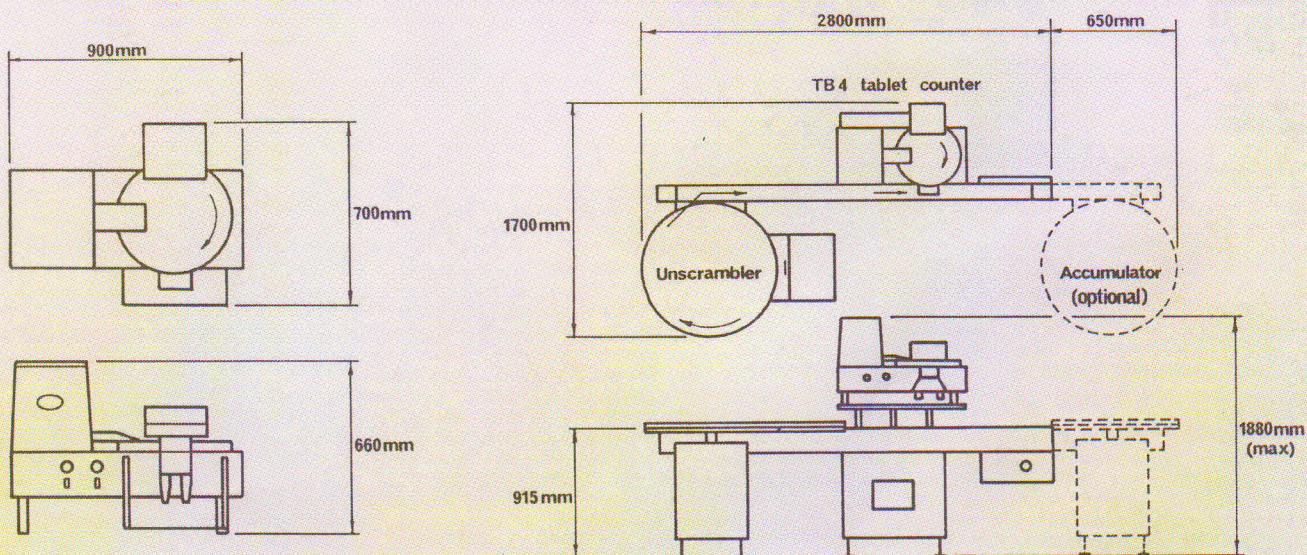


## Technical details

	TB4	TB4 + ATLC
Machine size	900 x 550 x 650mm	See sketch below
Voltage	110/230V single ph.	110/230V single ph. (machine) 380/415V three ph. (conveyors)
Power	200W	680W
Air supply	—	2500L/hr 3 bar
Net. wt.	77kg	185kg
Gross wt.	125kg	720kg
Case size	1030 x 640 x 850mm	2940 x 1440 x 1390mm
Operator	One	One



## Output: TB4

Please note that outputs quoted are for guideline purposes only and will depend on the batch size and tablet feed rate attainable on particular products. We will be pleased to carry out trials on your products to verify counting speeds.

Size	Tablets/min.	Size	Capsules/min.
5.0mm	2600	1	800
6.5mm	2100	2	900
9.0mm	1800	3	1000
10.0mm	1600	4	1100
11.5mm	1400	5	1200
15.0mm	1000		

