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The Role of Automated Mounting in Sustainable Flexographic Printing

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Sustainability has become a core value of many industries, and flexographic printing businesses are also adapting to the change. To reduce the net impact of different prepress and postprint processes, automation has been proved to be an efficient and sustainable method. Discover the main benefits of automated plating in this short paper.

SUSTAINABILITY IN FLEXO PRINTING

Sustainability has become a major concern for businesses across various industries, and the flexographic printing sector is no exception. With a growing focus on reducing waste, saving resources, and minimizing environmental impact, automated mounting has emerged as an essential tool for promoting sustainable practices in flexographic printing.

In this short paper, we will explore the role of automated mounting in sustainable flexographic printing, discussing its impact on waste reduction, energy efficiency, and overall sustainability.

The author Martijn Otten, Managing Director of AV Flexologic, has more than a decade of experience in the flexo industry and he is committed, together with his team, to improve sustainability in flexo printing.

Martijn Otten,
AV Flexologic Managing Director

AV FLEXOLOGIC VALUE

Revolutionizing the flexo industry, one innovation at a time, while continually championing environmentally-friendly practices

What sustainability means for the flexo industry

As the demand for packaging materials continues to grow, so does the need for environmentally responsible production methods. Flexographic printing will adapt in the upcoming years to meet these sustainability requirements. One significant development towards a better eco-friendly printing is the adoption of automated mounting systems for flexo plates. Let's go through the environmentally-friendly benefits of adopting automated mounting in the flexo industry.

75% reduction

Waste reduction

A primary benefit of automated mounting is the reduction of waste related to plate mounting errors. According to industry studies, manual plate mounting can result in errors of up to 0.300 mm color-to-color, while automated systems reduce this to less than 0.020 mm [1]. This improvement in accuracy not only enhances print quality but also minimizes waste due to mounting errors. In one case study, a flexographic printing company reported a 75% reduction in waste after adopting an automated plate mounting system [2]. By reducing the waste generated by mounting mistakes, automated mounting contributes significantly to the sustainability of the flexographic printing process.

Efficient use of plates

Plate usage reduction

In cases where large one-piece plates are being used, automated plate mounting facilitates being able to make use of multiple lane plates. Especially in combination with ECG printing, the plate mounting accuracy needs to be secured. With automated mounting systems it is possible a higher level of accuracy and precision, which in turn can facilitate a more efficient use of plates and lead to waste reduction.

Energy efficiency

Automated mounting systems often incorporate energy-efficient components and smart technologies that optimize energy consumption. For instance, some systems feature energy-saving modes that minimize power usage during idle times. In addition, according to AV Flexologic customers, automated mounting can reduce setup times by up to 50% compared to manual processes [3], leading to less energy consumption during the production process. Consequently, automated mounting contributes to the overall energy efficiency of flexographic printing operations.

Reduced use of chemicals

Automated mounting systems promote the efficient use of chemicals, such as adhesives and solvents, required during the plate mounting process. Precise application of these chemicals not only reduces waste but also minimizes the release of volatile organic compounds (VOCs) into the environment. By ensuring the judicious use of chemicals, automated mounting plays a vital role in promoting sustainable flexographic printing practices.

Enanched recycling potential

By minimizing plate mounting errors and improving the overall quality of the printing process, automated mounting can help increase the recycling potential of printed materials, lowering the environmental impact of the printing process.

Reduced carbon footprint

The adoption of automated mounting systems can help reduce the carbon footprint of the flexographic printing industry. The combination of reduced waste, energy efficiency, and minimized chemical use contributes to an eco-friendlier production process. Moreover, by embracing automation, printing companies can streamline their operations and optimize the use of resources, further reducing their environmental impact.

Achieving sustainability and increasing printing quality

Automated mounting plays a crucial role in promoting sustainable practices in flexographic printing by reducing printing waste due to mounting errors, reducing plate waste, improving energy efficiency, and minimizing the use of chemicals. As the demand for environmentally responsible printing solutions continues to grow, adopting automated mounting systems will not only help printers meet sustainability requirements but also enhance the overall quality.

AV Flexologic Automated Solutions

AV Flexologic stands at the forefront of the flexo industry, leading the way in automatic mounting and prepress solutions. Our commitment to innovation is evident in our diverse range of automated mounting machines and comprehensive prepress automation solutions. Each of our offerings not only ensures unparalleled accuracy and efficiency, but also contributes to a more sustainable prepress workflow, fostering a safer and healthier environment for prepress operators.

We are not just about providing solutions - we are about sparking transformation. We invite you to join us in redefining the boundaries of the flexo industry. Explore our automation options and discover how we can revolutionize your prepress workflow, enhance your sustainability efforts, and safeguard your operators.

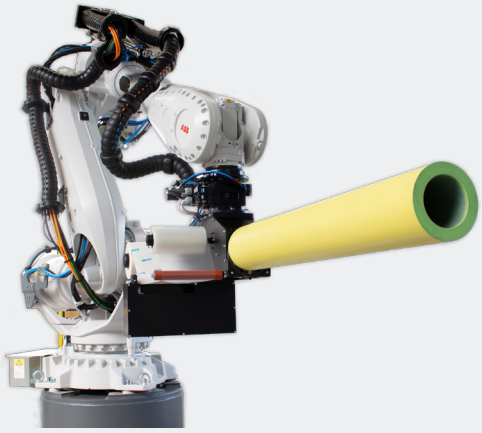
Do not just keep pace with the industry - lead it. Reach out to us today and let's shape the future of flexo together.

SAMM 2.0
Automatic mounting

Discover SAMM 2.0

FAMM 3.0
Fully automatic mounting

Discover FAMM 3.0



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Fully automated pre-press workflow

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