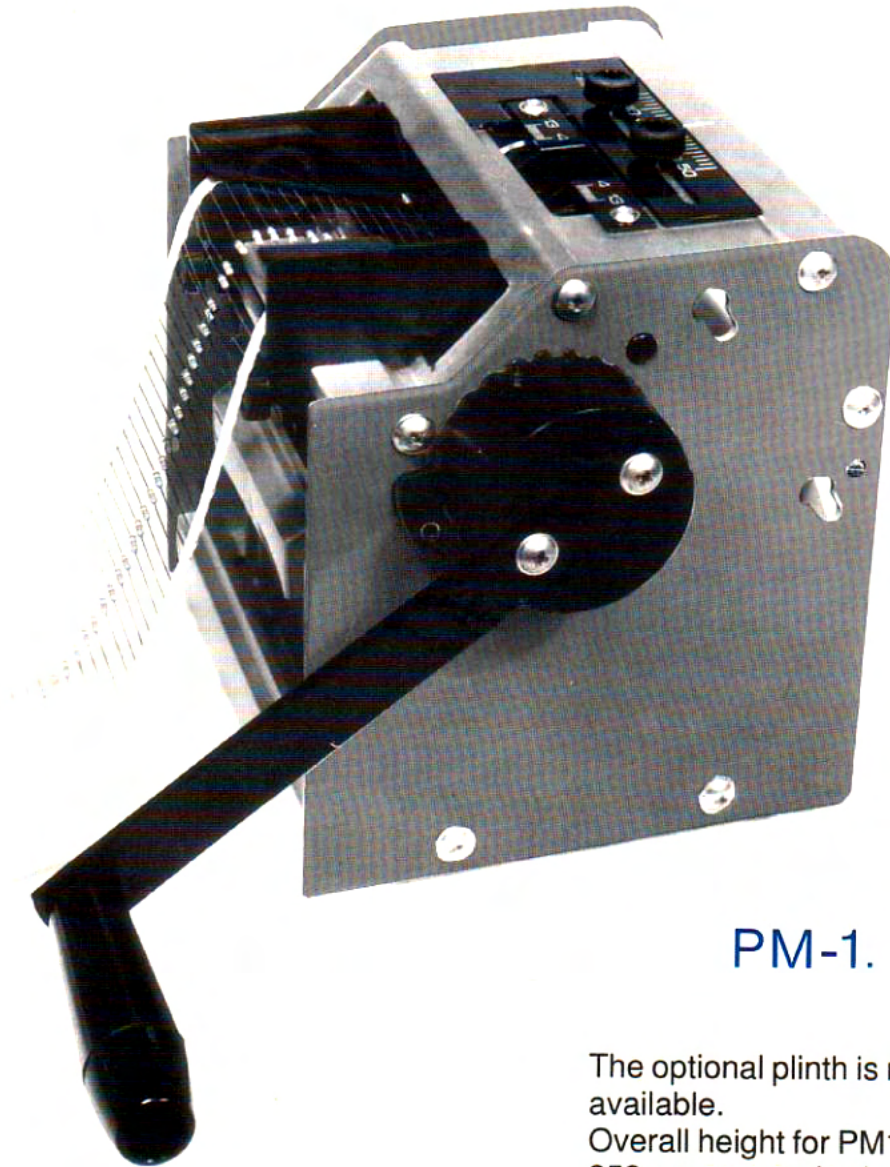


**CLIFF**

# COMPONENT PREFORMING MACHINES PM—Series



**PM-1.**

The optional plinth is no longer available.

Overall height for PM1 is now 250mm as standard.

## **PM-1. FEATURES INCLUDE**

- Adjustable steel anvils for producing a perfect score free bend on wires up to 1mm diameter.
- 35mmØ free running cutting wheels minimising wear and maximising efficiency and ease of use.
- Built-in scales on top of machine for pitch and down lead adjustments.
- Fitted guards all round the cutting and bending wheels for protection against trapping fingers.
- Optional plug in sensor for electronic component counting.
- Optional plinth to raise height of machine where not practical to site the handle over the edge of a bench.
- Optional motor drive.

## **PM-2.**

- Similar to PM-1 designed to cut components from bandoliers without bending.

# Specifications

## PM-1

The machine is designed to cut to length and pre-form axial lead components ready for fitting into PC Boards, where the component is parallel to the board. The components may be fed in bandolier form (assuming a 5mm. pitch between components or multiple thereof), or loose by means of the built in chute slots.

Finished components are collected in a standard size storage box, **not included**, placed under the cutter head, or (preferably) in front of the machine — using the supplied metal chute under the cutters.

A separate plinth is available to raise the height of the machine by 80mm. where it is not practical to site the handle over the edge of a bench.

All adjustments are carried out on top of the machine using the built - in scales. Setting instructions are printed on the machine.

Components are cut and formed without scoring or damaging the leads. Wire links can also be rapidly produced from banded wire.

General construction features anodised aluminium body with heavy steel sides. The free running blades are 35mm. diameter and produced in M2 high speed steel. The cutting and bending wheels are in high carbon steel, all are hardened and tempered as appropriate.

The bandolier drum supports have lugs which latch into keyhole slots on the sides of the machine allowing the drum to sit over the machine when in use. This system takes up less space and allows a gravity feed of components into the machine.

The machine will cut and form a comfortable and effortless 40,000 components per hour.

Guards are fitted all round the cutting and bending wheels for protection of fingers.

**PM-2.** Most axial lead components are nowadays supplied in bandoliered form. There are often occasions when circuit design dictates use of components which are not PCB mounted. It is time consuming to remove components from bandoliers by hand. **PM-2** is designed to rapidly cut components out of bandolier form to produce loose axial components — with straight wires.

**MD-1 Motor Drive.** This accessory quickly converts the manual machines to electric operation. The set speed gives 23/25,000 pcs./hour output. The motor drive also permits preforming/cutting of single components — by dropping them individually into the chute slots in the bandolier guides.

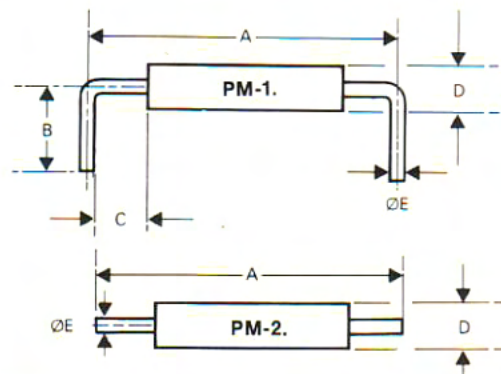
## Dimensions

### PM-1.

Bending Between Centres ... A	From 5mm. to 50mm.
Length of Cut ..... B	From 4mm. to 13mm.
Minimum Bending ..... C	1.2mm. Minimum
Diameter of Component ..... D	From 0.4mm. to 15mm.
Diameter of Wire ..... E	From 0.4mm. to 1mm.

### PM-2.

Cutting Between Centres ..... A	From 4.6mm. to 50mm.
Diameter of Component ..... D	From 0.4mm. to 15mm.
Diameter of Wire ..... E	From 0.4mm. to 1mm.



### Physical Dimensions of the Machines

Width ..... 200mm.  
 Height ..... 175mm. (with plinth) 250mm.  
 Depth ..... 165mm.  
 Weight..... 2.8Kg. (with plinth) 4.2Kg.  
 Motor Drive (only) Weight ..... 6.3Kg.

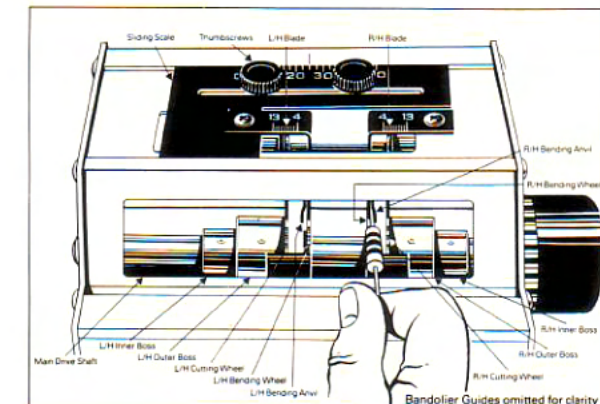
### BEING DEVELOPED:-

- \* Axial to vertical preform.
- \* Radial preform.

### PART NUMBERS

#### MD-1. Motor Drive Unit.

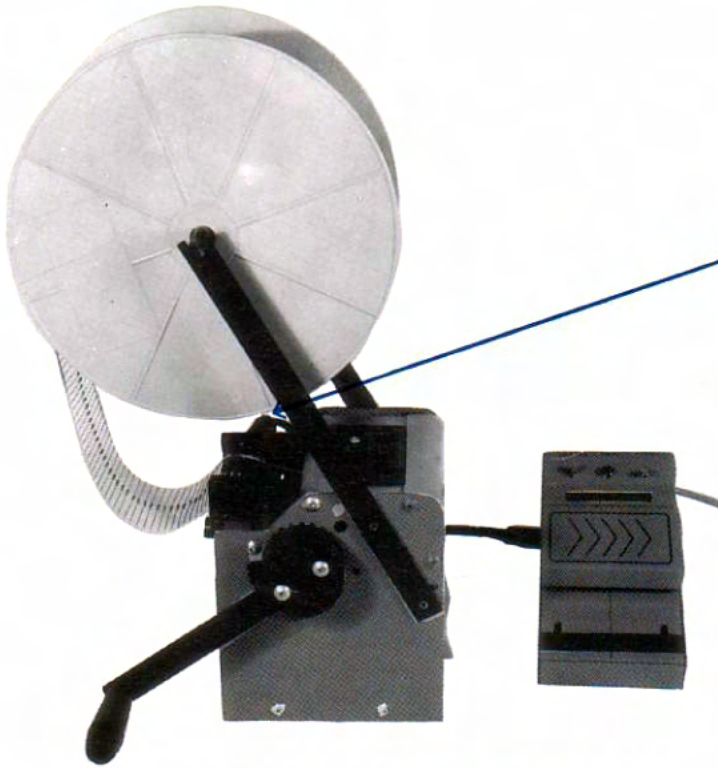
220/240V. AC. (Europe) Part No. OD66451.  
 115V. AC. 60Hz. (USA) Part No. OD664511.  
 100V. AC. 50/60Hz. (Japan) Part No. OD664512.



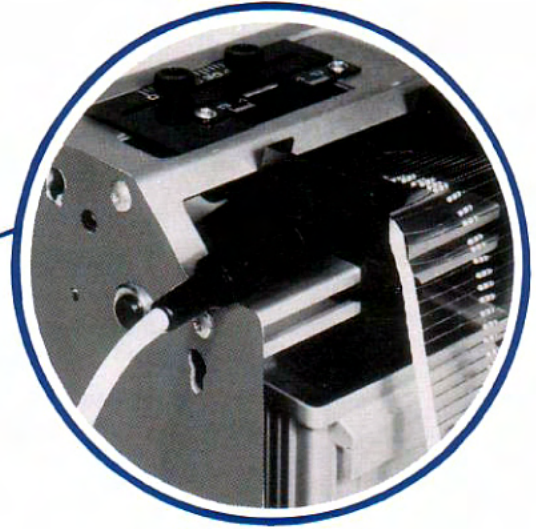
BASIC PM-1 Part No. OD6645.  
 Optional Plinth Part No. OD664610.  
 PM-1 with Plinth Part No. OD6644.  
 BASIC PM-2 Part No. OD66450.  
 PM-2 with Plinth Part No. OD664501.

# COUNTING COMPONENTS

Component Counter CC-1 may be used with all models, to count the components being processed.



PM-1 loaded with bandolier drum



Sensor attached to machine



PM-1 with Motor Drive MD-1.  
(Showing alternative bin mounting position,  
large bin is not supplied)