

New cutter technology made by KELLER

Press release 07/2020
KELLER ICS



In cooperation with SEW, KELLER HCW has completely revised its previous cutter technology to meet the future requirements. SEW converters of the Movii-C generation are used for the new development of the cutter. The modular design allows optimum energy efficiency. The common intermediate circuit

ensures the energy exchange between the axes. Due to the different acceleration and deceleration requirements of the drives, the braking energy of one axis can be used for the acceleration of the other axis. In this way, energy losses in the braking resistors and thus cooling measures in the switch cabinet can be reduced. The high-performance Movi-C controller calculates the complete cam disk application by using basic mathematical functions. Therefore, the former data blocks for the individual cam points belong to the past. The customer can make necessary changes to products independently using the Keller operating concept. The dimensions and output data for each size are stored in the Siemens TIA control system. The cutting length can be variably adjusted in the running process. In addition, the time for cutting and spacing and the distance between the gaps can be influenced.

The lifting of wires and tables is automatically calculated in the controller. The communication between the TIA control system and the SEW control system is reached by the Profinet fieldbus system. Moreover, the system is optimized by the improved controller properties of the Movi-C series.

The clay column detection can be realized by an incremental encoder on a measuring roller or measuring belt or optically via a laser. The advantage of the optical clay column detection by laser is the avoidance of mechanical influences on the measurement result during the cutting process.

Furthermore, functional safety is an integral part of this converter series up to PL (Performance Level) according to EN ISO 13849-1 or SIL 3 (Safety Integrity Level) according to EN 61800-5-2, EN 61508.