

# WORTH PARTNERSHIP PROJECT, WHEN TECHNOLOGY AND CREATIVITY OF GERMAN DESIGNERS TRANSFORM PRODUCTS INTO EXPERIENCES TO IMPROVE THE QUALITY OF LIFE AND THE ENVIRONMENT

28 January 2021 - A lightweight multidirectional 3D knitted seating for passengers in drone taxis, a biodegradable Capsule Collection using algae as a raw material to develop a range of healthy new materials, the first 3-D designed zero waste whole garment collection, sound-infused heirloom jewellery for marking meaningful moments in time.

These are just some of the German projects selected within the WORTH Partnership Project, the largest creative incubator in Europe, that shows how technology can renew design.

"Technology can undoubtedly help to innovate design, giving life to one-of-a-kind furniture items, clothing and materials that carries us towards a more sustainable future, environmentally conscious and attentive to people's quality of life," explains Korinna Mollà, coordinator of WORTH Partnership Project.

Funded by COSME, the European Union's program for the competitiveness of small and medium-sized enterprises, WORTH Partnership Project is the largest European incubator in the creative field, with 152 selected projects involving 345 partners from 34 EU-COSME countries - from France to Germany, Spain, UK Italy, not forgetting Holland, Slovenia, Moldova, Estonia, Sweden, Finland, Montenegro, Serbia, etc. This European Commission project is a unique laboratory where European designers can experience the benefits of transnational collaborations and participation in an internal market of over 500 million people.

Below are some of the WORTH Partnership Project projects involving German designers or companies. The complete list of projects is available on the WORTH website, and images are available here.

#### **Aeras-x Seat for Drone Taxis**

A lightweight multidirectional 3D knitted seating for passengers in drone taxis **Countries involved:** Austria, Germany

**The challenge: t**he transport industry is evolving through new possibilities and textiles are playing a key role contributing with smart designs, durability, flexibility, comfort and low weight. Drone taxis will be a reality in a few years' time, so why not be part of shaping the future?

The solution: the Project will design and scale up a lightweight multi-directional 3D knitted seating concept for passengers in drone taxis providing maximum



comfort within the tight constraints of a drone taxi, through the characteristics of a multi-zone, adaptable suspension knit. The basis is knitting technology using biodegradable fibres including multi-zone knit construction varying elasticity. They will create soft spacers volumes acting like foam to maximise comfort



while seamlessly integrated in the whole knit process without the need of secondary materials or procedures. No-waste production of the knit is a key element of the seat's sustainability goal.

#### The partners of the project:

- **GREINER AEROSPACE GMBH (Austria)** Greiner aerospace is a full-service provider for aircraft seating with comfort and style. Aerospace is part of the 100% family-owned company group, which was founded in Germany in 1868 and in Austria in 1899, combining the expertise of a network structure with the flexibility of legally autonomous business entities.
- **KOBLEDER GMBH (Austria)** Kobleder was founded in 1927 as a knitting company focused on the production of 3D-knitted textiles. They have wide expertise in different sectors from aviation, automotive, furniture, lightning to protective garments.
- PROF. CHRISTINE LÜDEKE (Germany) Industrial designer with a focus on the aircraft seating industry.
   In parallel professor at Pforzheim University, Head of Department of the new M.A. Design & Future Making, which explores transformative approaches to design making between traditional and emerging technologies.

# New Matters A biodegradable Capsule Collection Countries involved: Germany, Denmark



**The challenge:** the material choice alone can account for up to 95% of a product's environmental and social footprint." (Kering, 2018). Currently there is still a big gap regarding the availability of healthy materials and fashion products that are circular and inspired by Cradle to Cradle design philosophy. Algae as positive impact materials have been explored in material labs or textiles, but are not yet used for wearable garments in a fully circular collection.

The solution: the project tackles this challenge by <u>using algae as a raw material</u> to develop a range of healthy new materials. New Matters helps transform an efficiency discussion in sustainability to eco-effectiveness and material health. The slowness of lab-made materials offer an antipole and alternative to fast fashion and inspire a mindset shift.

