

CIPRES will be presenting at Formnext 2018 an industrial dyeing machine eCOLOR Type 1/350/1 for Additive Manufactured serial parts made of polymer materials

Hand in hand with CIPRES GmbH and Thies GmbH & Co. focused on the production of a dyeing machine for the treatment of additive manufactured polyamide components. Thies has developed a highly productive, industrial machine named eCOLOR Type 1/350/1.



eCOLOR has been developed for the treatment of Additive Manufactured parts, e.g. serial components, spare parts and/ or functional prototypes. It offers excellent dyeing results at highest productivity and reproducibility rates.

The dyeing machine is able to run at operating temperatures of up to 140 °C and at maximum 5bar operating pressure. With a packing diameter of 310 mm and packing height of 500 mm, the basic machine is designed to cover standard production capacities up to 37 liters. eCOLOR is further equipped with a flexible loading system for small (8 ltr.), medium (19 ltr.) or large (31 ltr.) batch sizes. Optimizing all stages of the dyeing process, including pre- and post- treatments, the frequency inverter driven pump allows an accurate and economic adjustment of the liquor flow as well as of the flow direction (in/out – out/in).

eCOLOR processes on an industrial scale with perfect process reliability as the machine is equipped with a state-of-the-art controller to monitor each step of the operation. With the user-friendly control software, reproducible and constant dyeing results can be achieved. Then, each process step can be exactly defined and optimized according to the individual technical and/or application-oriented needs.

Aiming for a high reproducibility as well as for a reduction of the operating costs and the environmental impact, dyes and chemicals can be precisely adapted. These machines are manufactured to comply with pressure vessel codes and safety regulations of the operating sites, e.g. DGRL, ASME, etc.



## **STRONG PARTNERS FOR STRONG PRODUCTS**

CIPRES has joined forces in one united mission with Thies, to complete the production chain in the refinement of nylon printed parts and to stand out in the new production way "3D printing". The combination of our complementary expertise in colors, coloring and finishing solutions will open a new chapter in our common history. We will entrance the excellences of this partnership to improve and expand your portfolio.

**CIPRES Technology Systems** was founded in 2004 by Carlos Prestien. From 2006, CIPRES began with the serial production through Additive Manufacturing and coloring of SLS components, setting the milestone for batch production on the market. We are pioneers of the coloring process and the leading service provider in this field. By now the focus of CIPRES is a further development of color techniques, color units and solutions for surface finishing.

On 1st August 2018 the company **CIPRES GmbH** was founded. CIPRES GmbH has taken over the service sector of CIPRES Technology Systems and will additionally offer the sale of coloring machines and machines for the finishing of additively manufactured components with the corresponding trainings.

## Thies GmbH & Co. KG

The origin and headquarters of the Thies Group is the old Hanseatic city of Coesfeld in Münsterland, Westphalia. A traditional textiles area, Münsterland is the birthplace of, and home to, a number of reputed businesses engaged in this sector. Thies lives out this tradition, supplying textile dyeing machines across the globe from Coesfeld since 1892. In 1929, the patent for and the following construction of the first pressure vessel made it possible, going forward, to carry out high-temperature dyeing operations. And this set new benchmarks for the whole industry. Until today, the family-run concern is challenging the interplay between product design, production technology, and control and application engineering – as the specifications with which the finishing of the goods must comply are extremely diverse. Based on more than one hundred and twenty years of experience, Thies is serving its business partners all over the world.



To complete this mission, CIPRES has added other strong partners among others:

**Additive Manufacturing Technologies Ltd** offers automated post processing solutions. With their complementary technology called PostPro3D, which allows end users to achieve an injection molded surface finish on 3D printed parts, creating an increased part value.

With **3D Cosmic, Archroma** brings 130 years of color expertise into the coloration of your 3D printed parts. The 3D Cosmic range has been specifically created for the coloring of 3D printed goods and will launch for sale online very soon.

**RÖSLER Oberflächentechnik GmbH**, a global leader in surface preparation and surface finishing possesses comprehensive knowhow and has decades of experience. Together with the experience of Rösler, as a specialist for surface technology and CIPRES, as an expert in the serial production and finishing of laser sintered polymer parts, we will adapt and automate these procedures to the needs and requirements of the market.