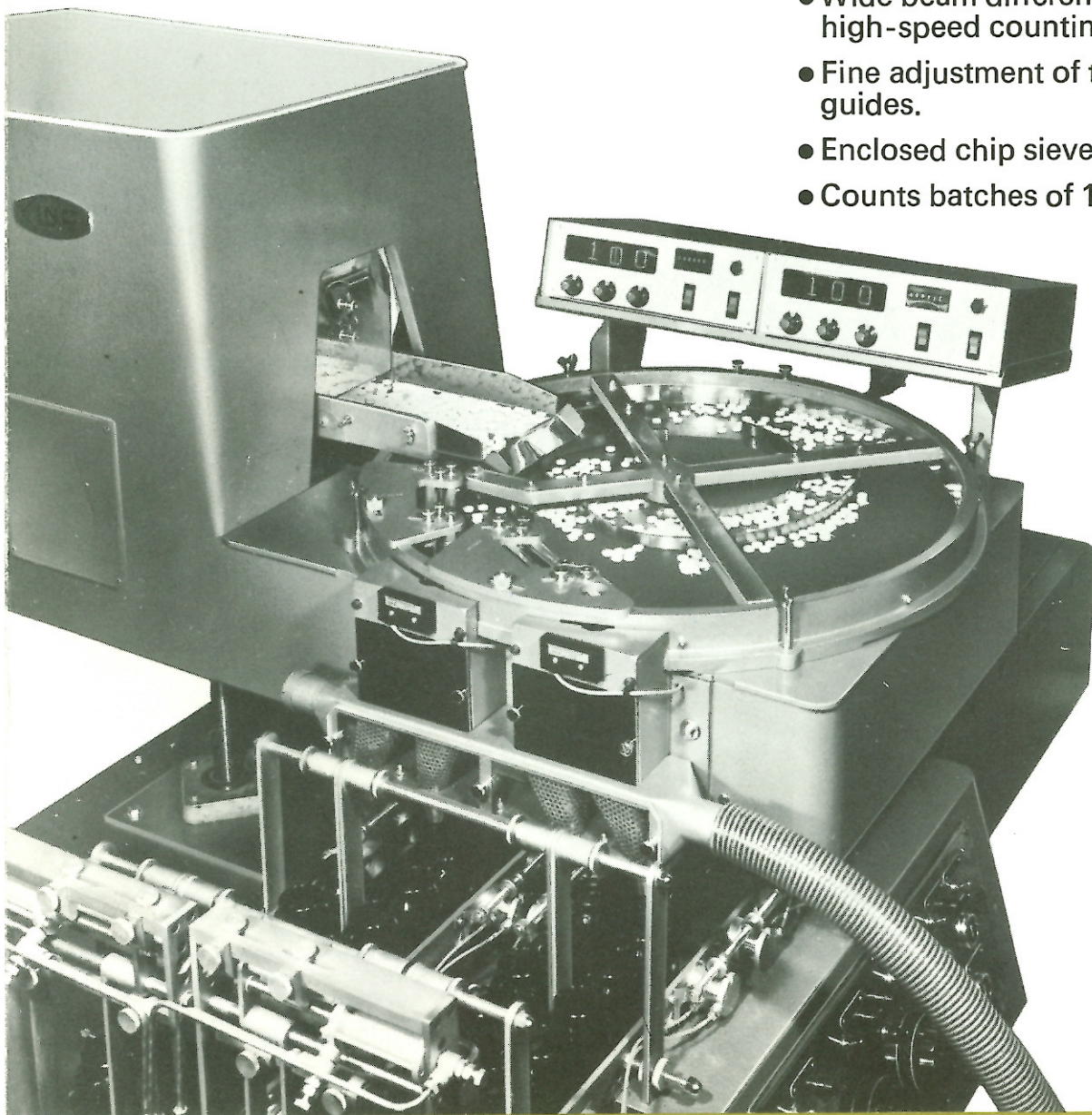
We reserve the right to alter this specification in line with our policy of continual product improvement.

