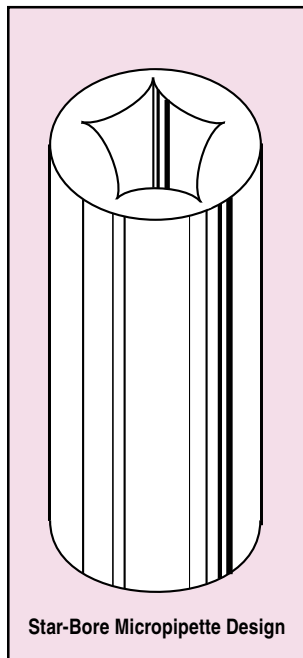


Star-Bore Micropipettes and Storage Container

Star-Bore Micropipettes



- Provides low surface contact area for less resistance to flow than standard capillary tubes
- Star-shaped capillary bore

The micro star-shaped capillary bore has been proven to be the best form for microelectrodes since it appeared in 1978. The star-bore decreases the pressure drop necessary to produce a specified flow rate by reducing the area of contact between the fluid and the capillary wall. The inability of water to wet glass crevices which are the size of the micro star-shaped bore points at the pulled tip (about 0.14 μm wide) is well known. This principle is responsible for the im-

proved filling characteristics of the fiber-filled capillary. The partial adherence of the glass fiber to the capillary wall creates two sharp corners which do not wet when the tube is filled, decreasing the wetted surface contact area.

These micropipettes take this principle to the ultimate by creating the ideal geometry for micropipette electrodes eliminating the need for fiber addition. As fluid is injected into the capillary, it fills the center of the 'star' trapping air in the star's five points. At the pulled tip of the capillary, surface tensions cause the exiting liquid to spread over the tip of the star-bore micropipette, sealing the air in the points of the star.

Since liquid will not wet the points of the star, fluids ride on a combination of the interior points of the star and the trapped air. The liquid-air interface presents virtually no resistance to flow. The only friction present is that created by the fluid contacting the interior points of the star. The area of the micro star-shaped capillary actually in contact with the fluids is only a fraction of the contact area in a similar-sized circular-bore capillary tube.

The liquid column 'glides' down the center of the micro star-shaped capillary tube, achieving a much greater flow rate at a much smaller pressure drop than that predicted for a circular bore capillary of the same working diameter. These star-bore micropipettes are 100 mm (3.94 in) long. Effective ID is 40 to 45% of the OD. The OD measurement provided is $\pm 3\%$.

Catalog No.	Product
CGS 8681.75	Star-Bore Micropipette, 1.0 mm OD, pkg. of 100
CGS 8682.75	Star-Bore Micropipette, 1.2 mm OD, pkg. of 100
CGS 8683.75	Star-Bore Micropipette, 1.5 mm OD, pkg. of 50
CGS 8684.75	Star-Bore Micropipette, 1.8 mm OD, pkg. of 50
CGS 8685.75	Star-Bore Micropipette, 2.0 mm OD, pkg. of 50

Pipette Sterilization and Storage Container



- Ideal for dry heat sterilization of pipettes
- Pyrex-type glass covers make contents easily visible
- Holds 21 pipettes
- Available for 1.0, 1.2, 1.5 and 2 mm diameter pipettes

This container is a convenient and easy to use pipette storage container. It is ideal for both storage and dry heat sterilization of micropipettes. In most application pipettes must be free from contamination at all times. By storing completed pipettes and partially made pipettes (between operations), the complete cleanliness of the micropipettes can be assured. Because the covers are

made of Pyrex glass, the complete container with pipettes in-situ can be dry-heat sterilized, ensuring contamination-free pipettes. The base accepts 21 pipettes. Select from containers that holds either 1.0, 1.2, 1.5 or 2 mm OD pipettes.

Catalog No.	Product
CGS 8686.75	Pipette Sterilization and Storage Container for 1.0 mm Pipettes
CGS 8687.75	Pipette Sterilization and Storage Container for 1.2 mm Pipettes
CGS 8688.75	Pipette Sterilization and Storage Container for 1.5 mm Pipettes
CGS 8689.75	Pipette Sterilization and Storage Container for 2.0 mm Pipettes