United Performance Metals

April, 2020



The UPM Market Informer

UNITED PERFORMANCE METALS ACHIEVES ISO 13485:2016 APPROVAL IN CONNECTICUT SERVICE CENTER

United Performance Metals (UPM) has successfully achieved ISO 13485:2016 certification from NSF-ISR. This approval will allow the company's South Windsor, Connecticut branch to provide both materials and processing services for the medical industry.

"Achieving this certification demonstrates our commitment to quality and service for medical OEM and machine shop sub-contractors in the Northeast, Mid-Atlantic, and other regions throughout the country," remarked

NSF ISR								
Certificate of Registration								
This certifies that the Quality Management System of								
United Performance Metals 30 Penar Vally Word Browner Vally Word Browner Vally Word Browner Vally Stragent and fund to be in conformance to the following standard(c): ISO 13455: 2016 <u>Source Mericeman</u> The disorbation of metal deter, plans, have and stores and the one sound (configuration), advantage and water jot configuration.								
	Certificate Number: Certificate Issue Date: Registration Date Expiration Date *:	C0327136-MD1 01-APR-2020 31-MAR-2020 30-MAR-2023	Ton Chestaut Tom Chestaut Se Vice President - ISR, NSF-ISR, Ltd.					
NSF International Strategic Registrations 789 North Cleader Road, Ann Anax, Morgan 4805 (1988) 1687-6000 www.mf.er.org								
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Dennis Rahill, Business Development Manager.

Mark Ruel, UPM Quality Lead in Connecticut added "Obtaining ISO 13485 certification validates United Performance Metals' commitment within the markets we serve by delivering the highest level of quality and consistency to our customers."

United Performance Metals South Windsor, CT branch now holds three (3) separate Quality Management Registration Systems; ISO 9001:2015, AS9100D and ISO 13485:2016.

United Performance Metals is here to assist you. Contact our <u>HOTLINE</u> with your most pertinent questions.

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UPM COVID19 Communication http://bit.ly/UPMCOVID19

UPM Essential Business Status https://bit.ly/UPMBSTATUS

Contact sales@upmet.com with your inquiries, or visit our website for a complete list of our high-strength, high-performance materials and to learn more about our FIRSTCUT+® Processing Services.





As we navigate this challenging business climate, United Performance Metals wants you to know we are here for you. We believe our ability to support our customers is essential. As a provider to Critical Infrastructure Sectors as identified by the Department of Homeland Security, at this time, we will continue to operate in all our facilities including those locations where the population has been placed under a 'Shelter-in-Place' or 'Stay at Home' order.

EMAIL sales@upmet.com

VISIT OUR WEBSITE! www.upmet.com

> CALL US! 888.282.3292

United Performance Metals is dedicated to serving our customers during this difficult time. We are open for business and working hard on your orders.





Surcharge Totals January - June 2020

	Jan	Feb	Mar	Apr	May	June
15-5	0.4561	0.4717	0.4414	0.4279	*	*
15-7	0.6608	0.6833	0.6682	0.6156	*	*
17-4	0.4443	0.4600	0.4314	0.4189	*	*
17-7	0.5711	0.5864	0.5414	0.5170	*	*
201	0.4374	0.4495	0.4215	0.4106	*	*
301 7.0%	0.5630	0.5783	0.5344	0.5108	*	*
302/304/304L	0.6214	0.6370	0.5875	0.5599	*	*
304-8.5%	0.6469	0.6628	0.6104	0.5809	*	*
305	0.8288	0.8467	0.7742	0.7311	*	*
309	0.8544	0.8719	0.7996	0.7563	*	*
310	1.2256	1.2472	1.1346	1.0641	*	*
316/316L	0.8537	0.8781	0.8429	0.7767	*	*
316LS/316LVM	1.1900	1.2000	1.1600	1.0400	*	*
317L	0.9920	1.0204	0.9924	0.9067	*	*
321	0.6647	0.6811	0.6257	0.5943	*	*
347	0.9745	0.9909	0.9355	0.9041	*	*
409/409 Mod	0.1606	0.1722	0.1684	0.1722	*	*
410/410S	0.1663	0.1779	0.1740	0.1779	*	*
430	0.1993	0.2103	0.2066	0.2103	*	*
434	0.2538	0.2674	0.2735	0.2655	*	*
439	0.2064	0.2172	0.2136	0.2172	*	*
440A	0.1993	0.2103	0.2026	0.2103	*	*
2205	0.7317	0.7558	0.7612	0.6980	*	*
263	6.8100	6.6353	5.8912	5.1666	5.2228	5.2107
276	6.8100	6.4227	5.5170	5.1098	5.1574	4.9677
A286	2.0100	1.9110	1.6451	1.4517	1.4352	1.3310
330	2.6200	2.5054	2.1497	1.8705	1.8297	1.6758
400	4.7800	4.5835	3.9451	3.4856	3.3901	3.0570
455	0.7200	0.7300	0.6900	0.6400	*	*
465	0.8700	0.8700	0.8400	0.7600	*	*
600	5.2800	5.0575	4.3080	3.7388	3.6428	3.3252
601	4.4700	4.2918	3.6784	3.2082	3.1306	2.8700
617	6.7400	6.4867	5.6610	5.0440	5.0724	4.9474
625	7.0900	6.8049	6.0346	5.5965	5.5849	5.3620
718	6.6500	6.4507	5.8690	5.4781	5.4381	5.2293
X-750	5.7900	5.5760	4.8474	4.2933	4.2001	3.8914
825	3.3500	3.1856	2.7310	2.4350	2.4121	2.2527
НХ	4.6000	4.3452	3.6989	3.3456	3.3542	3.1887
188	6.7800	6.8900	7.6700	7.5300	*	*
CCM	8.3400	8.7800	10.000	9.3000	*	*
L-605	7.6700	7.8500	8.9500	8.8000	*	*
		C 1		10.00		

*Surcharge currently not available

Medtronic Gives Away Ventilator Design Specs In Coronavirus Fight, Ahead Of Tesla Alliance

Medtronic is sharing design specifications for a basic ventilator model with any company that wants to help produce them for hospitals racing to treat coronavirus patients as the medical device maker discusses a manufacturing partnership with Elon Musk's Tesla. Separately, Musk said he's donating an unspecified number of ventilators to hospitals in need of them.

The Dublin-based company on Monday posted specs for its PB 560 ventilator "to enable participants across industries to evaluate options for rapid ventilator manufacturing to help doctors and patients dealing with COVID-19." Software and other information for the compact model, on the market since 2010 and sold in 35 countries, will also be added for download soon, the company said.

"Medtronic recognizes the acute need for ventilators as lifesaving devices in the management of COVID-19 infections. We know this global crisis needs a global response," Executive Vice President Bob White said in a statement. "By openly sharing the PB 560 design information, we hope to increase global production of ventilator solutions for the fight against COVID-19."

The move comes ahead of formal plans to make ventilators with Tesla that Musk tweeted about this month. Last week Musk donated more than 1,200 ventilators to Los Angeles hospitals, and on Tuesday he tweeted that Tesla has "extra FDA-approved ventilators. Will ship to hospitals worldwide within Tesla delivery regions. Device & shipping cost are free. Only requirement is that the vents are needed immediately for patients, not stored in a warehouse. Please [let] me or @Tesla know." He provided no details on how many of the devices Tesla has or where they came from.

Musk tweeted on March 25, 2020, that Tesla's Buffalo, New York, plant that makes solar panels and related products would be converted to make ventilators "as soon as humanly possible." Winkels wasn't able to provide details on whether Medtronic engineers visited the Buffalo plant and are in consultation with Tesla on the sourcing of materials, components and production equipment to make ventilators there. The project with Tesla may range from making the PB 560 as well as components spanning Medtronics' PB 560 and PB 980 model lines, she said. <u>*Click here for more on this story Source: Forbes, Alan Ohnsman*</u>

Lockheed and Bell Will Compete Head-to-Head to Build US Army's Future Attack Recon Aircraft

Sikorsky, a Lockheed Martin-owned company, and Bell have been selected to build and fly Future Attack Reconnaissance Aircraft (FARA) prototypes for the U.S. Army in a head-tohead competition, according to a March 25 Army statement.

The Army is planning to procure both a FARA and Future Long-Range Assault Aircraft (FLRAA) that will slowly replace the current fleet of Sikorsky-manufactured UH-60 Black Hawks utility helicopters and Boeing-made AH-64 Apache attack helicopters. The service plans to initially field both in the 2030s.

FARA will fill a critical capability gap currently being filled by AH-64E Apache attack helicopters teamed with Shadow unmanned aircraft following the retirement of the OH-58D



Kiowa Warrior helicopters. The service has tried and failed three times to fill the gap with an aircraft. The Army had selected five teams to provide FARA designs last spring: AVX Aircraft Co. partnered with L-3 Communications Integrated Systems, Bell, Boeing, Karem Aircraft and Sikorsky. <u>Click here for more on this story</u> *Source: Defense News, Jen Judson*

Formula 1 Teams, Carmakers and Aviation Groups Race to Meet Ventilation Challenge

The world faces a critical shortage of ventilators to treat victims of Covid-19. Manufacturers across the economy are being enlisted to help produce new devices. The world desperately needs more ventilators to help treat coronavirus patients. Manufacturers in all sectors are answering the call to help. One of the features of the coronavirus pandemic is the urgent need for ventilators – more ventilators than we have. A lot more in fact. And so, some unusual alliances have been formed to help solve the problem. In the UK, an engineering consortium led by one of the world's leading automakers, an aerospace group and a Formula 1 team have created a ventilator prototype that should be ready for use imminently.



Meanwhile, the vacuum cleaner maker Dyson has won an order for 10,000 ventilators from the UK government, which it plans to build in a factory that it had planned to use to produce electric cars before cancelling the project. However, the design needs to be approved and production started from scratch, while the consortium will be using existing designs. The UK government called for manufacturers to help with ventilator production to add to its current stock of 5,000-8,000 machines. Firms were asked to help by offering skills and expertise as well as manufacturing the components themselves. Businesses can get involved in any part of the process: design, procurement, assembly, testing, and shipping, according to the High Value Manufacturing Catapult, which helps accelerate new concepts to commercial reality.

