

Fabrication Additive

Bulletin de Veille - 20 février 2019

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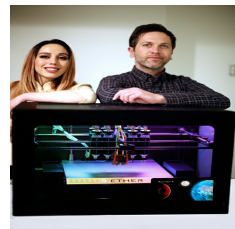
Naval Group et Centrale Nantes impriment en 3D la première pale d'hélice creuse au monde

08/02/2019 - www.primante3d.com

Dans un communiqué paru hier, les deux partenaires ont annoncé l'impression 3D du premier démonstrateur de pale creuse métallique au monde. C'est la même technologie d'impression 3D métal qui a été utilisée que pour son aînée, à savoir le procédé WAAM (Wire+Arc Additive Manufacture) qui consiste superposer des fils métalliques soudés au moyen d'un arc électrique et d'un bras robotique.

Procter & Gamble partners with Aether on 3D printing and artificial intelligence

20/02/2019 - www.3ders.org

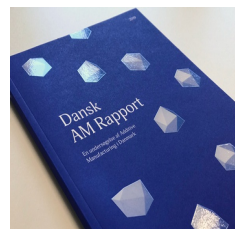


Aether, the San Francisco biotechnology company behind the multi-tool Aether 1 3D bioprinter, announced the commencement of a two year joint development agreement with Procter & Gamble for the development of cutting edge 3D printing and AI technologies. Development will include creating an interconnected network of computer vision and AI algorithms to increase multi-tool and multi-material 3D printing automation, as well as build an expanded suite of features designed to expand the possibilities for the field of 3D printing.

GÉNÉRALITÉS - FABRICATION ADDITIVE

Report finds Additive Manufacturing in use by 25% of Danish manufacturers

06/02/2019 - www.metal-am.com



The Danish AM Hub, Copenhagen, Denmark, initiated by The Danish Industry Foundation, has published its first annual report on the ways in which Danish manufacturing companies are using Additive Manufacturing, and concluded that 25% of all Danish manufacturing companies are using the technology. The responses of companies screened reportedly show that Additive Manufacturing is still primarily used in the prototyping and product development stage in Danish manufacturing.

Leading additive manufacturing academics give insights into 2019 plans and review latest 3D printing research

13/02/2019 - 3dprintingindustry.com

We are focusing our research on two areas that are relatively unexplored commercially, where the long-term academic horizon allows us to focus. How these additive implants will hold up long term in the human body remains the great unknown. I also have an educational responsibility to ensure that students in my additive manufacturing course have a full appreciation for the diverse additive manufacturing options as well as appreciating the long-term development and evolution of such manufacturing processes. .

AÉROSPATIAL - FABRICATION ADDITIVE

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- Relativity advances toward 2020 3D printed rocket launch with new IP and expertise

AI SpaceFactory wins second in Phase 3 of NASA's 3D-Printed Habitat Challenge

07/02/2019 - www.3ders.org

The New York-based architecture and technology firm received a prize of \$88,353 after their autonomously 3D printed sub-scale habitat called MARSHA was selected by NASA as one of the five finalists in the competition. AI SpaceFactory's 1,200-gallon basin was 3D printed in only 24 hours, which is incredibly fast according to 3D printing standards, but a significant amount of time considering that the final prototype habitats will be 3D printed in front of a live audience in April.

NASA installs Tether Refabricator aboard ISS for in-space 3D printing

11/02/2019 - 3dprintingindustry.com



The CEO of TUI Rob Hoyt said that he was "incredibly proud and thankful for the hard work put in by our team, the astronauts, and the NASA In Space Manufacturing Team to get the Refabricator all the way to installation aboard the space station. According to Niki Werkheiser, ISM project manager at Marshall Space Flight Center, "The Refabricator is key in demonstrating a sustainable model to fabricate, recycle and reuse parts and waste materials on extended space exploration missions

Orbex imprime en 3D le plus grand moteur de fusée

14/02/2019 - www.3dnatives.com

On le sait, l'impression 3D ne s'est pas cantonnée aux limites terrestres et a prouvé tout son potentiel dans l'espace : fusées imprimées en 3D , habitations sur la lune , imprimantes 3D en apesanteur , etc. Son fabricant précise qu'il utilise 100% de biopropane, un carburant renouvelable venant réduire les émissions de carbone de 90%, et dispose d'une planification sans choc et d'une séparation de la charge utile, éliminant ainsi les débris orbitaux.

