



## BOX-DUMP LOADING

The Metromatic derives its high capacity from the fact that it is designed around the Box-Dump method of loading as described in U.S. Patents. A single operator can remove ampuls or vials from the factory packed cartons and wash an average of 40 loads per hour.

### DESCRIPTION

Each Metromatic Ampul & Vial Washer consists of three basic components:

1. The Wash Chamber
2. The Rotary Disc Valve [U.S. Pat. 3,568,690 and 3,353,545]
3. The Washing Head and Wash Racks

The washing heads are interchangeable and each is designed to a certain ampul or vial size and to the suppliers pack. A washing head is fitted with the same number of washing needles as there are vials or ampuls in the pack. The needle centers conform to the ampul or vial pack so that in the Box-Dump loading procedure a needle enters each item to be washed.

Since the number of ampuls or vials which can be packed into a given area is inversely proportional to the body diameter, the capacity increases as the body diameter decreases.

Because of the different needle spacings required by the different body diameters, separate washing heads are needed for each ampul and each vial body diameter.

### CAPACITY

Metromatics are in operation washing up to

24,000	1 & 2 ml. ampuls per hour	Shell vials
11,520	5 ml. ampuls per hour	Tubes
5,760	10 ml. ampuls per hour	Syringes &
3,840	50 ml. ampuls per hour	Dental cartridges as well as
34,720	2 ml. vials per hour	Screw Capped bottles of glass or plastic can
8,080	10 ml. vials per hour	also be washed on the METROMATIC.
1,920	100 ml. vials per hour	

### STANDARD PACKS

American suppliers of vials & ampuls have collaborated with us in setting up standard packs so that the users of Metromatics need not be dependent upon a single source of supply for any ampul or vial. Ampuls from 1 to 20 ml. are packed 144 to a box in 9 rows of 16 ampuls each. There is a cardboard divider between the rows of 16 ampuls. 1, 2 & 5 ml. ampuls are also available in packs of 300.

50 ml. ampuls are packed 96 to a box in 8 rows of 12 ampuls each.

Vials are packed either in rows in a corrugated tray with cardboard dividers between the rows or on 60° centers in a shrink pack. In this latter form there is direct contact between all vials. The 60° pattern is held by wrapping the unit in a heat shrinkable plastic.

The overall size of a shrink pack varies somewhat for different vial sizes but never exceeds 14" x 18".