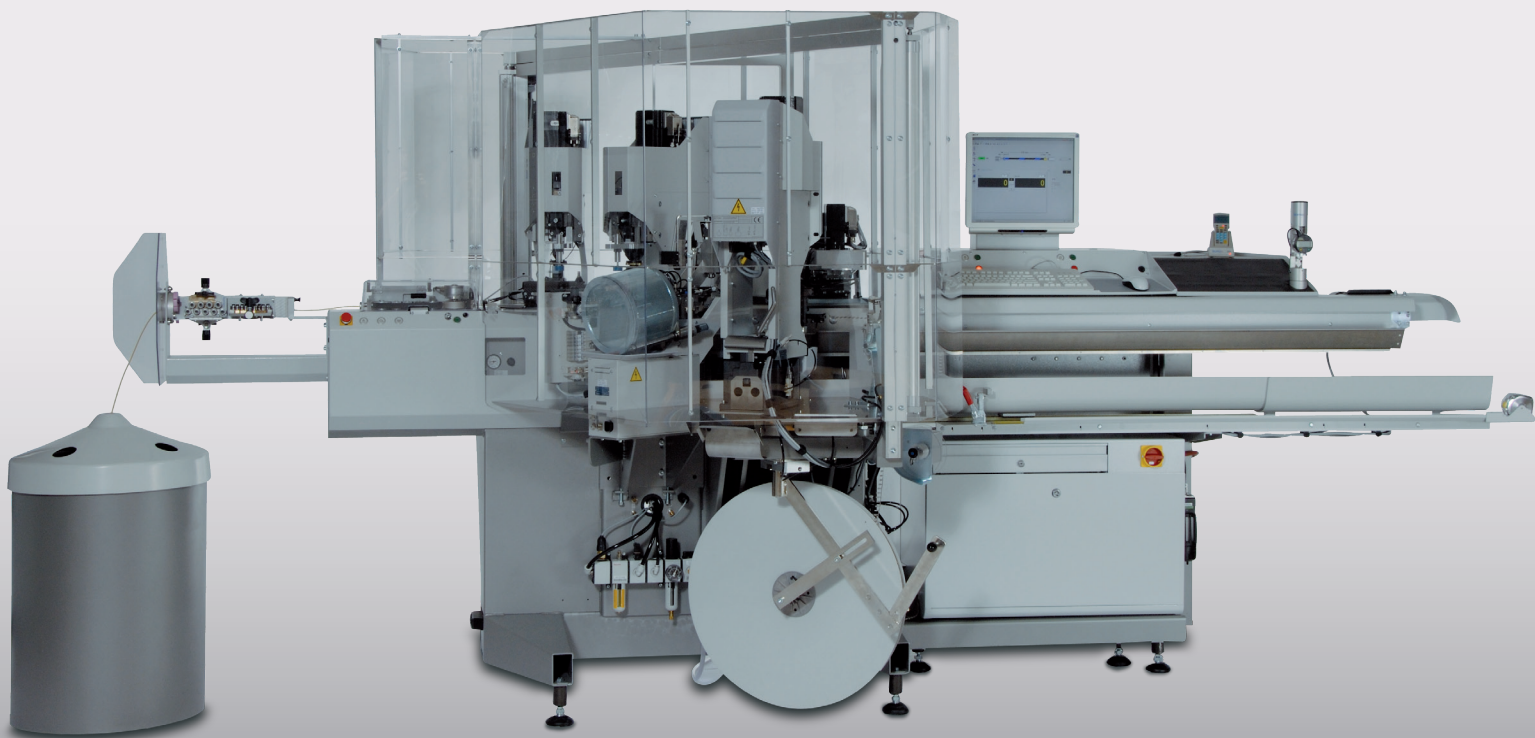


Alpha 355 S / Alpha 356

Multifunctional automatic crimping machines

komax WIRE



THE WAY TO MAKE IT | FLEXIBLE

With their open architecture, the Alpha 355S and Alpha 356 have a wide variety of applications. Besides Komax standard processing modules, many customer-specific modules can be easily integrated.

Alpha 355 S

You can mount up to five processing modules on the Alpha 355 S. In spite of its compactness, it offers excellent accessibility.

Alpha 356

With its extra large mounting surface, the Alpha 356 has room for up to seven processing modules. This machine is ideal if you need increased flexibility or have complex processes.

Areas of application

Along with the most frequent standard processes of crimping and seal loading, you can obtain a large variety of processing modules such as: fluxing/tinning, twisting the ends of wires, fitting with insulating sleeves and crimping modules for ferrule crimping and MIL-crimping, ultrasonic or resistance welding modules. You can integrate customer-specific processing stations easily with the ultra-flexible TopWin software.

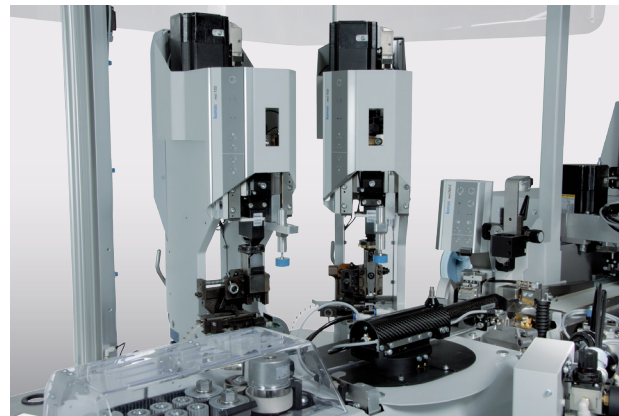
◀ **Alpha 356** With three crimping presses and two seal loading modules



▲ **Alpha 355 S** Basic module 4m with quick-change system for tools

High productivity

With the reliable TopWin software you can record and edit jobs while the machine is running. The quick wire selector, quick tool-change system and other options ensure excellent productivity especially if there are frequent changeovers.



▲ **Alpha 356** With crimping module and seal loading module

Conductor detector sensor ACD

Miniaturization and new technologies are making the quality requirements on cable processing tougher all the time. To satisfy the current automobile crimping standard for solder-free electric connections, Komax has developed the fully automatic conductor detection (ACD). This product recognizes even the slightest contacts between blades and conductor strands in the course of production. ACD is based on a capacitive measuring principle and integrated in the blade holder. It uses the regular stripping blades. The work range covers the entire spectrum of cross sections, any conductor length and stripping with full strip or partial strip. There are setup parameters to set the limits of monitoring desired. Defective conductor ends are removed fully automatically during production.



▲ **ACD** Conductor detector sensor

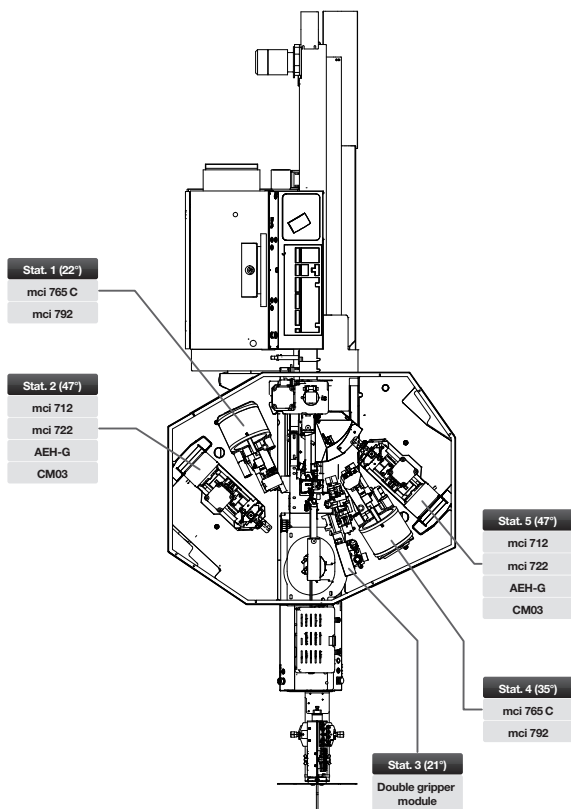
User friendly

The drive unit for the blade head is placed underneath, giving the machine a neat and ergonomic layout. All processing stations have safety covers that open vertically for optimum access, and application-specific parts like applicators and contact rolls can be changed without tools. Controls are placed at decentralized positions, allowing the necessary

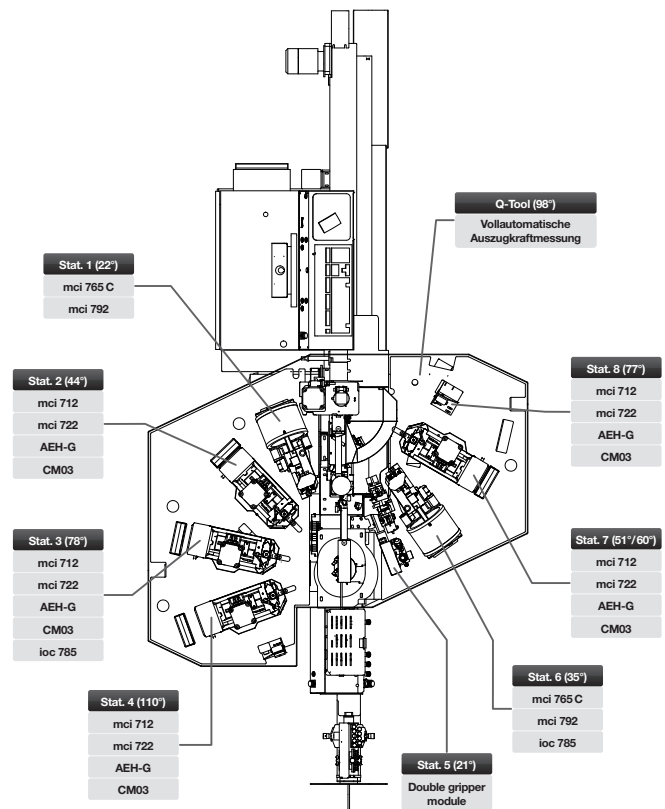
machine functions to be triggered during setup. All setting and adjustment procedures can be controlled from the TopWin graphical user interface in the operator's choice of over 20 different languages.

Choice of standard configurations

Alpha 355 S



















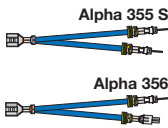
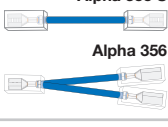
Alpha 356



Your benefit

- Highly flexible with up to five or seven processing stations
- Integration of standard and customer-specific processes possible
- Conductor detector sensor for highest quality in cutting
- Integrated quality measurements
- Create the next job while the machine is running
- Can be integrated in a network with WPCS interface

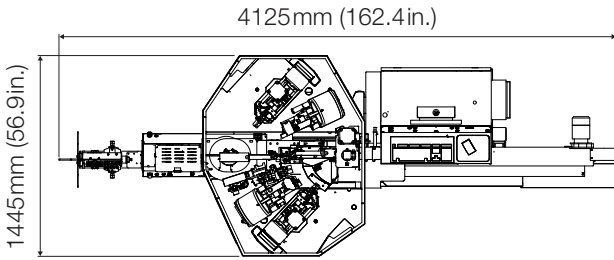
Application sample Alpha 355S/356

Cutting		Flat cable / Notching	
Half strip		Inner conductor processing	
Full strip		Double sheath / Coaxial and triaxial cables	
Intermediate strip / Intermediate slitting		Ferrule crimping	
Twisting / Tinning	 Alpha 356	MIL-Crimping	
Crimping		Wire end solidifying / Splicing / Welding	
Seal insertion		Hot stamp marking	 Komax 60 Hot stamp
Split cycle for closed barrel		Ink-Jet marking	 Komax 60 Ink Jet
Double crimping	 Alpha 355 S Alpha 356		
Sleeve insertion	 Alpha 355 S Alpha 356		

Options and Accessories

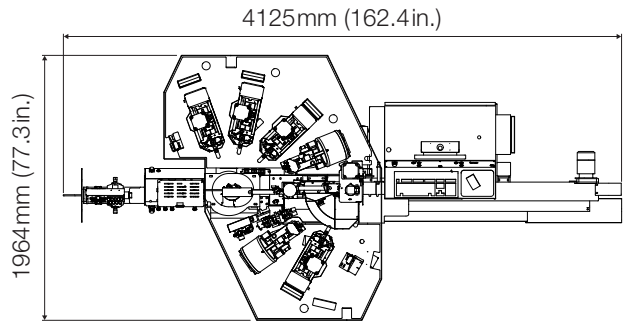
Feeding systems	Komax 106 ads 117 ads 119
Marking systems	Komax 26 hot stamp marking Komax Inkjet marking system IMS Laser marking on request
Wire infeed	Belt drive
Processing modules	Crimping module mci 712 Crimping module mci 722 (with programmed crimp heights) Seal loading module mci 765 C (with seal position monitoring SPM) Twisting module mci 782 Tinning module ioc 785 Sleeve module mci 792 Double gripper module Wire end ferrule module AEH MIL-crimping module Welding module Ultrasonic compaction
Quality control	Integrated crimp height measurement Integrated pull-off force measurement Fully automatic pull-off force measurement Crimp force analyzer CFA/CFA+ Conductor detector sensor ACD Strip quality check SQC Material change detection Material verification Wire length correction Splice check Spark tester Seal position monitoring SPM Terminal end detection
Deposit systems	Deposit gripper Basic module 2m (78.7in.) or 4m (157.5in.) Extension module 2m (78.7in.) or 4m (157.5in.)
Accessories	Tool changer (355S) Automatic guide tube changer (355S) Barcodescanner PM8300
Software	Networking WPCS Data conversion TopConvert Production control center KomaxCAO

Machine layout Alpha 355 S



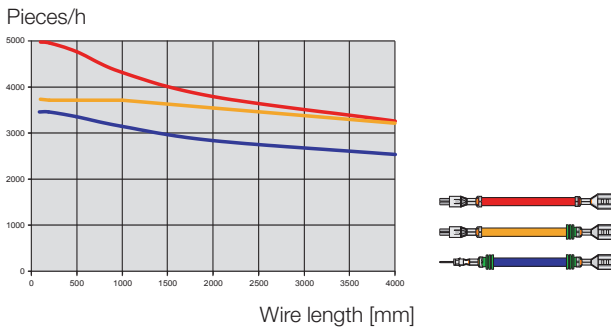
Heigth with cover closed: 2000mm (78.7in.)
 Heigth with cover open: 2900mm (114.2in.)

Machine layout Alpha 356



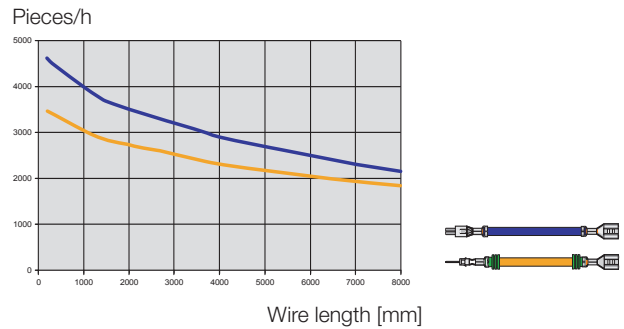
Heigth with cover closed: 2000mm (78.7in.)
 Heigth with cover open: 2900mm (114.2in.)

Reference values for piece output of Alpha 355 S



Conductor: FLYR 0.50mm² (AWG20)
 Pneumatic pressure: 6bar (87psi)
 Speed: 12m/s (39ft/s)
 Acceleration: 60m/s² (197ft/s²)
 Crimping module: mci 722
 Seal loading module: mci 765 C
 Quality monitoring: active

Reference values for piece output of Alpha 356



Conductor: FLYR 0.75mm² (AWG19)
 Pneumatic pressure: 6bar (87psi)
 Speed: 10m/s (33ft/s)
 Acceleration: 50m/s² (164ft/s²)
 Crimping module: mci 722
 Seal loading module: mci 765 C
 Quality monitoring: active

Technical data

Length range	60mm–65000mm (2.36in.–213ft.) Optionally 30–60mm (1.18in.–2.36in.)
Length accuracy	Repeat accuracy: ±(0.2% +1.0mm (0.04in.))
Stripping lengths	0.1mm–35mm (0.004in.–1.38in.)
Stripping lengths with partial strip	47mm (1.85in.) on side 1 35mm (1.35in.) on side 2 Optionally up to 80mm (3.15in.)
Wire cross-sections*	0.22mm ² –6mm ² (AWG24–AWG10) Optionally 0.13mm ² (AWG26)
Wire infeed speed	max. 12m/s (39ft/s)
Noise level	<75dB (no crimping module)
Electrical connection	3×208–480V / 50–60Hz 5kVA
Pneumatic system	5–8bar (73–116psi) 9m ³ /h (318ft ³ /h)
Weight	Alpha 355 S: ca. 1300kg (2866lb.) Alpha 356: ca. 1400kg (3090lb.)

* Extremely hard and tough wires may not be able to be processed even if they are within the above cross section range. If you are in doubt about your wires, we are happy to process samples of them.

More information about our products:

www.komaxwire.com

Komax Wire is a division of Komax Holding AG, Switzerland.