



## BigRep Introduces the BigRep SHIELD, a Large-Format Dry Cabinet for Optimal Material Storage Conditions

*Designed to protect your filament from material degradation, the BigRep SHIELD dry cabinet stores up to 60 kg of filament in ideal conditions, eliminates more than 99% humidity, reduces material waste by 20% and repairs costs up to 50%.*

**Berlin, Germany. July 13, 2021** – BigRep, the global leader in large-format 3D printing, introduces the new BigRep SHIELD, an industrial filament dry cabinet that ensures optimal storage conditions for 3D printing materials. Without proper storage in a humidity-controlled environment, 3D printing filaments - particularly engineering-grade materials such as PA 6/66, TPU, PVA, BVOH, PET - will absorb airborne moisture and result in higher rates of printing error, nozzle clogging, and machine downtime.

Far surpassing the industry standard of 1%, the BigRep SHIELD maintains 0.1% humidity by looping air through a controlled desiccant chamber without the use of heat, therefore avoiding the risk of over-drying filaments from long-term heat exposure. As part of an industrial workflow, the BigRep SHIELD reduces misprints and material waste by 20% and saves up to 50% on repair costs caused by clogging and extruder damage.

"Environmental conditions, normally outside of your control, play a huge factor in the printability of the filament. We want our customers to produce quality prints every time, which is why we saw it important to provide a solution and especially a big one that can hold a lot of material," said Sven Thate, BigRep Managing Director. "To extend the life of your 3D printer and save time and money by preventing downtime and damages, the SHIELD is a must-have to avoid workflow disruptions."

In developing SHIELD, BigRep collaborated with Amboss+Langbein, an industry leader with almost 40 years expertise in drying systems for plastics manufacturing. This combined wealth of industrial knowledge, along with quality components and a Siemens control system, results in a robust and reliable machine that ensures ultimate productivity protection at all times. The industrial-sized storage chamber holds up to 60 kg of filament, enough material for one month continuous 24/7 printing.

- Interior dimensions: W x D x H: 480 x 480 x 1200 mm, 276 liters
- Storage capacity: Minimum of 12x 2.5 kg spools, 12x 4.5 kg spools, or 6x 8-10 kg spools

The SHIELD maintains constant overpressure for an airtight storage volume. This prevents new moisture from entering its chamber during regular operation and ensures the system can quickly remove any and all airborne humidity with 100% air recirculation. The SHIELD provides ample space for safe, long-term storage of highly-sensitive additive manufacturing materials to maintain their ideal condition.

### 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, and advanced materials. Founded in 2014, BigRep is headquartered in Berlin with offices and technical centers in Boston and Singapore.

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