

Fabrication Additive

Bulletin de Veille - 21 mars 2019

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A LA UNE

3Diligent produces 140 3D printed components for Seattle's second tallest tower

07/03/2019 - www.3ders.org



Californian digital manufacturing service provider 3Diligent has 3D printed 140 unique exterior curtain wall nodes for the Rainier Square Tower which is currently under construction in Seattle. Based on that requirement and the geometries of the nodes, 3Diligent created prototypes using investment casting and 3D printing. "We prototyped in both technologies and ultimately picked 3D Printing because of the dimensional accuracy and structural reliability it gave us."

GÉNÉRALITÉS - FABRICATION ADDITIVE

2019 – The Year of 3D Innovation

20/03/2019 - www.azom.com

For any organisation undertaking large print projects, the ability to continually monitor the print procedure and compare it to the original digital file presents a compelling opportunity to reduce errors within the print process. Blended Manufacturing Models With a 3D hardware resource that now offers the repeatability and reliability required within a manufacturing process plus the accessibility of global materials, organisations can now begin to fundamentally rethink the way 3D printing is used at every stage of the manufacturing process.

3 Experts Show How 3D Printing is Changing the Face of Manufacturing

05/03/2019 - www.engineering.com

"I'm not an expert in 3D technology and additive manufacturing," said Taylor. Together, RAPID + TCT Keynotes Illustrate the Future of Additive Manufacturing These three keynote topics paint a clear picture of the future of additive manufacturing in 2019. Next, Naomi Murray's presentation illustrates how additive manufacturing is continuing to unlock new innovations in those industries considered to be in the 3D printing niche, such as medical device manufacturing.

AÉROSPATIAL - FABRICATION ADDITIVE

Archinaut 3D printing technologies deemed ready for orbit

12/03/2019 - 3dprintingindustry.com



Though perhaps better known as the robotic-arm enabled structure seen in the video below, the Archinaut project actually encompasses the development of two systems, Archinaut: ULISSES and Archinaut: DILO. Photo via Made in Space Collaborating with Made In Space on the Archinaut project are American global aerospace and defense company Northrop Grumman, and Oceanering Space Systems, that specializes in the production of in-space robotics.

NASA develops new copper alloy for 3D printing rocket components

EVÈNEMENTS / ÉTUDES - FABRICATION ADDITIVE

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- CECIMO welcomes EU's focus on Additive Manufacturing in planned trade deal between EU and US

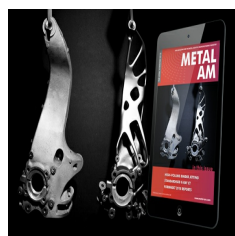
20/03/2019 - 3dprintingindustry.com



The result metal powder used to produce near-fully-dense 3D printed parts such as combustion chamber liners and fuel injector faceplates with a Concept Laser M2 3D printer, a Powder Bed Fusion (PBF) AM system. For the latest aerospace additive manufacturing, subscribe to the 3D Printing Industry newsletter , follow us on Twitter and like us on Facebook.

AlphaSTAR & Raytheon to present 'Qualification of an AM Missile' at AMUG 2019

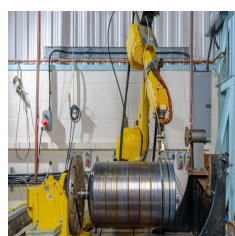
04/03/2019 - www.metal-am.com



Collaborating on a US Missile Defense Agency Phase II contract, engineering services and software company AlphaSTAR Corporation, Long Beach, California, USA, and Raytheon, a specialist in defence, civil government and cybersecurity solutions based in Waltham, Massachusetts, USA, have cooperated on a project to predict the Additive Manufacturing Process and Service Loading of an as-built additively manufactured part.

Wire Arc Additive Manufacturing builds titanium pressure vessel for space exploration

05/03/2019 - www.metal-am.com



The titanium pressure vessel was produced by Wire Arc Additive Manufacturing at Cranfield University. Eng Massimo Chiampi, Study Manager for Additive Manufacturing projects at Thales Alenia Space, stated, "We were looking for an innovative manufacturing solution for the tanks, which typically suffer from long lead time with the conventional production route based on subtractive machining.