NASA awards \$2M to team making tiny 3D printed sensors for planetary rovers

18/02/2019 - www.3ders.org

Mahmooda Sultana and her team at NASA's Goddard Space Flight Center in Greenbelt, Maryland won a \$2 million technology development award to advance a nanomaterial-based detector platform which is capable of sensing everything from minute concentrations of gases and vapor, atmospheric pressure and temperature, and then transmitting that data via a wireless antenna. They are also lightweight, hardened against radiation and require less power, making them ideal for space applications.

CONCEPTION - FABRICATION ADDITIVE

Link3D launches Additive Manufacturing Recommendation System to simplify material selection

07/02/2019 - 3dprintingindustry.com

Integrated within the workflow of the company's additive manufacturing execution system (AMES), AMRS allows engineers to filter available materials based on qualitative characteristics and technical properties. Nominate them and more for the 2019 3D Printing Industry Awards. For more of the latest 3D software updates and other news, subscribe to the 3D Printing Industry newsletter , follow us on Twitter and like us on Facebook. For new opportunities in your field join 3D Printing Jobs.

Stratasys goes direct from CAD to 3D print with GrabCAD Print Advanced FDM

11/02/2019 - 3dprintingindustry.com



With the help of GrabCAD Print, a cloud-based CAD software, Stratasys 3D printers can now go directly from CAD to print, thus removing the conversion to mesh file step to streamline the workflow. The latest addition in this effort is the Advanced FDM feature, which can slice CAD

models directly for 3D printing, making the manufacturing process leaner. For more information on additive manufacturing software subscribe to our 3D printing newsletter.

TECHNOLOGIES - FABRICATION ADDITIVE

Hexbot modular all-in-1 desktop robot arm can 3D print, draw, engrave and pick objects

07/02/2019 - www.3ders.org

The 3D printing module could 3D print onto beds placed on the conveyor belt (by another Hexbot of course), fabricating part after part without any human intervention; the same Hexbot that places build plates onto the conveyor belt could slide to the end and move the printed object off of the conveyor. Though it's not addressed in the campaign, the motion of the Hexbot should enable it to 3D print on angled surfaces, allowing it to make stronger parts by 3D printing the layers perpendicular to the direction of stress undergone by the 3D printed object. ...

Aurora Labs proves Rapid Manufacturing Technology's scalability at high build speeds

15/02/2019 - www.metal-am.com



"A large portion of the groups that Aurora is currently in discussion with are interested in replaceable parts and the capability of replacing them directly using Additive Manufacturing or redesigning them using the advantages of 3D printing with superior materials to deliver a superior product at a cost-competitive price," he continued.

MATÉRIAUX - FABRICATION ADDITIVE

On Jabil's Move into Engineered Materials for Additive Manufacturing

31/01/2019 - www.engineering.com

JD: If you look at one of the biggest hold-backs of moving 3D printing from prototyping into manufacturing, it's the ability to get real manufacturing-grade materials that solve true-to-life manufacturing problems. A lot of the new-generation metal 3D printers are adopting metal injection molding powders, and we're hoping that will dramatically increase the range of powders that are available for metal 3D printing. .

