

BigRep Launches Partnership with umati to Establish a Common Interface Specification For Machine Integration in Additive Manufacturing

BigRep and umati have agreed to work together on establishing standardized software interfaces and principles to integrate additive manufacturing machines into a production monitoring IT environment.

CONNECTING PEOPLE, PROCESSES, PRINTERS

BigRep, a leader in 3D printing, becomes a member of the standardization association umati (Universal Machine Technology Interface) to define a common machine integration interface specification for AM machines. umati, started in 2017, is an open community of machine-building industries focused on adopting a standardized interface based on OPC Unified Architecture. The future UA4AM (UA Interface for Additive Manufacturing) is designed to facilitate communication between 3D printers and software such as MES, PLM, and ERP. VDMA started the process; now over 200 companies are part of this initiative.

As Dr. Sven Thate, Managing Director of BigRep, says: “umati perfectly matches BigRep’s mission towards increased productivity and ease-of-use for our Additive Manufacturing systems and our users in industrial environments. We are *open* to third-party materials to enable limitless applications; we are *open* for maximum connectivity to enable fully digital workflows.”

ESTABLISHING A COMMON FRAMEWORK FOR STANDARDIZATION IN AM

There is currently no agreed-upon framework for standardization within additive manufacturing. The lack of standardization across the additive manufacturing industry acts as a barrier to the broader adoption of additive manufacturing. Adopting this standard will enable better interoperability across various digital platforms, better data transmission from one production step to the next, and better-quality assurance. This translates to higher productivity for our users and reduced time-to-market. A robust standard for communication is in itself a driver for innovation as it is a solid base for software companies to build smart solutions. Digital integration capabilities based on standardization will become a key feature for AM machines on the factory floor.

Adopting this standard will allow users to prototype faster, innovate with new APIs, and ensure further interoperability across various digital platforms. This enables smoother workflows and improved to-market times.

BigRep is an early adopter of the standard as we believe in the power of data integration to enable mass AM production and reduce complications across the supply chain.

Formnext 2022, running at Frankfurt Messe from 15-18 November, will present UA4AM for the first time in a public space. This shows umati adopting additive manufacturing as an additional industry segment. You can meet BigRep at Hall 12.1 - Booth F01, where we will be happy to talk about the potential of standardization in 3D printing, as well as display the BigRep PRO.2, numerous prototypes, jigs & fixtures, and our cutting-edge productivity software solutions, CONNECT and



FLOW. Additionally, the types of materials one can use on our printers will be available, alongside our team happy to explain the various ins and outs of what BigRep has to offer.

About BigRep

A global leader in large-format FFF 3D printing, BigRep strives to transform its user's productivity and creativity with easy-to-use additive manufacturing solutions. With an aim to help companies accelerate innovation and rethink manufacturing, BigRep's German-engineered 3D printers enable engineers, designers, and manufacturers from start-ups to fortune 100 companies to go from prototyping to production faster, getting their products to market first. Through collaborations with strategic partners – including BASF, Bosch Rexroth, Etihad Airways, and Deutsche Bahn – BigRep continues to develop complete additive manufacturing solutions comprising of industrial 3D printers, software, advanced materials, and services. Founded in 2014, BigRep is headquartered in Berlin with offices and technical centers in Boston, Singapore, and Shanghai.

Learn more about BigRep [here](#).

About umati

umati (universal machine technology interface) is a global initiative for the promotion of open communication interface standards for machinery and production equipment. Here umati relies on OPC UA as the global interoperability standard and its support for seamless extendibility of object-oriented Information Models via Companion Specifications. The OPC UA Companion Specification for Additive Manufacturing (UA4AM) which is currently being developed is embedded in the umati initiative. The related interface is intended to facilitate the exchange of information between an AM machine and software systems.

Learn more about their aims at <https://umati.org/industries-additive-manufacturing/>.