

An insight into the revolution of Printing Technology with OnyxOMNIA at Drupa 2024

he recent Drupa 2024 trade fair marked the debut of OnyxOMNIA, a groundbreaking advancement in the printing industry.

Crowds of people gathered at our booth every day and throughout the duration of the fair to watch live demonstrations of the unique FlexoDigital machine on the market, setting a new benchmark for mix of small and medium runs. This innovative machine seamlessly integrates the strengths of Flexo and Digital printing technologies, presenting an unparalleled combination of versatility, efficiency and sustainability.

Revolutionary Versatility and Customization

The OnyxOMNIA features the possibility to print alternatively with fully Flexo technology, with fully digital technologies or with a combination of both and therefore stands out as the most versatile printing press available today. Its design allows for the addition of one or more Down-Stream Units (DSUs) tailored for various functional or embellishment purposes. This flexibility extends to the wide range of substrates and ink types it can handle, making it an ideal choice for diverse printing needs. Whether dealing with water-based, solvent-based, or a combination of both, OnyxOMNIA ensures optimal performance and exceptional print quality.

Economic and Efficient Operation

A key highlight of the OnyxOMNIA is its cost-efficiency. By balancing the use of Flexo CI units for solid colors and Digital units for process colors (CMYK), the machine achieves rapid changeovers and minimizes downtime. The integration of digital technology means instantaneous job changeover, reducing the need to frequently change Flexo colors with each job. This approach not only lowers operating costs but also significantly boosts productivity.

Unmatched Productivity

With a staggering printing speed of up to 400 meters per minute and a maximum web width of 1350 mm, the OnyxOMNIA is designed for high productivity. Its innovative Active Start technology streamlines the setup process, enabling automatic pressure and register settings in under three minutes. This efficiency reduces material waste to less than 20 meters per startup, making it a leader in fast and sustainable printing solutions.

The true revolution in terms of efficiency and versatility is represented by the possibility of printing alternatively with fully Flexo technology at a maximum printing speed of 400 mpm, with fully digital technologies only at a maximum printing speed of 150 mpm or with a combination of both

(FlexoDigital) at a maximum printing speed of 300 mpm, making it as a matter of fact a true 3-in-1 machine!

Commitment to Sustainability

Sustainability is at the core of OnyxOMNIA's design. The machine features the cutting-edge Active Pack technology, which focuses on energy savings and reducing consumable material usage. This eco-friendly technologies can lead to savings of up to 300,000 EUR per year, on a single machine! The Active Dry® system optimizes energy consumption during the drying phase, adjusting drying power based on ink coverage and further reducing energy use by up to 50%.

The innovative Active Ink system also plays a crucial role in sustainability. By adjusting pumping cycles according to the printing characteristics identified by Active Start, it achieves up to 60% reduction in energy consumption. These features underscore OnyxOMNIA's commitment to minimizing its environmental impact while maintaining top-notch printing performance.

Compact and User-Friendly Design

The OnyxOMNIA is not only powerful but also compact and ergonomic. Its patented configuration of the Flexo CI Drum and Digital Printing Engine ensures the shortest web path, facilitating easy maintenance and cleaning. The ergonomic cockpit, featuring a floating HMI that adjusts to the operator's height, enhances ease of use and operational efficiency. With a single integrated control panel, operators can manage both Flexo and Digital printing technologies seamlessly from one location.

Pioneering Print Quality

OnyxOMNIA delivers exceptional print quality, combining the precision, robustness and reliability of Flexo technology for solid colors with the flexibility of Digital technology for variable data. This dual capability ensures vibrant, high-quality prints, whether for detailed graphics or large solid color areas.

OnyxOMNIA doesn't just connect Flexographic and Digital printing but also establishes higher benchmarks in versatility, efficiency, and sustainability. After years of continuous trials and rigorous testing Uteco has brought OnyxOMNIA to life through a journey that has culminated in a machine embodying a true revolution in the world of printing.

OnyxOMNIA is both a major achievement for Uteco and a groundbreaking approach to the printing industry.