Stratasys and Rapid Prototype+Manufacturing classify ULTEM 9085 for America Makes members

12/02/2019 - 3dprintingindustry.com



Stratasys and Rapid Prototype+Manufacturing (rp+m), an Ohio-based 3D printing service bureau, has produced a comprehensive guide on the engineering-grade ULTEM 9085 resin used in FDM/FFF 3D printing. The ULTEM 9085 Type I Database details the physical and mechanical properties and processing parameters of the material. (Brackets 3D printed on the Fortus 900mc Production 3D Printer. In this context, the classification of ULTEM 9085 and its availability to America Makes' member organizations carries a lot of weight. .

Desktop Metal adds 316L stainless steel for the Studio System

13/02/2019 - www.metal-am.com



As the world's premier energy and chemicals company and an early investor in Desktop Metal we look forward to advancing the state of the art and developing next generation applications where Additive Manufacturing can leapfrog existing manufacturing methods.

New 3D printer materials from 3D Systems, Liberty, Evonik

14/02/2019 - 3dprintingindustry.com

In the long term the company hopes to establish a £60 million powdered



metals production plant for the purpose at Teeside, North East England. Mark Zhao, founder and CEO of TPM 3D, comments, "New, ready-to-use materials that are optimally adapted to the individual printer and expand the range of application to higher temperatures move the 3D printing industry one step further toward series production. For all of the latest additive manufacturing news, subscribe to the 3D Printing Industry newsletter , like us on Facebook and follow us on Twitter.

SFU researchers use cellulose material to 3D print wireless IoT sensors

19/02/2019 - www.3ders.org

Additionally, 3D printing further enabled them to add or embed functions onto 3D shapes or textiles, creating greater functionality. "Our eco-friendly 3D printed cellulose sensors can wirelessly transmit data during their life, and then can be disposed without concern of environmental contamination," says team lead Kim, a professor in the School of Mechatronic Systems Engineering at SFU's Surrey campus. Posted in 3D Printing Application.

MARKET / BUSINESS - FABRICATION ADDITIVE

Xerox fait son entrée sur le marché de l'impression 3D en rachetant Vader Systems

11/02/2019 - www.3dnatives.com

Xerox rejoint les grands groupes historiquement sur le marché de la 2D qui se lancent dans la fabrication additive ; on pense notamment à HP qui fait maintenant partie des revendeurs d'imprimantes 3D les plus importants du marché, ou encore à Mimaki qui a développé une technologie d'impression 3D couleur. Xerox poursuit dans son communiqué de presse : "Les clients du secteur de la fabrication souhaitent utiliser l'impression 3D, mais les offres actuelles servent uniquement le marché du prototypage, et non la fabrication en général.

EOS met la main sur une filiale de son concurrent Stratasys

19/02/2019 - www.primante3d.com



Sur le marché en plein essor de l'impression 3D, les acquisitions se multiplient. Président d'EOS Amérique du Nord, Glynn Fletcher a déclaré : « La fabrication additive est une technologie de pointe et ce n'est pas aussi simple que d'appuyer sur un bouton. Grâce à l'acquisition des plus grands talents du secteur de la fabrication additive, nous formons désormais un groupe de services d'ingénierie entièrement dédiés à ces types d'exigences. « L'impression 3D industrielle est encore relativement nouvelle, mais elle est passée de la théorie à la pratique. .

EVÈNEMENTS / ÉTUDES - FABRICATION ADDITIVE

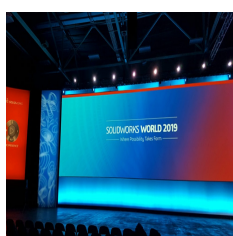
Preview AMUG 2019: conference keynote speakers

05/02/2019 - 3dprintingindustry.com

The [Additive Manufacturing Users Group](#) (AMUG) annual meeting brings together experts and leaders from across the AM world. In a crowded calendar of 3D printing events, AMUG has become well established as a must attend conference for anyone serious about additive. 3D Printing Industry will of course be returning to AMUG as attendees and media sponsor for 2019.

