

A MANNHEIM TYPE SLIDE RULE

(WITH A, B, C, D, CI, K, S, T, L SCALES)

A simple and accurate device for solving quickly mathematical problems involving multiplication, division, proportion, percentage, squares and square roots, cubes and cube roots, diameters and areas, reciprocals, logarithms and exponents, trigonometric formulae, and all sorts of combinations of these operations.

The art of operating a slide rule is easy and can be learned readily by anyone. Any person called upon to do much numerical calculation will find it profitable to invest the small amount of time necessary to learn this art. The slide rule will save hours of mental strain for those engaged in business or engineering calculations.

Used by Students, Teachers, Architects, Engineers, Merchants, Salesmen, Purchasing Agents, Manufacturers, Accountants, Chemists, and Estimators.

DESCRIPTION OF THE SLIDE RULE

The Mannheim type slide rule consists of three parts, a ruler, a slider, and a runner. The ruler (also called the body or the stock) carries three scales marked A, D, and K. The slider fits into and slides in grooves on the top side of the body. The slider can be reversed in the body and carries on one side the B, CI, and C scales, the reverse side bearing* the S, L, and T scales. The runner (also called indicator or cursor) consists of a lens carrying a hair line and set in a frame which slides to the right or left over the face of the rule.

Problems are worked (namely, the various operations of multiplication, division, taking square roots, and so on are carried out) by comparing two of the scales with each other. Since there are nine scales (marked A, B, C, D, CI, K, S, L, T,) it is easily seen that there are numerous combinations taking two scales at a time. The manipulation of the slide rule consists in moving the slider along the body and in sliding the cursor to right or left over the face of body and slider. It is important for the hair line on the cursor to be placed exactly at right angles to the direction in which the scales run. The setting of the hair line may be checked by centering it upon the reading A-1 (at the left or right end of the A scale): if the hair line is properly adjusted, it will also center upon the mark D-1. Any two readings (such as A-1 and D-1) which center upon the hair line when in proper adjustment are said to be in register. The purpose of the cursor is to enable one to read easily the figures on any one scale which lie in register with readings on any other scale. If the slider is too tight in the body grooves; it may be freed by using a little talcum powder, oil of paraffin, paraffin wax, or sandpaper.

It will be easy to learn the operations of the slide rule, if the following instructions be read carefully. The first point is to learn how to locate given numbers on the various scales. After explaining how to read numbers on the scales, we give a description of each scale, and then explain how to make calculations with the slide rule.

*For slide rules not having the S, L, and T scales, all references in these instructions to S, L, T scales are to be disregarded.

ACU-RULE MFG. CO.

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