

Gamma 255

The fully automatic wire processing machine for wires with small cross sections





Top quality processing over a uniquely broad range of cross sections. This fully automatic wire processing machine excels in its simplicity of operation and flexibility. Whether the task is double-ended crimping or twisting, fluxing or tinning, the Gamma 255 will carry it out with compellingly unique process control and minimal changeover times.

In spite of its compactness, this unit has fully integrated quality-monitoring and feed systems as part of its standard equipment.

Area of application

The Komax Gamma 255 is a flexible fully automatic wire processing machine for efficient wire processing. It processes cross sections in a range from 0.0123mm²/AWG36 to 2.5mm²/AWG14 in excellent quality. It is compatible with all commercially available tools. You can crimp both ends of wires as short as 20mm.

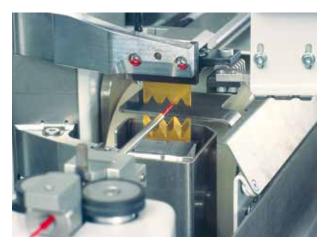
Technology

The entire cross section is processed using programmable, highly dynamic servo-drives and V stripping blades. As part of its standard equipment, the machine has a prefeeder, splice detection, wire-end monitoring and knot detection, as well as two wire straightening stations.

The integrated prefeeder assures gentle wire feed from drums, coils or reels even at high draw-in speeds. A bad-wire handling system with automatic post-production is also integrated.

The machine has a WPCS interface and can thus be easily integrated into a production planning system (Komax MES or customized).

To verify quality, you can also integrate devices for measuring crimp height (Komax 341) and pull-out force (Q1210, Komax 332) into the production process.



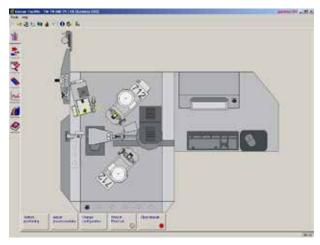
▲ Cutting head Gamma 255



A Prefeeder Integrated

User friendly

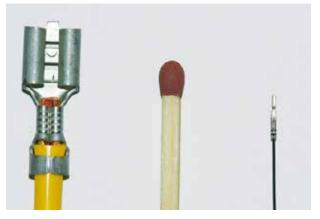
The compact layout is carefully thought-out and allows you to change over from crimping to twisting, fluxing and tinning in no time at all. With its vertically opening safety cover, the Komax Gamma 255 is readily accessible from all sides. Operations and material handling are simple and convenient. The reliable TopWin user interface adds to this high level of user convenience in over 20 different languages.



▲ TopWin User interface

Flexible

Contemporary wire processing requires total solutions with optimized functions and costs. To meet these demands, processing modules such as the mci 712 and mci 722 crimp module, the mci 782 twisting module, and the ioc 785 fluxing/tinning module with all process monitoring units are integrated right into the TopWin user software. With a choice of two different crimp modules, you can adapt the Gamma 255 to meet your individual needs. No matter what products you manufacture on the Gamma 255, this machine's intuitive operations allow you to make full use of its flexibility. All product data is saved in a database and can be retrieved at any time.



Cross section range
0.0123 mm² bis 2.5 mm² (AWG36–AWG14)



▲ Configuration For twisting, fluxing and tinning

Your benefit

- Reliable processing of a larger range of cross sections
- Double crimping or twisting, fluxing and tinning
- Can handle double crimped wires as short as 20mm
- Minimal footprint thanks to a compact design
- Minimal conversion times
- High equipment standards
- TopWin with graphical user interface
- Readily accessible
- Highly dynamic servo-axes in use
- Over 20 different languages available to users

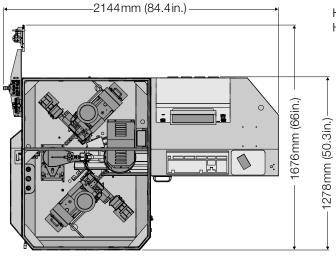
Application sample Gamma 255

Cutting to length	0	Coaxial and triaxial cable processing	
Full stripping		<u> </u>	
Half stripping		Split cycle for closed barrels	
Crimping	= 3 ⊨{ □	Ferrule crimping	
Twisting / Tinning		Inkjet marking	□ Ink Jet offline)⊃

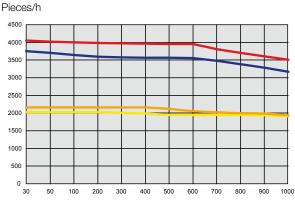
Options and Accessories

Feeding systems	Dereeling unit Komax 104
Marking systems	Komax inkjet marking system offline
Wire infeed	Roller drive
Processing modules	Crimping module mci 712 Crimping module mci 722 (with programmed crimp heights) Twisting module mci 782 Tinning module ioc 785
Quality control	Crimp height measurement Komax 341 Pull-off force measurement Q1210 or Komax 332 Crimp force analyzer CFA/CFA+
Deposit systems	Basic module 1 m (39.4 in.) or 3 m (118.1 in.) Deposit grippers for fine conductors
Accessories	Barcodescanner Towerlight Magnifying glass Uninterruptible power supply UPS Coil holder Set for large cable drums
	Software: Networking WPCS Data conversion TopConvert Manufacturing execution system Komax MES

Machine layout Gamma 255



Reference values for piece output of Gamma 255*



Wire length [mm]

Heigth with cover closed: Heigth with cover open:

1750mm (68.9in.) 2650mm (104.3in.) Made in Switzerland



Conductor Pneumatic pressure Speed Acceleration Crimping module Crimp force analysis FLRY 0.50mm² (AWG20) 6bar (87psi) 100% 100% mci 712 active

* Information is subject to change and depends on the materials being processed

Technical data

Length range	15mm–10000mm (0.6in.–32.8ft.)
Length accuracy	Repeat accuracy: ±(0.2% +1.0mm (0.04in.))
Strip length	0.1mm–15mm (0.0039in.–0.59in.)
Wire cross-sections**	0.0123mm ² -2.5mm ² (AWG36-AWG14)
Wire infeed speed	max. 3m/s (9.8ft/s)
Noise level	<75dB (no crimping module)
Electrical connection	3×208-400V 50/60Hz 1×230V 50/60Hz
Compressed air connection	4–6bar (58–87psi)
Air consumption	3m³/h (106ft³/h)
Weight	870kg (1918lb) gross – with packaging

* The Gamma 255 may also be able to process wires outside the indicated cross section range. By the same token, it may not be able to process certain extremely hard, tough wires even though they are within the indicated cross section range. If you are in doubt about your wires, we are happy to process samples of them.