# king electronic tablet counting machine

## models TB4/TB5

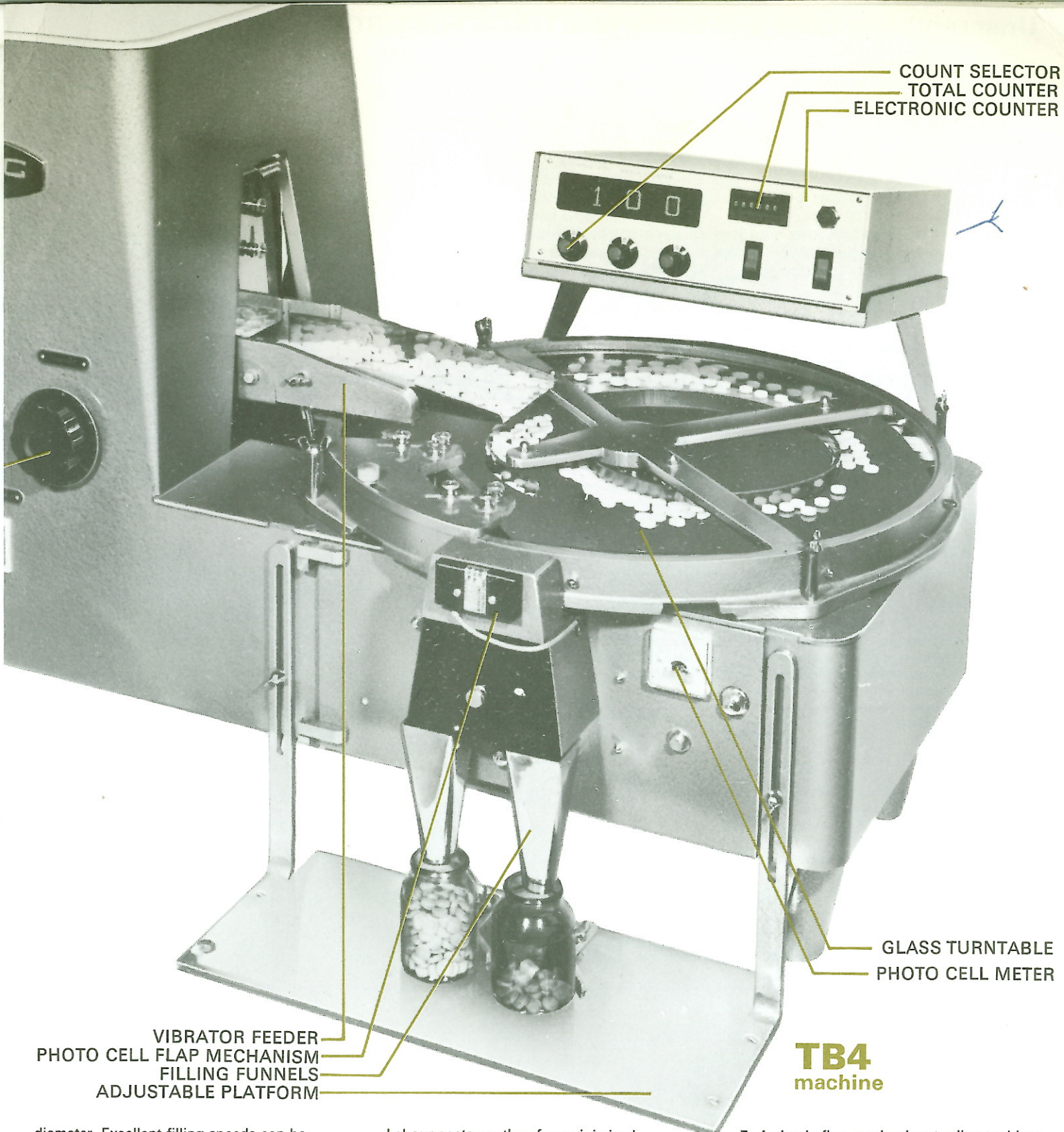
Modern transistorised electronic tablet counters with direct read-out.

- Wide beam differential light source for high-speed counting.
- Fine adjustment of tablet take-off guides.
- Enclosed chip sieve and dust chute.
- Counts batches of 1-1000 or 10,000.



**packaging machinery worldwide**

**C. E. KING LIMITED** 41 London Street Chertsey Surrey England Tel: 09328 (Chertsey) 65191 Telex: 23323 Telegram: King Chertsey  
**King Verpackungsmaschinen GmbH** 6361 Rodheim vdh Beinhardsweg West Germany Tel: 060307/2222 Telex: 415959



COUNT SELECTOR  
TOTAL COUNTER  
ELECTRONIC COUNTER

GLASS TURNTABLE  
PHOTO CELL METER

VIBRATOR FEEDER  
PHOTO CELL FLAP MECHANISM  
FILLING FUNNELS  
ADJUSTABLE PLATFORM

**TB4**  
machine

diameter. Excellent filling speeds can be obtained even with small-necked containers. The machine can be operated manually (one operator) and be fully automated with container unscrambler, feed and gating at a later date. An average operator can handle up to 35 containers per minute.

