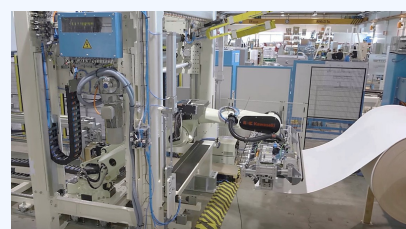
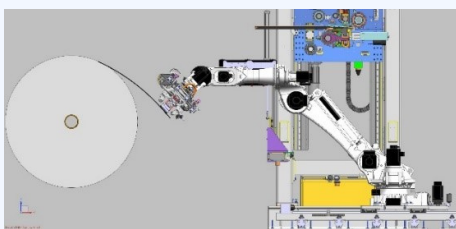
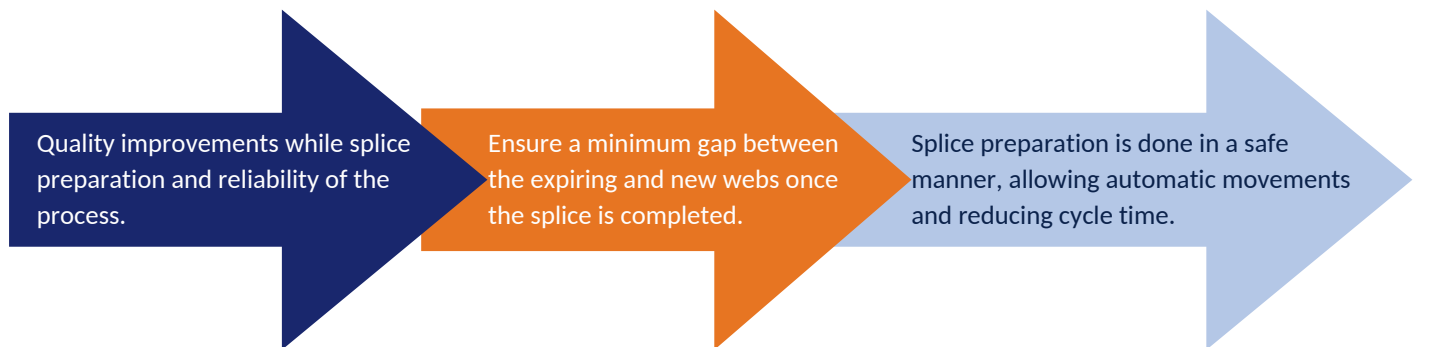


# AUTO SPLICE PREPARATION SYSTEM

Processes automation is a daily topic. Automatic workflows make production more reliable and thus, more efficient. The main objective of this development is to offer an automatic system that allows our customers to **increase the efficiency of their process** by optimizing the splice preparation by the operator. This involves eliminating manual tasks, reducing preparation time and human errors.

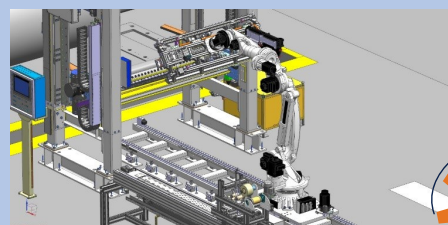
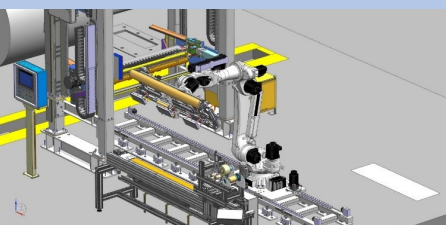


*Robot picking up the paper process*

The time required to prepare and ensure a quality splice makes the demand for speed in preparation ever greater. Reducing splice preparation time also reduces stress on the operators. Most failed splices are due to poor preparation. Stopping a production process of printing or lamination and the subsequent speeding up has a very negative effect on the efficiency of the line and on final product quality. Robustness and repeatability of the splice preparation task is a critical aspect.



**Auto Splice Preparation System** utilizes a robotic system with a head that has multiple tools for the automatic preparation of the splice without any operator interaction. Multiple technologies are used, including artificial vision, to detect and position the paper web.



Auto Splice Preparation System is able to grasp the edge of the paper from the new reel, even if the papers have different weights and thicknesses.



New reels can be unwound in both directions, and the system is able to detect and capture the web from the reel whether it comes from the top or the bottom of the reel. The entire process is coordinated with the rest of the machine's automatic sequences, such as automatic reel loading, automatic splice sequence, etc.



As a correct preparation is essential to ensure the quality of the splice as this could be the origin problems in the rest of the process; a small overlap between webs would be a point of double thickness that would affect the proper functioning of the process. **Eliminating human errors, specially working with butt splice, will ensure success in the remainder of the process.**

*Robot collecting the adhesive tape and attaching it to the preparation arm*