HP, DECATHLON AND LONATI GROUP PRESENT THE INNOVATIVE SHOE PRODUCTION CONCEPT AT ITMA IN MILAN.

By leveraging digital technologies, the companies are defining the future of manufacturing. In Milan, Italy, this June 8, 2023 HP, a global technology leader, is proud to join forces with Decathlon, one of the world's largest sports companies, and Lonati Group, the world's leading manufacturer of circular knitting machines, to unveil their revolutionary manufacturing concept at the ITMA trade show in Milan. Together, they are presenting an innovative and sustainable approach to footwear manufacturing that is set to reshape the industry. Harnessing the power of advanced technologies, including HP's Multi Jet Fusion technology and Lonati's knitting machines for uppers, this collaboration paves the way for a future of sustainable footwear production.

Traditionally, footwear production requires numerous parts, adhesive materials and a significant workforce. However, HP, Lonati Group and Decathlon are revolutionizing the process by harnessing the power of 3D printing. With their latest innovation, they have developed a sports shoe that embodies the future of footwear manufacturing. This innovative shoe combines Lonati's meticulously crafted sock with an innovative midsole and outsole produced with HP's state-of-the-art 3D printer. Lonati's XT-MACHINE and Double Cylinder E1530XS knitting machines enable the production of uppers with single- or double-layer fabric, resulting in an integrated upper that offers unparalleled comfort, lightness, performance, and quality. HP's Jet Fusion 5200 printer produces both the midsole and outsole of the shoe, showcasing the cutting-edge capabilities of 3D printing technology. To ensure optimal performance, these components are made from BASF Ultrasint TPU01 material, a versatile thermoplastic polyurethane powder known for exceptional shock absorption and flexibility.

By integrating these advanced materials and technologies, Decathlon and HP are revolutionizing the sports footwear industry, paving the way for innovative designs that offer unparalleled comfort, durability, and performance. With this partnership, the companies intend to share a main message, focusing on the advantages of 3D printing and digital knitting for industrial-level manufacturing, emphasizing the following key points:

1. Customization, the shoe is highly customizable, allowing consumers to personalize the footwear to their own preferences and needs.
2. Circularity and repairability, using a glueless assembly method, the shoe can be easily repaired in case of damage, the cushion and upper parts can be separated, allowing targeted repairs without the need to discard the entire shoe. This not only extends the life of the product, but also reduces waste. In addition, the use of a single material, TPU (thermoplastic polyurethane), for the grip and cushion parts increases the recyclability of the shoe, all contributing to a more sustainable and environmentally friendly product life cycle.
3. Local production, with 3D printing the shoe can be produced locally, reducing emissions from transportation and supporting local economies.
4. Flexibility: the manufacturing process allows for optimized inventory and on-demand production, thus reducing waste.

Phillipe Seille, Exploration Leader at Decathlon, expressed his enthusiasm for the collaboration, stating, "We are excited to partner with HP's Customization and 3D Printing division and the Lonati Group on this project that exemplifies our commitment to sustainability. By utilizing the potential of

3D printing, we are revolutionizing the shoe manufacturing process by offering consumers customized, recyclable and locally produced footwear." Don Albert, head of Footwear and Sports at HP Personalization & 3D Printing, added, "HP's Multi Jet Fusion technology is enabling a new era of sustainable and innovative manufacturing. We are proud to partner with Decathlon to show the immense potential of 3D printing in contributing to a more sustainable approach to manufacturing."

Lonati Group's expertise in footwear technology aligns perfectly with these important shared values of sustainability.