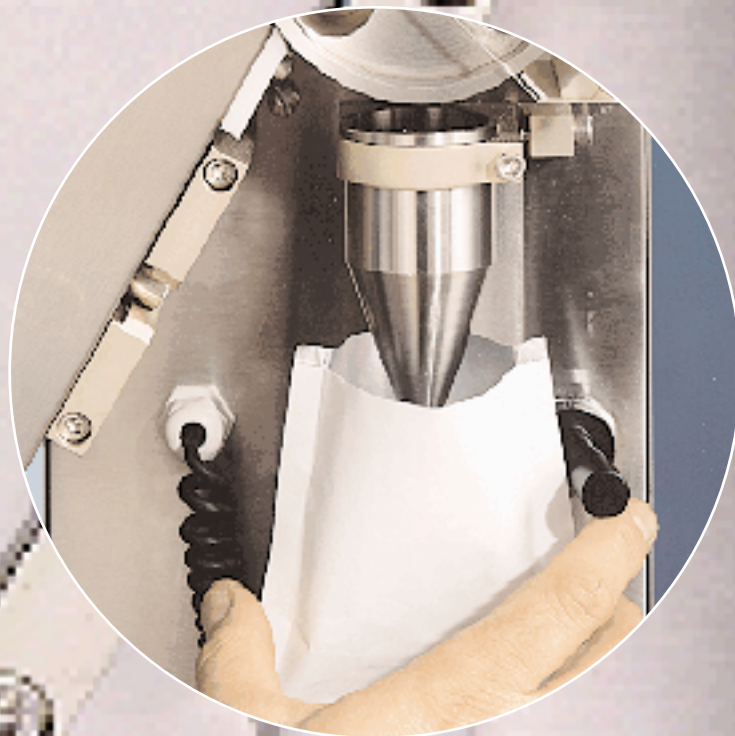


MODEL  
**4400/TX**

FULLY AUTOMATIC  
BENCH TOP POWDER FILLER



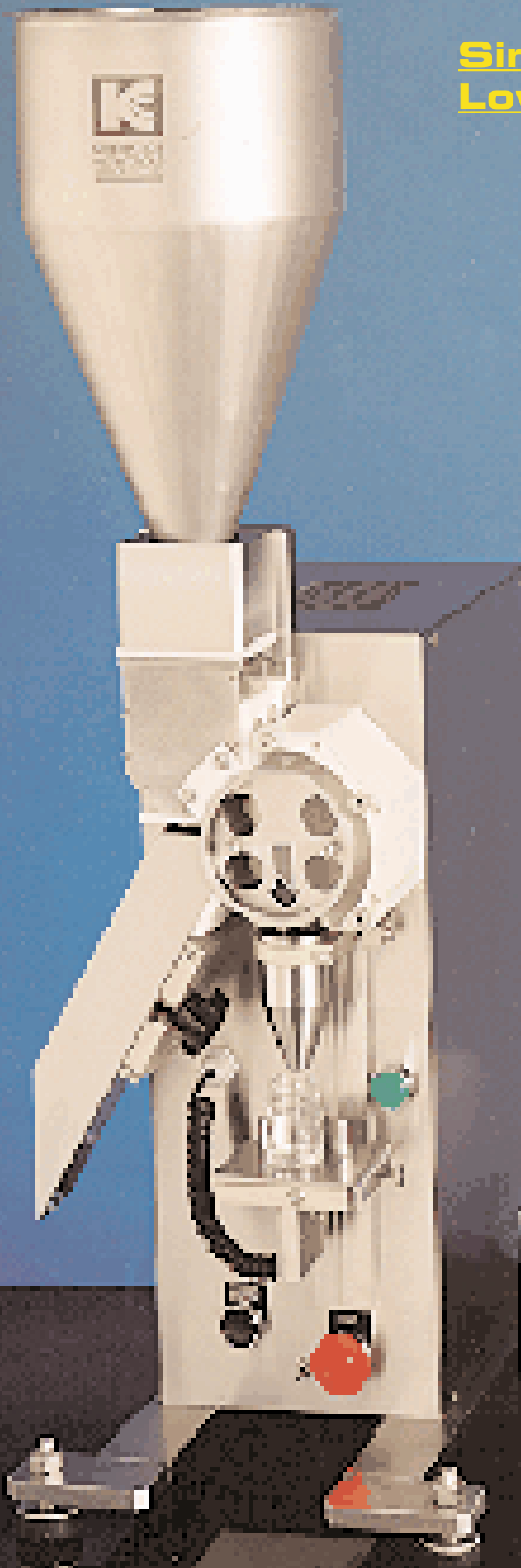
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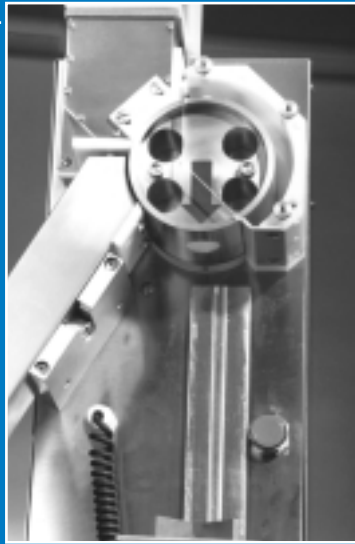
for applications assistance...  
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**LABORATORY EVALUATION**  
of your product.



