retrofits, Pratt & Whitney says it is poised to take advantage of the single-aisle airliner rebound that is widely forecast to lead the post-COVID-19 pandemic aviation market recovery.

Although the engine-maker's overall maintenance, repair and overhaul (MRO) revenues have been particularly affected by the downturn, the company has made the most of slack demand to implement specific improvements to the PW1000G family. "We've been able to really take

this time to upgrade the configuration of that engine," says Rick Deurloo, Pratt & Whitney chief commercial officer. "Our MRO output was really a big focus in 2020, and so it's positioned us as we exit this crisis."

In line with other forecasts that predict passenger recovery will be led by the single-aisle, short-to-medium-haul passenger market, Deurloo says: "Like most airlines and OEMs around the world, we're cautiously optimistic that in the second half of this year we'll start to see that traffic come back and stick—not just come back and then go away again. This summer we think the traffic will come back to some degree, and we'll be able to hold it and grow it from there."

Part of the company's belief is based on its position on what Deurloo describes as "the right-size airplane" whether that's the PW1100G-powered Airbus A320neo, PW1500G-powered A220 or PW1700G/1900G-powered Embraer E-Jet E2 family.

"The general belief is there are three markets that'll probably come back," Deurloo says. "The fastest is likely to be the low-cost market because of leisure, the narrow body because of the size and domestic. That's our sweet spot, and we've seen the [geared turbofan (GTF)] come back first. At the end of 2020, GTF utilization was back to roughly 95% of pre-COVID levels. GTF-powered aircraft were amongst the last airplanes to go down, but if it went down then, it was also the first airplane to come back up." [Read the full story here.](#) *Source: Guy Norris for Aviation Week Network*

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## Google Spinoff Malta, continued

Swiss energy firm Proman led the Series B, joined by previous investors Alfa Laval and Bill Gates-backed Break-through Energy Ventures, which led Malta's \$26 million Series A round in 2018. Dustin Moskovitz, co-founder of Facebook and Asana, also participated.

"The commercialization process is moving along nicely," VP of Commercialization Ty Jagerson said in a Tuesday interview. "Anyone looking at 4 hours [of energy storage] is starting to look 8 to 10. The market is transitioning rapidly."

Malta has already submitted bids for storage solicitations, he added, and plans to have its first commercial project online in 2024 or 2025. That timeline is driven in part by the scale of the enterprise. Malta's core plant design would charge at a rate of 185 megawatts and will be able to discharge at 100 megawatts for up to 10 hours. This industrial facility would be designed to operate for 30 years.

The gap between power in and power out reflects heat losses in the conversion process, but over the last few years, the company identified a commercial use for that inefficiency: industrial heat. Decarbonization of industry will drive numerous uses for carbon-free, 100-degree-Celsius heat on demand. It's no accident that investor Alfa Laval is a leading supplier of heat exchange technology. *Source: Julian Spector for GTM*