Solidworks World 2019, le rendez-vous des acteurs de la CAO

14/02/2019 - www.3dnatives.com



Du designer à l'ingénieur, cette nouvelle édition a rassemblé plus de 6 000 personnes et 100 partenaires avec un thème présenté par Gian Paolo Bassi, CEO de Dassault Systèmes Solidworks, « Where Possibility Takes Form » L'équipe 3Dnatives a pu en savoir plus sur les dernières innovations et technologies. Historiquement spécialisé dans l'impression

[POWDERMET2019 and AMPM2019: Full conference programmes now available](#)

12/02/2019 - www.metal-am.com

The MPIF has released the full conference programmes for POWDERMET2019: the North American Conference on Powder Metallurgy and Particulate Materials, and AMPM2019: Additive Manufacturing with Powder Metallurgy, set to run concurrently at the Sheraton Grand in Phoenix, Arizona, USA, from June 23–26, 2019. Metal Additive Manufacturing tutorial A new Metal Additive Manufacturing Tutorial will also make its debut during POWDERMET and AMPM2019.

RÉGLEMENTATION / BREVETS - FABRICATION ADDITIVE

[Titomic licenses two exclusive CSIRO patents for pipe additive manufacturing](#)

08/02/2019 - 3dprintingindustry.com

“To capitalize on the significant \$300+ Billion global interest Titomic has received from the Oil & Gas, Mining, and Marine industries to provide more sustainable and cost-effective AM manufacturing, these new TKF technologies enable Titomic to provide viable digital manufacturing capabilities leading to significant short, mid and long-term revenue opportunities.) A model of the Titomic Kinetic Fusion 3D printer at Formnext 2018. ...

[Disrupting the Disruptors, Low Cost 3D Metal Printing](#)

15/02/2019 - 3dprintingindustry.com



The Virtual Foundry’s newly patented high metal composite filaments create pure metal 3D Prints with common, off-the-shelf FDM printers. This novel solution to a complex problem has sparked a movement in low-cost, high quality, 3d metal printing. This furnace will produce the largest metal parts ever FDM 3D Printed. For more additive manufacturing news subscribe to our 3D printing newsletter or follow us on Facebook and Twitter. If you are looking for a career in additive manufacturing then our 3D Printing Jobs board is the best place to start. ...

[Purdue and University of Southern California enhance 3D printing quality control with machine learning](#)

18/02/2019 - 3dprintingindustry.com

The research papers discussed in this article were titled, “Bayesian Model Building From Small Samples of Disparate Data for Capturing In-Plane Deviation in Additive Manufacturing “, published in Technometrics and “Model Transfer Across Additive Manufacturing Processes via Mean Effect Equivalence of Lurking Variables “, published in The Annals of Applied Statistics. For more news on the latest research in additive manufacturing, subscribe to our 3D printing newsletter.

[SAE International releases first specifications for Norsk Titanium Rapid Plasma Deposition](#)

18/02/2019 - 3dprintingindustry.com



Concluding the most recent advance from the company David Alexander, Director of Aerospace Standards at SAE International, said, “Given that advanced materials and advanced manufacturing are strategic focus areas for SAE International, we continue to support the aerospace industry’s advances and adoption of additive manufacturing technologies. If you’re a company looking for candidates with additive manufacturing expertise, create a profile on 3D Printing Jobs and start advertising now.

[Relativity advances toward 2020 3D printed rocket launch with new IP and expertise](#)

18/02/2019 - 3dprintingindustry.com

The AEON 1 engine, which has already undergone over 100 test firings is



composed of 100 components, a fraction of the number of parts for a typically produced engine; This part, as with a full 95% of the current Terran rocket, is built on the Stargate 3D printer. Buzza joins Relativity as Distinguished Engineer after an 8 month term as Advisor to the company. His career, which began in 1988, started with a 14 year term as Advanced Research and Development at Boeing, and went on to encompass senior roles at Space Exploration Technologies and Virgin Orbit.

Service Information Numérique - Pôle IES

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