

Micropipette Puller and Power Controller



Mechanical Vertical Micropipette Puller

- Produces repeatable pipettes
- Versatile, compact, simple and fast to operate and easy to clean
- Tip size range from sub-micron (for DNA injection) up to large pipettes for oocyte holding

Mechanical Vertical Micropipette Puller

This precision engineered mechanical vertical micropipette puller is extremely versatile and easy to use. Several different pulling techniques may be employed resulting in a variety of highly concentric and reproducible micropipettes and microelectrodes. The puller section consists of two carriages fitted with clamps for holding the a glass capillary tube, a spring actuating mechanism, and a heater filament. Power for the heater is provided by a regulated power controller with last-reading memory.

Both carriages of the puller move on precision, ground, stainless steel guide bars. Each carriage has a mass of only 6.5 grams ensuring very rapid acceleration. A quick release mechanism for the guide-bars facilitates easy cleaning. The upper carriage is connected by means of a cord running over a pulley to a long extension spring housed under the instrument. The tension of the spring, and hence the carriage acceleration, may be adjusted by means of a calibrated bar. Even light springs can impart

to the carriage, acceleration of up to 50 g, because of the carriage's low mass. The carriage can be held in any one of a number of set positions, by means of a carriage release pin.

The lower carriage can be clamped at any position within its 55 mm range of movement. Scales are provided to indicate the positions of both carriages, and of the adjustable stop fitted with a buffer which is provided to arrest the movement of the left carriage at any predetermined position within its travel. The heater assembly comprises a specially designed reflective housing which concentrates the heat of the heater-coil, and applies it uniformly to the glass tube. Only one screw is needed to hold the heater assembly onto the micropipette puller, accurate location being ensured by two dowel pins. This arrangement achieves easy interchangeability, the heater assembly can readily be removed, replaced by another and then reinstated in exactly the same position. Additional heater assemblies and coils are available. An alignment mandrel is used to locate the heater-coil in exactly the correct position in its housing. The ends of the coil are then clamped into precision terminal posts, and the mandrel removed. This puller is powered by the Regulated Power Controller which must be ordered separately.

Catalog No.	Product
CGS 8272.75	Mechanical Vertical Micropipette Puller



Regulated Power Controller

Regulated Power Controller

- Easy to adjust
- Last reading memory
- Compact
- Digital display
- Easy to note settings
- Immune from input supply voltage variations
- Voltage switchable 115/230V

This unique power controller, with last-reading memory, considerably simplifies preparation and repeatable micropipettes. Pre-set outputs the adjustments of heat levels during pulling and forging, and eliminates accidental filament bum-out. One controller will provide power for the Micropipette Puller, the Microforge, as well as for the Turbo-Microbeveller; provision for the microbeveller includes a connection for the motor and a control for adjusting lamp intensity.

Catalog No.	Product
CGS 8273.75	Regulated Power Controller, 115/230 VAC, 50/60 Hz



Detail of Carriage Mechanism