## The partners of the project:

VON TAUBEN & SPATZEN (Germany) based in Berlin, Von Tauben & Spatzen is a creative design and
research studio exploring, analysing, and designing with and through healthy materials. We curate
and consult on circular and sustainable fashion, textiles and materials for a positive impact following
the Cradle to Cradle design agenda. The founder, Sarah Maria Schmidt holds the degrees
Sustainability in Fashion (MA), a BA in Design/Fashion Design and a Bachelor of Culture & Arts and
diverse industry experience.



 MATERIAL DESIGN LAB (Denmark) As an interdisciplinary space for material understanding and experimentation with facilities for hands-on material studies, Material Design Lab facilitates technical and artistic material experience and exploration through education, research, development and showcasing of materials.

H|H
The first 3-D designed Zero Waste Whole Garment collection
Countries involved: Germany, Sweden



**The challenge:** starting with the need to develop new technologies for textile and garment production for which the concept of waste becomes redundant, the textile industry needs to re-think its manufacturing workflow to be more sustainable and competitive.

The solution: the innovation in the H|H Zero Waste Manufacturing System lies in the integration of two different textile technologies (customised spinning production and zero waste weaving technology) into one zero waste whole garment production process. This project aims at changing existing textile production infrastructures through a completely new design workflow. HILO controls on-demand yarn quantity and qualities, McQuillan designs zero-waste garments directly off the loom. Both technologies address many of the problems of garment production and have the potential to provide new workflows for local micro-factories. The idea is to use software to translate digital patterns

into different yarn thicknesses varying from very light to heavy.

# The partners of the project:

- **STUDIO HILO (Germany)** established in 2018, Studio HILO has been developing diverse open-source prototypes for digital spinning systems. Their software and hardware allow professionals to adapt industrial yarn productions to their needs, making production more local and flexible.
- **HOLLY MCQUILLAN (Sweden)** Holly McQuillan develops methods for designing garments that can be constructed in 2D and when cut become 3D articles of clothing.



### **Horai Collection**

Sound-infused heirloom jewellery for Marking meaningful moments in time **Countries involved:** Germany, Poland

**The challenge:** to develop a process that combines computational design with artisanal craftsmanship. In this process, we digitally transform voice data into three-dimensional CAD models.

The solution: this project worked on <u>uniquely personalised jewellery</u>, designed with the customers' voice and its sound waves at its core. Recorded messages, memories, and poetry are infused and transformed into personal and poetic pieces. The jewellery pieces come to life by infusing the sound waves of your spoken words into a growth algorithm that then translates them into intricate organic shapes. The 3-D forms generated are 3-D printed to produce patterns for traditional lost-wax casting.



# The partners of the project:

- **Lissome (Germany)** Dörte Lange is the creative director and founder of Lissome and an expert and passionate advocate for sustainable lifestyle. Dörte has worked, as art director for ELLE magazine and international design + branding agencies.
- **Vipa Designs (Poland)** are casters, manufacturers and designers of high-quality gold, silver, platinum and palladium jewellery, offering our services both to private clients and to the trade. Founded in 1979 by managing director Peter Crump, Vipa soon established an enviable reputation for innovative design and the high quality manufacturing of jewellery.

### **WORTH Partnership Project**

A European Commission initiative that aims to support collaboration between PM and start-ups of designers, producers and technology companies to create new products and implement innovative and disruptive ideas. The initiative is implemented by a consortium across Europe, with the belief that creative industries (SMEs and start-ups) are the main drivers of economic growth in Europe.



The WORTH Partnership Project is funded by COSME, the European Union Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises.

#### Consortium:



AITEX Research Institute. Project Leader - Centre of excellence in applied research and advanced technical services for industry





KEPA Business and Cultural Development Centre - Intermediary authority and management of support programs for SMEs and entrepreneurs



IED Istituto Europeo di Design- International Institute of Higher Education specializing in design, creativity, communication and management



DAG Communication - Communication agency with experience in complex projects around the world and with a special approach for different target media



AA Avvocati Associati Franzosi Dal Negro Setti - Law firm with a strong reputation in the field of intellectual property law (design, trademarks, patents, copyrights, advertising, unfair competition) and in a range of business and commercial affairs at European level

#### Learn more:

www.worthproject.eu



@worthproject



@worth project



Worth Partnership Project



Worth Partnership Project