# HOW DOES IT WORK?

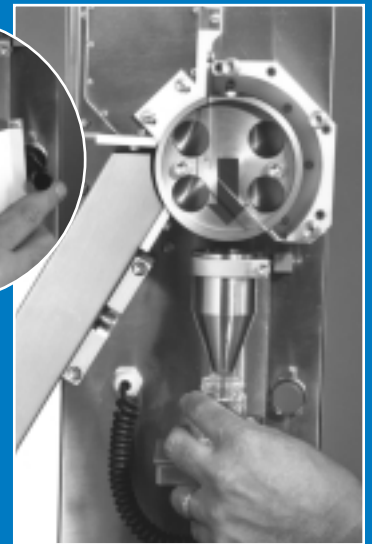
1

At the start of the fill cycle, the shuttle is in its home position with the mouth of the fill chamber facing down. A metered dose of powder, already picked up on the prior cycle, is held in the chamber ready to be dispensed.



2

Placing a container on the container platform, or holding a pouch beneath the fill chamber, actuates a microswitch to start the fill cycle.



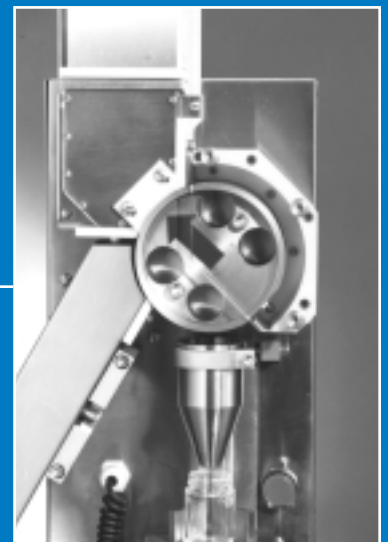
3

Powder being held in the shuttle's fill chamber is immediately dosed into the container, then, after only the slightest hesitation...