**SMALL COUNTS** of up to 25 frequently cause output to drop as the speed with which the operator can replace filled containers is limited. In such cases automatic container feeds are often justified.

**MEDIUM COUNTS** of up to 100 usually mean the machine is operating at optimum capacity and the operator is fully occupied.

With **LARGE COUNTS** of 500 to 1000 plus, the machine is also operating at maximum output, but the operator will have more time to concentrate on other work such as manual cottoning or capping.

Labour costs are therefore minimised. Other counting methods (by weight etc.) are invariably less efficient and cannot offer the same accuracy and time-saving advantages incorporated in the KING system.

**WHAT DO OUR CUSTOMER'S GET WITH EACH MACHINE?**

1. A large capacity removable fibre-glass hopper with no seams to trap dust.
2. A variable vibrator giving exceptionally smooth feed, fitted with stainless steel liner and dust/chip removal chute.
3. A rotating glass disc which does not mark or contaminate tablets.
4. A scroll arrangement to gently orientate the tablets into a single row and pass them through the wide-beam differential light source.

5. A simple flap mechanism to divert tablets accurately after completion of a pre-set batch counter.

6. The latest and most reliable technique in electronic counting and batching systems.

7. A light sensitive amplifier head that remains completely effective even when counting very dusty tablets.

8. An electronic system not effected by voltage fluctuation and ambient light.

9. The whole unit is easily serviced and the electronic batch counter is interchangeable from one machine to another.

10. The electronic counter has a built-in test system together with resettable meter which records the total number of containers filled.

# Unscrambling table and bottle feed UBCS and UBCD

Both single and double models are designed to unscramble containers and automatically feed them to the counting machine. Bottle blowers can be fitted prior to filling if required. The machines are compact and easily adjusted to suit different container sizes – no change parts are needed. All types and shapes of containers can be handled providing they stand freely on a moving conveyor. Difficult shaped containers may be supported in a puck.

## UBCD

The containers are placed on a rotating unscrambling table. An

orientating device allows two rows to pass on to a 'Delrin' plastic slat conveyor which is trip free and will not mark the containers in any way. A simple mechanism separates each row into two rows of containers and they are fed under the filling funnels. A simple gating device allows the filled container to escape at the end of each count. The filled container returns to a single row and is then ready to feed to the next operation. A power lift raises and lowers the counting machine to suit different height containers. There is a 'no container – no count' device.

Max. container size 2½ in. (63mm.)  
Min. container size ¾ in. (19mm).

Approximate outputs are:

## UBCS

80 containers at 25 tablets per min.

40 50

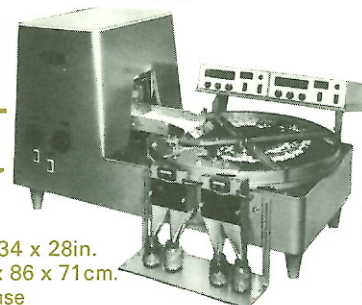
20 100

## UBCD

160 containers at 25 tablets per min.

80 50

40 100



## TB4 and TB5 tablet counters

## TB5 machine

### Description

These electronic counting machines were designed as a very reliable, accurate and versatile counter of all tablets, dragees and capsules. The machines are simple to set up and operate. Any count may be selected by rotating switches to batch from 1-1000 or 10,000. The units are compact and easily accessible for cleaning. A Tablet Stacking attachment is available.

