

Changing capillary dimensions in capillary electrophoresis – Tech Information

When you change the ID of your capillary in your CZE system, the following changes can be expected. It is important to be aware of these effects.

Joule Heating: An increase ID or length of your capillary will increase the amount of heat due to Joule Heating. Smaller ID and length of capillaries are utilized to more efficiently dissipate Joule Heating.

Resolution:

1. A reduction in capillary ID reduces detector sensitivity due to a smaller path length.
2. A reduction in capillary ID reduces the sample load requirements.