# ProMaker Model 225 Button Maker



# A Technical Guide for Users

The pin-back button as we know it was first introduced in 1896. The materials used to make buttons may have advanced, but the manufacturing technology has remained mostly unchanged. This user guide will describe the core components of the ProMaker Model 225 Button Making Machine, their functions, and best use practices. It also provides a guide to select the right die size for your button project. The ProMaker Model 225 makes it fun and easy to craft professional grade buttons—whether you're new to button making or an experienced professional.

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# **Drawing With Diagram**

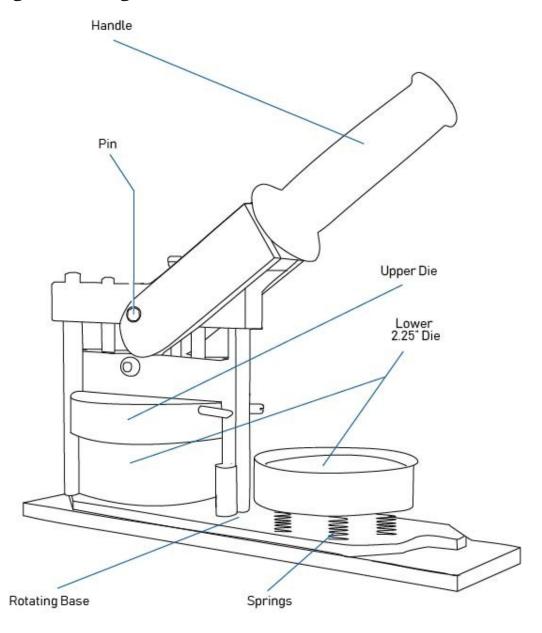


Figure 1: Mechanical components of button maker

While simple in construction, most button makers require a few key components for successful operation.(See figure 1) The ProMaker Model 225 shares these universal design components with other button making machines.

### **Core Components**

Rotating Die Base: The ProMaker Model 225 features a rotating base(turntable) for the two necessary die. The spring-loaded base is designed to rotate 180 degrees and lock into place for easy toggle between the two lower die.( See figure 2)

Lower Die: The two lower die are housed in the rotating die base. They are referred to as the pickup die and the crimp die. (See figure 3) Each serves a different function in the button making process. (See pg. 4)



Figure 2: Rotating Die Base

Upper Die: The upper die(see figure 1) holds the button in place for pressing during the crimping process.

Handle: The ProMaker Model 225's handle operates on a pin-and-lever system to move the upper die—pressing the buttons with precision.

Springs: The springs are housed underneath both the pickup die and the crimp die. The spring action of the die allows the upper die mechanism to press the button shell effectively.

# The Upper and Lower Die System

#### The Upper Die

The upper die is the stationary die and is not part of the rotating die base mechanism. Its core function is to hold the button shell in place after being pressed by the pickup die. The upper die is operated on a lever and pin system that is attached tro the handle. This allows the upward and downward movement required to press the shell of the button to the pinback the button making process.

#### Pickup Die

The pickup die is typically where the button making process begins. (See figure 3) Note the inside grooves. These grooves are designed to accommodate the button shell, graphic, and mylar outer coating of the button. ProMaker Model 225's pickup die is spring-loaded for easy pressing.

The button shell, graphic and mylar coating are usually loaded into the pickup die; the pickup die is then rotated 180 degrees until it locks in place directly beneath the upper die.



Figure 3: Pickup Die Closeup

#### Crimp Die

The crimp die usually ends the button making process. This crucial mechanism on your button making machine holds the pinback portion of the button in place to be pressed with the button shell. Please note the deeper grooves compared to the pickup die(see figure 4). This feature can be used to differentiate between the two die.



Figure 4: Crimp Die Closeup

#### Die Size

When selecting a button maker, it is important to know which size buttons you wish to produce. All Button Makers branded machines have the die size included in their model name. For example, your ProMaker Model 225 button maker features a 2.25" die size— this corresponds with button size produced by the machine. Information about the model can be located on the button making machine's name plate, located near the base of the handle.(see figure 5)



Figure 5: Button Maker Name Plate

If no information is available, or the name plate has been obscured, you can also measure your die to determine size. Size is an important aspect of button making—before you order button materials, you must know that they will be compatible with your machine. To measure die, use a micrometer or other fine measurement tool to measure straight across the **inner ring** of the machine's pickup die. The resulting measurement provides you with your machine's die size, and more importantly—the size button the machine can produce.



# **Works Cited**

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