### Operation

The tablets are placed in a fibre-glass hopper. A variable speed vibrator feeds the tablets over a dust removing grid on to a rotating glass disc. This disc orientates the tablets. One row of tablets drop off the edge of the disc through a light beam and photocell assembly. The pulses from the P/E cells are fed into 1 electronic batch counter. The count is selected on rotating switches. Any batch can be selected from 1-1000 (3-decade) or 1-10,000 (4-decade). The tablet feed is continuous and at the end of the batch the tablets are directed into alternate containers. On the TB5 two rows of tablets pass through 2 photo cells and pulse two electronic batch counters.

### Specifications

	TB4	TB5
Machine size:	39 x 24 x 28in. 100 x 61 x 71cm.	44 x 34 x 28in. 112 x 86 x 71cm.
Voltage:	1 phase	1 phase
Operator:	One	One.
Changeover time:	5 mins.	5 mins.
Cleaning time:	5 mins.	5 mins.
Power Consumption:	¼ H.P.	¼ H.P.
Net Weight:	200lbs. (90kg.)	350lbs. (159kg.)
Gross Weight:	300lbs. (135kg.)	400lbs. (181kg.)
Case size:	39 x 24 x 27in. 99 x 61 x 68cm	49 x 31 x 28in. 124 x 79 x 71cm.

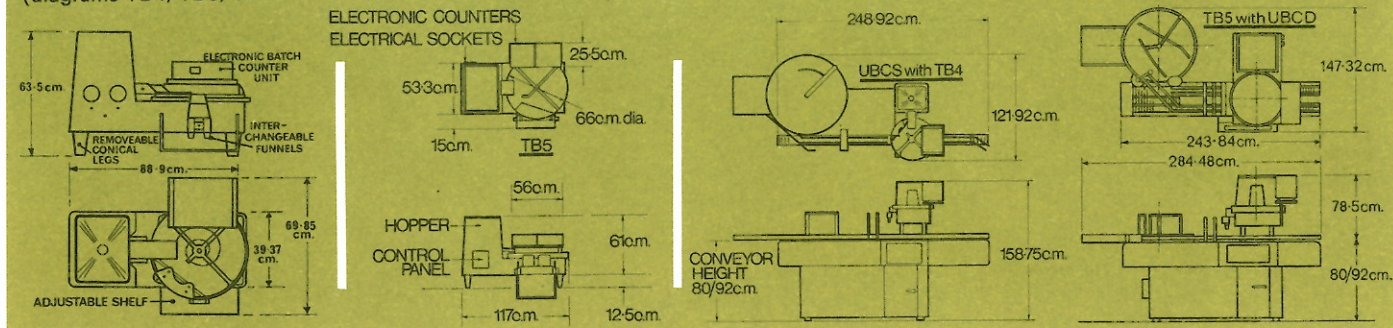
### Outputs

TB4			TB5		
Tablet size	Tabs/min	Capsules/min	Tablet size	Tabs/min	Capsules/min
5mm	3000	No. 1 1000	5mm	4000	No. 1 1600
6.5mm	2500	No. 2 1100	8mm	4000	No. 2 1700
9mm	2500	No. 3 1200	9mm	3750	No. 3 1800
10mm	2000	No. 4 1300	11mm	3500	No. 4 1900
11.5mm	1500	No. 5 1400	12.7mm	3250	No. 5 2000
25mm	1250		14mm	3000	
			15mm	2500	

### Specifications

	TB4 & UBCS	TB5 & UBCD
Machine size:	104 x 54 x 55in. 264 x 137 x 140cm.	104 x 48 x 60in. 264 x 122 x 152cm.
Voltage:	1 and 3 phase	1 and 3 phase
Operator:	None if in line	None if in line
Changeover time:	10 mins.	10mins.
Cleaning time:	10 mins.	10 mins.
Power Consumption:	1 H.P.	1 H.P.
Net Weight:	1500lbs.(682kg.)	1800lbs.(816kg.)
Gross Weight:	1800lbs.(816kg.)	2300lbs.(1043kg.)
Case size:	100 x 48 x 48in. 254 x 122 x 122cm.	101 x 51 x 48in. 256 x 129 x 122cm.

(diagrams TB4, TB5, TB4 with UBCS and TB5 with UBCD)



C. E. KING represented by:

