





# Sleeve*MASTER*<sub>AUTO</sub>



- Automatic plate mounting systems have existed for a while, but they only gained momentum in the market a few years ago.
- The market's requirement for an automatic plate mounter lead us to investigate the possibility to introduce our own automatic machine, the SMA project stated back in the 2018.
- Our starting point was that we wanted to have an automatic machine that improved the mounting performance of the Irisleeve HD and this was difficult and took time.
- We have given the market what it wanted, but in a reliable more consistent manner.





#### SleeveMASTERAUTO ROOTS

Keeping the best and proven CAMIS IRISLEEVE HD features we improved them and incorporated them into our new automatic mounter.

- The frame layout is insipired by the IRISLEEVE HD
- The mandrel on the Sleevemaster HD is even stronger
- The camera beam is the same design as used on the IRISLEEVE HD
- The plate application roller is new design from the IRISLEEVE HD
- Maintained the high level of operational Ergonomics
- Camera beam and mandrel stays fixed like the Irisleeve
  - > Vastly Reduced Movement compared to all other solutions
  - > No 'heavy moving parts' as we see on many competitors machines
  - Reduced calibration
  - ➢ Reduced wear
  - ➢ Reduced cost
  - > Vastly



#### SleeveMASTERAUTO SIMPLICITY

The aim of the SMA is to deliver to the operator a new tool, that is able to deliver automation without the issues often linked to this kind of technology

- With maximum machine and process reliability
- User friendly interface based on the Irisleeve HD platform
- Updated MMRM imaging software for camera / image management
- Full hands free plate registration
- Full hands free plate application (even used plates)
- The ability to manually override all systems and mount either by 'push botton' or by 'hand' (complete machine/mounting dependance)



#### SleeveMASTERAUTO KEYPOINTS

#### The SMA KEYPOINTS

- Double decker cameras
- Plate Mounting table
- Plate manipulator
- Plate Application roller
- Anti Curl System
- Active Skew Control
- Semi Auto sleeve change

Speed, efficiency & accuracy





#### SMA DOUBLE DECKER CAMERAS

In some automatic machines the camera is pointed to the mandrel TDC with the following negatives:

- The gap between the table doesn't support the plate in the crosshairs / image Zone
- Increases risk of distorted cross hair image
- Possibility for poor/inconsistent register
- Cross Hair covered by pressure roller







#### SMA DOUBLE DECKER CAMERAS

With the SMA the main cameras are 60mm behind the mandrel TDC.

- The reference marks sit on the table, where no distortion affects the cameras image
- A simple combination of air and roller are able to remove any image deformation due to plate curl (ANTI CURL SYSTEM)
- The 2<sup>nd</sup> set of cameras are used for reporting and controlling functions







#### SMA DOUBLE DECKER CAMERAS





## SMA MOUNTING TABLE

The SMA mounting table is a sturdy reinforced aluminium structure

- Full width, front and back
- Automatic table positioning controlled by the CNC system
- Adjustable front and back portion to reduce the gap over the sleeve







#### SMA PLATE MANIPULATOR

- Sits independantly on the mounting table
- 2 independent manipulators equipped with suction cups carefully position the plates
- Able to handle both wide and narrow plates (offset or in lanes)
- Guided and controlled by the MMRM vision system







## SMA ACTIVE SKEW CONTROL

- Track and control plate skew during application
- Uses specifically designed plates
- The main cameras are able to track the plate even during plate application
- The secondary roller keeps a low pressure on the plate (assisting the Anti Curl System)
- The rear table is able to adjust to compensate plate skew during appllication
- Works only when mounting from the front of the plate





#### Sleeve*MASTER*AUTO Benefits in the press room

- Raise the level of standardisation in the plate mounting department
  - Consistent quality between operators, shift after shift
  - Increased standardised register over conventional mounters
  - Reduces the risk of press waste and downtime
  - Consistent mounting times for optimal cost control
  - Consistent Print quality and press set up times due to standardized register and application
- Reduces operator stress
  - With Flexo 4.0 integration, zero set up mistakes (QA scan info from ERP)
  - Reduces the need of sensitive manual operations
- Quality control
  - Integrated and automatic reporting features
  - Check, control and compare ongoing and previous jobs



#### Sleeve MASTERAUTO Benefits against the competition

- Vastly Reduced movements = less drives, less wear, less parts, less complication
- Vastly reduced ongoing calibration and annual factory service requirements
- Ability to work independently from the automatic system
- Ability to work automatically with all but the worst quality used plates
- Ability to track and control plate skew
- Ability to work with all presses up to the width of the SMA