Most obviously, companies that already make ventilators were asked to step up production, but "there is also a further challenge to the wider engineering and manufacturing community to fast-track a simpler ventilator system," the HVMC said. Five design companies with a medical equipment track record worked on five specifications, with clinical input. These specifications were then narrowed down to two designs, one produced by Smiths Group, the other by Penlon. Smiths' devices are mobile, lightweight devices designed to be used in ambulances, while Penlon makes more heavy-duty anesthesia machines that are used in surgery and include a ventilator.

The possibility of a new model made from scratch by other manufacturers is still being considered, according to the Financial Times. The government estimates that it needs 30,000 more ventilators to deal with the crisis. The consortium, called the Ventilator Challenge UK, comprises three teams, led by McLaren, the Formula 1 racing team, carmaker Nissan and Meggitt, an aerospace engineer. The three teams are focusing on different issues that play to their strengths – F1 teams are used to designing and refining new components extremely rapidly as they fine tune their cars between races. Nissan has expertise in mass production and distribution that will enable the new machines to be produced and delivered quickly to where they are needed, while Meggitt brings expertise in producing oxygen systems for aircraft. Other members of the aerospace team include aircraft manufacturer Airbus and component makers GKN, Renishaw and Thales. Airbus is ready to offer its 3D printing and production facilities to rapidly produce prototypes and components.

Academics are getting involved, too. Engineers, anesthetists and surgeons from King's College London and the University of Oxford are building and testing prototypes that can be manufactured using techniques and tools available in well-equipped university and small and medium enterprise workshops. The team have been working to define novel mechanisms of operation that will meet the required specifications for safe and reliable function. The design aims to exploit off-the-shelf components and equipment. "Demonstrating safety and reliability and achieving regulatory approval of the opensource design will be necessary, and once this has been achieved, the approach could unlock potential for a new kind of distributed manufacturing effort," says Dr Federico Formenti, a lecturer at the School of Basic and Medical Biosciences at King's College, which has offered the use of its workshops to make or 3D print bespoke components.

If designs are approved rapidly, universities, SMEs and large industry will be able to make and assemble these ventilators close to their local hospitals where they are most needed. "This may allow local scaling according to demand and reduce stress on NHS distribution," Formenti said, and once the pandemic fades, this approach could help spread know-how in other countries, he added. For more on this story, visit <u>https://bit.ly/39x6Rsr</u> *Source: Forbes, Mike Scott, Photo, Bloomberg*

Germany Reportedly Moving Toward a Split Buy of Super Hornets, Growlers and Eurofighter Typhoons to Replace Tornado Jets



The German air force will reportedly buy up to 90 Eurofighters, 30 F/A-18E/F Super Hornets and 15 EA-18G Growlers to replace the remainder of its Panavia Tornado fighter jet fleet, but the split procurement doesn't offer an easy answer for Germany's requirement to field a nuclear-capable jet, a U.K. defense think tank said.

Germany plans to use the Super Hornet, made by U.S. aerospace company Boeing, to fill a NATO requirement to field fighter aircraft capable of dropping the B61 nuclear gravity bomb, according to German business publication Handelsblatt, which first reported the split buy. It will also buy Growlers to replace the Tornados that carry out an electronic attack role.

However, only the legacy F/A-18 Hornet — not the Super Hor-

net — was ever certified to carry the B61, wrote Justin Bronk, a research fellow with the Royal United Services Institute, a U.K. based thinktank that covers defense issues. That means that the Super Hornet will have to go through the certification process, said Bronk, who called the split buy "the worst of all previously mooted outcomes."

Boeing spokesman Justin Gibbons said that while the Super Hornet is not yet certified to carry the B61, the company has the U.S. government's support for future integration.

"The F/A-18 Super Hornet is capable of being certified to meet B61 requirements for Germany under its timeline. Boeing has a proven track record of successfully integrating weapons systems that meet the needs of both U.S. and international customers," he said. Gibbons declined to comment on the timing of Germany's deadline for competitive reasons.

Click here for more on this story Source: Defense News, Valerie Insinna

SAAB Starts Manufacturing Gripen F Fighter Aircraft for Brazil

Saab has started manufacturing the first two-seater fighter aircraft Gripen F for the Brazilian Air Force. The work program began with the Swedish company performing the first metal cut for the fighter aircraft.

Brazilian Air Force Monitoring and Control Group (GAC-Saab) head colonel Renato Leite said: "This milestone is important for the Gripen project because it demonstrates that the development phase is proceeding properly."



"This signals the beginning of the production of the two -seater aircraft, Gripen F, which is much anticipated by the Brazilian Air Force."

The Gripen F shares same design configuration and features as of Gripen E, but it comes with an additional seat, displays and controls for the second crew member. The two-seater aircraft can operate on training mode with one crew member and another where both the crew members will share the workload. The manufacturing program also involves Brazilian partner companies Embraer, AEL Sistemas, Akaer and Atech. *Source: Air Force Technology , photo: Tuomo Salonen, SIM Finnish Aviation Museum*