

Communication – October 2020

## NEW LCP METAL TAPE LONGITUDINAL FEEDING - CUTTING - PULLING

### COMPACT – MODULAR – ERGONOMIE IN COIL PROCESSING

T.H.E. MACHINES – Switzerland presents its newest **LCP Module** longitudinal tape feeding, cutting with edge trim winding and pulling unit. Specifically designed and engineering to facilitate a secure introduction of alloy tapes with edge cutting and waste trim winding without impacting, disrupting or posing any danger to the parallel process of metal forming and welding.

Process stability and Operator safety are of paramount importance in any production environment.

Available on all the latest FWM and MFWL multi-layer plastic metal composite pipe production lines, this module can also be added to existing and third party lines.

### LCP at a glance

- Compact with **minimal foot print**. Ergonomic design. All the processes of tape centering, cutting edge trim winding and tape haul-off (capstan) are housed in one dedicated protective unit.
- Respecting all safety requirements, designed for location in continuous production environment and with easy access to all elements.
- Engineering = Robust, Execution = Precise, the System permits long-term line performance under the most demanding conditions.
- Possible integration in an existing line (retrofit).
- Easy handling of the edge strip winders during coil transfers.
- Multiple trim edge winders for easy access and safe unloading of the waste spools.
- Integrated inner tube guiding aid unit (PGS).
- Excellent accessibility to all components and visibility with led lighting illumination to entire work area.
- Easy mechanical maintenance and access to cutting unit (knives) and capstan.
- Easily accessible cable ducting for post integration of additional wiring customer and simple color coded pneumatics.

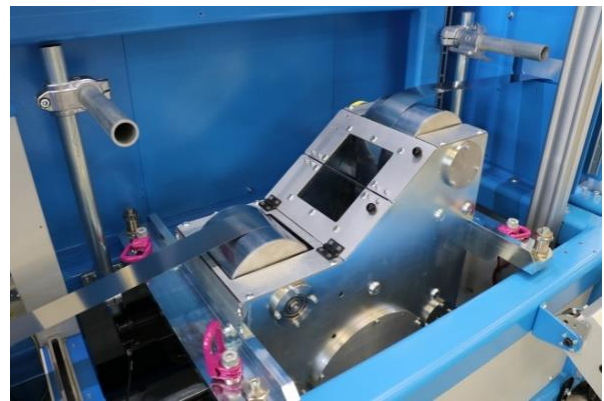


Available on  YouTube <https://youtu.be/iQ7ucLi Uno>

# LCP Cutting - Trim Winding - Tape Pulling

## The key performances of our technologies

- Easy set-up and alignment due to compact machine length and indexing system with downstream FWM (Forming & Welding machine).
- Very good supervision and visibility of the work area with protection doors closed.
- Stable and constant working speed from 0 to + 60 m/min thanks to the new servo motor.
- Integrated non-contact web centering system. The system corrects tape deviations, due to tape sabre effect between coil batches. Continuous re-positioning of the tape at the entrance of the tape haul-off and pulling unit CPT. The system is connected directly to the production recipe menu and the parameters are loaded automatically for each product.
- Deviations in strip positioning according to strip width, thickness and type of strip are automatically corrected.
- Integrated web tension control system before cutting. This system allows continuous control of any change in the state of the different types of strip such as variation between each coil, fault generated by an operator when threading the strip, detection of a mechanical problem on one of the strip unwinding elements, wrong selection of load weights on the tape dancers.
- The system allows direct comparison of production lots, lot to lot of the same product for quality control tracing.
- Integrated continuous strip width measuring system. The precision measuring head continuously validates the set tape cutting width in our SEC (Strip Edge Cutting), any deviation from this width is recorded and visualized in our system and alerts the operator. The data is collected for quality control purposes.
- Strip tension management system for downstream forming. The tension is controlled and monitored by a precision strain gauge. It ensures a constant tension in the forming process regardless of the production speed.



For further more detailed information, please don't hesitate to contact us.