TECHNOLOGIES - FABRICATION ADDITIVE

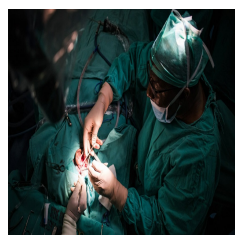
Fraunhofer dévoile un système de fabrication additive hybride à grande vitesse

04/03/2019 - www.primante3d.com

Une équipe de chercheurs de l'Institut Fraunhofer en Allemagne, a dévoilé les premières images d'un système de fabrication additive pour l'impression 3D à grande vitesse. Il est question d'une machine hybride dénommée SEAM, qui combinerait le fraisage CNC et l'impression 3D de type FDM (dépôt de matière fondue). On lui doit notamment une imprimante 3D métal low-cost , ainsi qu'un centre dédié à la technologie dénommé Additive Manufacturing Alliance.

Des chirurgiens implantent des osselets imprimés en 3D dans l'oreille

18/03/2019 - www.3dnatives.com



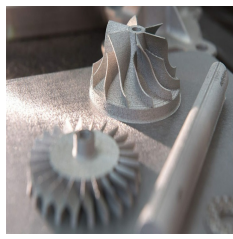
En Afrique du Sud, une équipe de chirurgiens de l'hôpital universitaire Steve Biko vient de réaliser une opération unique en son genre : ils ont effectué une greffe d'osselets imprimés en 3D dans l'oreille moyenne : le marteau, l'enclume et l'étrier auraient en effet été remplacés par du titane imprimé en 3D. Et il est rare de voir des implants pour oreille imprimés en 3D en métal ! Quelques progrès ont été réalisés en Inde ou en Australie en 2016 où une petite fille de deux ans et demi avait reçu une prothèse d'oreille imprimée en 3D.

MATÉRIAUX - FABRICATION ADDITIVE

L'armée américaine transforme un alliage d'acier pour imprimer en 3D des pièces ultra-résistantes

06/03/2019 - www.3dnatives.com

Une équipe de chercheurs du laboratoire de recherche de l'armée américaine Combat Capabilities Development Command affirme avoir



adapté un alliage d'acier sur mesure pour qu'il soit compatible avec la technologie d'impression 3D par fusion sur lit de poudre. La fabrication additive a des répercussions dans le secteur militaire, notamment sur toute la partie logistique : la technologie offre aujourd'hui des moyens plus efficaces pour produire des pièces détachées à la demande, améliorant alors les délais de fabrication et les flux d'approvisionnement.

DSM & Fortify Collaborate to Develop High-Performance Composite Materials for 3D Printing

06/03/2019 - www.azom.com



Fortify, a Boston-based advanced manufacturing company, and DSM, a global purpose-led, science-based company in Nutrition, Health and Sustainable Living, have announced that they will develop high performance composite materials for 3D printing of structural parts. The Fortify Fiber Platform Most 3D printing platforms are closed, limiting the use of resins to those that are produced by the 3D printer company itself.

PostProcess develops swift solution for 3D printed SLA Resin Removal

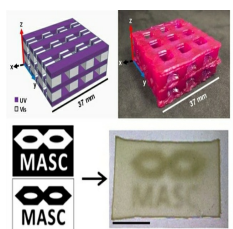
20/03/2019 - 3dprintingindustry.com



New York-based automated post-printing developer PostProcess Technologies has announced a new solution for 3D printed SLA resin removal, expanding its catalog of automated additive manufacturing post-print technologies. The chemistry of the new SLA resin removal solution created by PostProcess, called PG1.2, is designed to enable a longevity in the post-printing process as well. "PostProcess has designed the world's first complete SLA resin removal system, available only from the pioneers in forward-thinking 3D post-printing.

Invented: MultiMaterial Resin 3D Printing

20/03/2019 - www.engineering.com



However, while there are many different types of resins available and upcoming, resin 3D printing, whether from SLA, DLP, or other processes, has a very severe limitation: only a single material can be used. This limitation would appear obvious when you look at a resin 3D printer setup: there's a tank of the liquid resin that is illuminated by a light source. The process is comprised of a resin that is actually a mixture of two different materials (monomers), and two different light sources.

