

# **Precision Lead Former**

## **Forms Axial Leaded Components**

- GPD's CF-8 eliminates component body stress.
- Versatility is the key word for the CF-8.
- Simple tooling changes make short or long run production jobs quick and easy.





## **CF-8 Capabilities, Functions, & Dies**

### **Capabilities & Forming Function**

GPD's CF-8 meets exacting military standards for forming axial leaded components.

Its transport wheel system holds the component by the body as the component travels through the crimping and forming stations.

The CF-8 forming process eliminates component body stress by first crimping a lead on one side of the component body and then crimping the lead on the other side. After the leads are crimped, the component advances to the bending station where the leads are held and formed by a roller mechanism that produces nick-free results.

The CF-8 is unique - it can form axial leaded components either vertically or horizontally with a simple die change. The extended stroke capability of the CF-8 allows  $\pm .005$ " ( $\pm 0.13$  mm) control over lead length.

Versatility is the key word for the CF-8. Simple tooling changes make both short and long run production jobs quick and easy.

Repeatability of station settings are controlled to  $\pm .002''$  ( $\pm 0.05$  mm) via positive pressure on the adjustment shafts.

Components can be processed from either bulk or reeland-tape feed systems. Numerous die sets enable you to reproduce many forms for horizontal or vertical positioning including: stress relief (single or double side), flushmount or stand-off lock-in, reflow, and underbody forming.

#### **CF-8 Functions:**

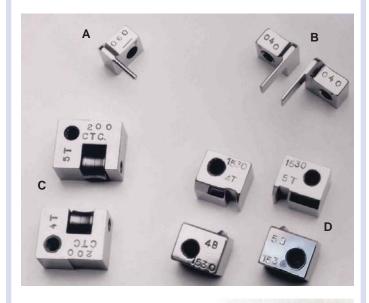
- Forms axial leaded components with lead diameters between 0.015" to 0.060" (0,38 mm to 1,52 mm)
- · Meets exacting military standards
- · Extremely low maintenance
- Eliminates component body-to-lead stress
- Forms axial leaded components either vertically or horizontally
- Station setting repeatability controlled to ±.002" (±0,05 mm)
- Works with either loose or reel and tape feed systems
- Tooling change-over is quick and easy
- · Will form:
  - Stress relief (single or double side)
  - Flush mount/stand-off
  - Flush mount/stand-off lock-in
  - Reflow
  - Underbody
  - Horizontal or Vertical configurations

# Forming & Bending Die Set Examples

GPD's hardened steel dies are precisely made, easily accessible and installed or changed with minimum effort. We offer a wide variety of standard dies, plus custom dies can be manufactured on request.

- **A** .060" (1,52 mm) pin die used in vertical forming *Part Number 800D-7060*
- **B** .040" (1,02 mm) horizontal die set used in flushmount forming Part Number 800A-0040
- C Flushmount roller die set for forming leads close to the component body Part Number 800C-1000
- **D** Stand-off dimpling dies for wire diameters of .015" to .030" (0,38 mm to 0,76 mm) Part Number 800E-1000
- E Stand-off/Flushmount Lock-in .030" to .045" (0,76 mm to 1,14 mm)

  Part Number 800F-3000

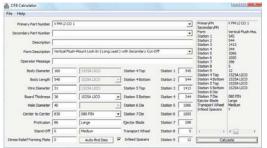




## **CF-8 Accessories**

**CF-8 Calculator Software Package**: Just enter the values of the component dimensions, forming parameters, and form type. Strike one function key and the computer automatically calculates all station settings and recommends appropriate dies.

