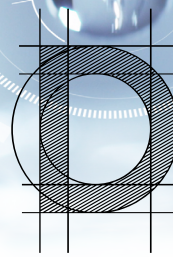


# Ergonomic Design



BRANDTECH® Scientific offers a variety of pipetting instruments that have been designed with ergonomics as a priority. But what do we mean by "ergonomics"? Ergonomics does not just mean lower force of operation. It includes grip design that reduces static strain; it considers overall instrument weight; it redistributes forces to appropriate muscle groups to reduce fatigue; and makes operation simple and intuitive to minimize training and user error.

## Reduction of Static Strain

Repetitive motion disorders are aggravated when the hand and arm are in a constant state of tension. BRAND® designs its instruments to minimize static strain. The macro™ pipette controller, for example, virtually eliminates the clenched grip associated with pipette bulbs. The simple lever actuation is not only simple for novices, but also relaxed for prolonged operations.

## Low Instrument Weight

In days gone by, a heavy instrument was seen as rugged. Now, we realize that it's just...heavy. BRAND is a world-class plastics manufacturer, and uses just the right combination of high technology polymers and metal components to create light weight pipettes that remain world-class in precision and accuracy. The low weight of the pipettes and the new accu-jet® S motorized pipette controller, means that less arm strength is needed during sustained use. The instruments are carefully balanced, as well, to ensure that effort is devoted almost exclusively to pipette control, not to support.

## Force Redistribution

When substantial or repetitive force must be applied by small, relatively weak muscles, the risk of repetitive motion disorders is accentuated. The controls of the Transferpette® S pipette are designed to minimize the amount of forces required to stabilize the pipette in the hand and provide one-handed operation of all functions, including volume adjustment, with minimal hand movements. A short piston stroke reduces thumb movement. The HandyStep® touch repeating pipette eliminates thumb strain altogether by using an index-finger touch instead of the thumb for actuation.

## Simple, Intuitive Operation

Besides the attention to force reduction and redeployment, BRAND® instruments take into account the human factors of simple operation. The accu-jet S is an excellent example. Push-button speed control means that the user can continuously vary operating speed just by adjusting pressure on the control button. At the same time, critical operations may call for extra protection for a sample, so the accu-jet S adds a speed limiter to ensure that momentary inattentiveness does not lead to over-aspiration or excess speed in the dispensing step. Electronic pipettes are also designed with a user-friendly interface (recognized by an OSHA-certified testing lab) that most users find obvious without a manual. This provides the comfort of an electronic instrument without the complexity that is often associated with electronic control.

BRAND's attention to these four design factors, results in a line of ergonomically designed pipettes, repeating pipettes and pipette controllers that respect the welfare of the users in the prolonged operations typical of a research lab.