MARKET / BUSINESS - FABRICATION ADDITIVE

Fictiv secures \$33 million in Series C funding round to transform digital manufacturing

06/03/2019 - 3dprintingindustry.com



Founded by Dave Evans and Nate Evans, Fictiv couples AI with a range of manufacturing methods such as 3D printing, CNC, injection molding and urethane casting to streamline production. Furthermore, Fictiv's machine-learning algorithm also ensures that every 3D model conforms to the Design for Manufacturability (DFM) practices. To learn more about cloud manufacturing subscribe to our 3D printing newsletter and join us on Facebook and Twitter. We also have jobs in the industry, register yourself at our 3D Printing Jobs page to receive job updates. .

Innovate UK £2.25m funds particle beams in 3D printing innovation

18/03/2019 - www.3ders.org

University of Huddersfield scientists have teamed with the Huddersfield company Reliance Precision for two successive 3D printing projects that have earned £2.25 million funding from Innovate UK. These projects have



been key elements of Reliance's overall programme to develop a new generation of electron beam additive manufacturing (EBAM) machines that will enable much wider adoption of this form of 3D printing, in which metal powder is placed under a vacuum and fused together by heat from a high-energy electron beam. Posted in 3D Printing Technology.

Nanofabrica dévoile sa solution de micro impression 3D

19/03/2019 - www.3dnatives.com



Quand on parle de nano impression 3D, plusieurs acteurs nous viennent en tête, acteurs qui ont déjà développé des solutions pour créer des pièces microscopiques, que ce soit avec du métal comme 3D MicroPrint , ou encore le français MicroLight3D qui offre une résolution submicronique. L'entreprise israélienne Nanofabrica vient donc s'ajouter au secteur de la micro impression 3D, espérant résoudre les défis associés à cette technologie.

EVÈNEMENTS / ÉTUDES - FABRICATION ADDITIVE

Renishaw open day: Manufacturing in Aerospace, The Direction of Travel

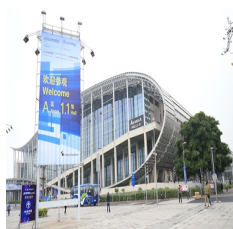
06/03/2019 - 3dprintingindustry.com



Additive manufacturing at the center will include a home grown wire-fed laser metal deposition additive system and powder bed AM. Eventually a record £80 million with Rolls-Royce was secured , in part due to Castle's long-term strategy summed up in the MD's phrase, "We want to keep partners, not costs saved. , and using the Fourth Industrial Revolution term (4IR), mapped how oil (a driver of the Second Industrial Revolution) could be seen as analogous to data in 4IR. " shows the participation of 42 people with Parkinson's taking part in a long term clinical trial.

Asiamold 2019 to kick off this Sunday

07/03/2019 - www.metal-am.com

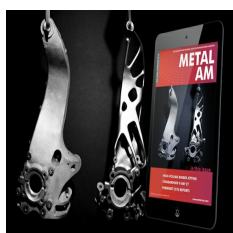


In 2019, Asiamold's Agora and Seminar, and its China 3D Printing Industry Technology Application Summit, will be held again. - Metal 3D Printing Enhances Efficient Production Solutions Presented by: Renishaw (Shanghai) Trading Co Ltd - High Precision Industrial 3D Printing Presented by: BMF Material Technology Inc - Metal 3D Printing – Changing the Manufacturing Process and Application of Moulding Industry Presented by: Guangdong Hanbang 3D Tech Co Ltd - Materialise Software Solutions Help 3D Printing Application in Mould Industry Presented by: Materialise Shanghai Co Ltd.

RÉGLEMENTATION / BREVETS - FABRICATION ADDITIVE

CECIMO welcomes EU's focus on Additive Manufacturing in planned trade deal between EU and US

08/03/2019 - www.metal-am.com



CECIMO, the European Association for the Additive Manufacturing sector, has welcomed the EU's commitment to keep Additive Manufacturing as one of the priority areas in EU-US talks for a trade deal on industrial goods. CECIMO will continue to cooperate with trade negotiators and convey the views of Europe-based AM exporters on non-tariff barriers encountered in EU-US trade.

Pour toute information, merci de [nous contacter](#)