



komax

TM4000

SEMI-AUTOMATIC MODULAR MACHINE PLATFORM

The TM4000 is a modular machine platform that fills the gap between standardized wire processing machines for individual processing steps and fully automatic production systems specially designed for one specific cable assembly. It offers an economical alternative between the two system types and is used for semi-automatic assembly of sensor and data cables in the automotive and industrial sectors.

The powerful TM4000 covers a wide variety of applications. The system can be equipped with various reliable process modules, quality tools and customer specific elements. Due to the modularity of the platform, the machine can be configured to a customer-specific system that suits the individual needs of the customer.

Options

- Custom cable clamp
- Custom crimp applicator
- Automatic crimp height adjustment
- Crimp module with split cycle
- Terminal strip chopper
- Paper winder
- Bad part cutter
- Bad part collector
- Automatic secondary locking
- Automatic block feed by bowl feeder
- Pick and place unit for loose piece handling
- Automatic take-over
- Automatic take-out
- Finished product buffer system
- External trigger
- Remote access
- MES data transfer

Process modules

- Double seal module
- Stripping unit
- Crimp module
- Block loader

Quality tools

- Vision sensor for polarity control
- Optical sensor for strip and seal quality monitoring
- Crimp Force Analyzer (integrated)
- Terminal locking monitoring
- Camera for visual check

Technical Data

Cable length*	max. 1300 mm (51.2 in)
Outer cable diameter**	max. 14 mm (0.55 in)
Inner conductor diameter	max. 9 mm (0.35 in)
Dismantling length***	min. 14 mm (0.55 in)
Strip length	0.2 – 40 mm (0.008 – 1.6 in)
Wire cross section****	max. 6 mm ² (9 AWG)
Cable clamp speed	max. 800 mm/s (31.5 in/s)
Electrical connection	220 V - 50 / 60 Hz
Current	max. 16A
Compressed-air connection	6 bar (87 psi)
Dimensions (L X W X H)*****	1200 x 884 x 2136 mm (47.2 x 34.8 x 84.1 in)
Weight	ca. 350 kg (ca. 772 lb)

* Uncoiled cable

** Determined by the resolution of the light curtain

*** Smaller dismantling length upon request, smallest is min. 8.2 mm (0.32 in)

**** Determined by crimp module, stripping unit is max. 16 mm² (5 AWG)

***** With tower light

Highlights

- **Modular machine platform**
- **Customer-specific system**
- **Proven solution(s)**
- **Networked machine**
- **Online maintenance help**