**Operator set up is faster and a lot more accurate.** If parameters are selected outside the limits of the machine, the program will suggest an optional form or different die selection. This protects the machine from damage by improper setup. (Included with CF-8)



#### **Dual Feeder System:**

The CF-8 Dual Feeder System allows you to feed taped components at a rate of up to 25,000 parts per hour or hand feed single components one at a time. (Included with CF-8)



Reel Feed Arm: The Reel Feed Arm is designed to hold all reel and taped components. (Included with CF-8)

Foot Switch: The Foot Switch functions almost as a third hand. In conjunction with the dual feed system, the Foot Switch allows the operator to easily hand feed and form one component

component at a time if required. (Included with CF-8)





**Transport Wheel System**: GPD's Transport Wheel System is available to work precisely with three wire diameter ranges:

Small .015" to .030"

(0,38 mm to 0,76 mm)

Medium .030" to .042"

(0,76 mm to 1,07 mm)

Large .042" to .060"

(1,07 mm to 1,52 mm)

NOTE: Order a minimum of one system to be included with the CF-8.

## **Optional Accessories**

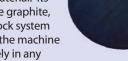
**Electronic Counter**: The predetermining/totalizing counter will detect even the smallest glass component unerringly. When connected in the predetermining mode, the counter will stop the machine when the preset count

is reached. (Optional Accessory)



**Rotating Machine Platform**: This circular platform allows the operator to easily rotate the entire machine and gain better access for die changes and normal

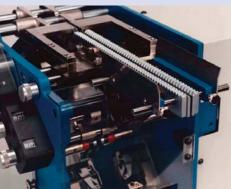
maintenance. It is covered in ridged, static dissipative material. Its unique graphite, posi-lock system holds the machine securely in any position. (Optional



position. (Optional Accessory)

**Jacobs Ladder Loose Axial Component Feeder**: GPD's Jacobs Ladder Feeder will feed loose axial components with a wire diameter from .015" to .060" (0,38 mm to 1,52 mm). The feeder mounts directly on the CF-8 and is driven from the existing eccentric shaft so there is no additional power requirement. It is easy to mount, easy to load, and easy to use. (Optional Accessory)





**Spare Parts Kit**: (Optional Accessory)



## **CF-8 Specifications**

#### **Production Rates**

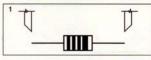
- Tape-mounted components up to 25,000 parts per hour
- · Loose-fed components up to 4,000 per hour

#### **CF-8 Specifications**

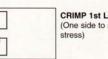
- Height .....14" (356 mm)
- Width......18" (457 mm)
- Depth ......12" (305 mm)
- Actual Weight......96 lbs (43,6 kg)
- Shipping Weight....102 lbs (46,3 kg)
- · Power:

100 volt, 50/60 Hz, 3 amp 120 volt, 50/60 Hz, 3 amp 230 volt, 50/60 Hz, 1 amp

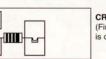
#### **CF-8 OPERATION SEQUENCE**



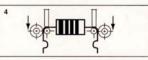
(Carbide cutting blades)



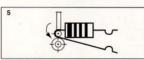
**CRIMP 1st LEAD** (One side to avoid



**CRIMP 2nd LEAD** (First crimping die is open)



HORIZONTAL BEND (Leads are held while bending)



**Taped Components** 

Dim

BD

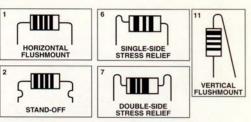
WD

VERTICAL BEND (Rolls lead over pin die. Lead is held while bending)

Lead\*

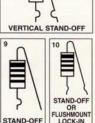
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#### SOME POPULAR FORMS PRODUCED ON THE CF-8

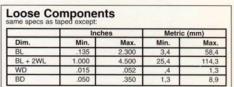


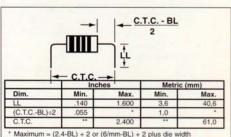






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		-11
	REFLOW	S





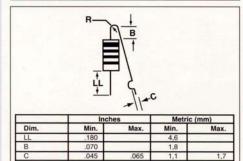
\* Maximum = (2.4-BL) + 2 or (6/mm-BL) + 2 plus die width Minimum CTC is dependent on the type of die used and the type of component being processed

BD	<b>Body Diameter</b>
BL	Body Length
CTC	Center to Cente

Lead Length LL WD Wire Diameter

WL Wire Length R **Bend Radius** В Body to the Bend

Crimp Height



BL + 2 WL

2.000

Min .135

.050

.200", .400",

