## Ruwel and tw-elektric Horst Müller GmbH & Co. KG jump ahead of the Direct Imaging game

Leading PCB manufacturers Ruwel and TW have integrated their industry-leading Ledia direct imaging machines from Ucamco with autoloading solutions from ASS Luippold, their specialist automation supplier of choice. The resulting systems combine robust reliability and ease of use with intelligent data management, speed, versatility and flexibility.

**Gent, Belgium – August 11th, 2016** – Ucamco and ASS Luippold are pleased to announce that Ruwel and TW, two PCB manufacturers with very different manufacturing environments, have integrated their existing Ledia Direct Imaging systems into automatic imaging lines using Autoloaders tailored to their individual needs by ASS Luippold.

At Ruwel, Ledia is used for imaging soldermask on medium sized jobs, with each panel taking up to 60 seconds to image. Here, ASS housed the Ledia within an in-line linear axis system integrated into a conventional conveyor line. Panels are transferred between the conveyor, the autoloader and Ledia by a single arm moving in simple horizontal, vertical and rotational axes. TW uses its Ledia to process much faster inner- and outerlayer dry film resists in a high-mix very low volume and prototype production environment, so ASS installed a faster more flexible off-line autoloading system whose two highly versatile high-speed 6-axis robot arms can execute multiple complex tasks in parallel.

In both cases, incoming panels are placed on a pre-centering table where they are cleaned before moving to the Ledia for imaging. TW's system also inspects each panel's fiducials then places it within microns of its optimum position on the Ledia for increased imaging throughput. The combined systems are highly data intelligent, fast and flexible, yet robust, precise and reliable, and designed for 24/7 operation with minimal cost in use.

The savings and benefits to Ruwel and TW are significant. Not least, as each panel enters the system, the autoloader identifies it, transferring job data and processing instructions to the Ledia in milliseconds, saving hours of valuable job set-up time over the course of a 3-shift day. But perhaps the most important reason for automating Ledia's panel handling operations is that it only works when an operator is there to feed it with cleaned, centred panels. In practice, operators may be busy with several machines, and need breaks from time to time, so as for any manually operated machine, there will inevitably be idle moments.

Automation ensures that the Ledia is used to its maximum capacity, while freeing operators to work more effectively throughout the imaging department. It can also save further money by, say, eliminating the need for phototools, or by removing a process bottleneck. And it improves quality and yields by eliminating the risk of scratching and inadvertent fingerprints.

By automating Ledia, Ruwel and TW have awarded themselves some serious advantages in a ferociously competitive world – it's only a matter of time before they are joined by like-minded PCB manufacturers whose vision will place them, too, firmly among the world's leaders in PCB imaging.

## **About Ucamco**

Ucamco (formerly Barco ETS) is a market leader in PCB CAM software, photoplotting and direct imaging systems, with a global network of sales and support centers. Headquartered in Ghent, Belgium, Ucamco has over 25 years of ongoing experience in developing and supporting leading-edge photoplotters and front-end tooling solutions for the global PCB industry. Key to this success is the company's uncompromising pursuit of engineering excellence in all its products.

For more information on Ledia, please contact Ucamco:



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## **About ASS Luippold**

ASS' LDI self-contained automation solutions and options including PCB precentering, cleaning and code recognition can be adapted to all DI systems, manufacturing environments and production needs. Printed circuit boards are handled gently by top-of-the-range 6-axis industry robots with intelligent PCB gripper systems, while ASS' focus on Industry 4.0 intelligent systems ensures open interface connections for complete data exchange regarding programs and machine states. ASS places great importance on low cost of ownership, reliability and its use of high quality low-maintenance components.

For more information about LDI automationplease contact ASS Automation:



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