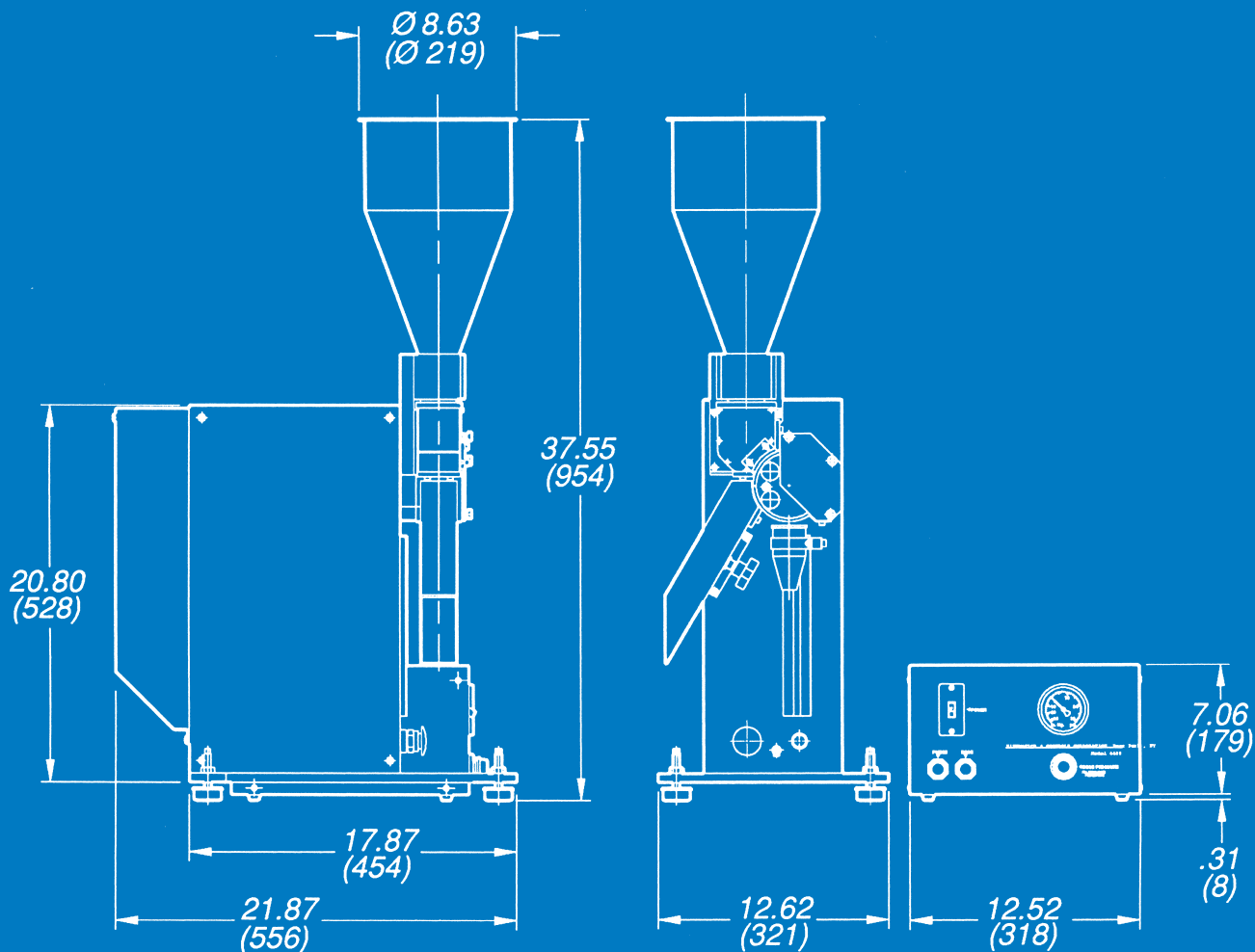


4

The shuttle automatically is driven up to pick up a fresh charge of powder for the next cycle. The shuttle dwells in this position momentarily to ensure a full dose, then returns back to its home position to await the signal to commence the next cycle.



# Dimensions, Weight & Electrical Specifications



## Shipping Dimensions:

Console: Foam Lined Carton: 10.5" x 16.5" x 18.5" (41.9 x 26.7 x 47.0 Cm.)

Shuttle Mechanism: Wooden Crate: 15.5" x 27.5" x 31.5" (39.4 x 69.9 x 80.0 Cm.)

## Shipping Weights:

115 V. Console: 26 Lbs. (11.8 Kilos)

115 V. Shuttle Mech.: 150 Lbs. (68 Kilos)

220 V. Console: 38 Lbs. (17.2 Kilos)

220 V. Shuttle Mech.: 165 Lbs. (75 Kilos)

## Electrical Data:

Console: 2.5 Amps. @ 115 V.-50/60 Hz. (1.3 Amps. @ 220 V.-50/60 Hz.)

Shuttle Mechanism: 5.0 Amps. @ 115 V.-50/60 Hz. (2.5 Amps. @ 220 V.-50/60 Hz.)

# MODEL 4400/TX

# FULLY-AUTOMATIC BENCH TOP POWDER FILLER

## **A Production SUPERSTAR!**

**Smooth, Efficient Productivity... Always the Name of the Game**

### *Production...*

Kinematics' Model 4400/TX, Rotary Shuttle Powder Filler, grinds it out... day after day... all year long! There simply is no better way to turn out your low to moderate volume production runs of precisely metered powders... Period! The process couldn't be more trouble-free...more exact... and even more economical than with this production Superstar! Just plug it in, and for as long as you want it to, the beast just plays... and plays... and plays.

The 4400/TX, together with even an inexperienced operator, can easily produce between 9,000 and 10,000 accurate and repeatable dry fills in a single, eight-hour shift. The easy-to-calibrate, single-cavity shuttle disk makes set-ups so simple that they require only a few minutes to accomplish. Changeovers and cleanups are likewise a breeze. An award-winning harmonic drive keeps it humming along at a strong, yet unbelievably quiet pace. The 4400/TX is truly a gritty performer... the ideal choice for any laboratory or limited production environment.

### *Accuracy...*

The Model 4400/TX utilizes an extremely accurate, vacuum/volumetric dosing principle. This technology enables it to be both a simple powder dispenser and a precise, exact weight, metering device. Costly hand weighing is eliminated. It will dispense free-flowing, as well as sticky products as fine as 10 microns in particle size, to coarse granular products with repeat accuracies sometimes better than  $\pm 1\%$  over three  $\Sigma$  limits. Single doses can range from approximately 50 mg. to a high of about 80 Gm. Two-shot dosing can, of course, double these fill sizes... all with non-cumulative error! Actual fill capacity, maximum production rate and repeat accuracy are all variables that are product dependent. Please ask us for a no-cost/no-obligation evaluation of your product in our laboratory.

### *Superior Design & Construction...*

The finest available materials and components are used throughout the instrument. The vacuum console's aluminum alloy chassis and cover are powder coated and baked with a tough polyester overcoat. Product contact parts are all made of the most corrosive resistant grades of stainless steel alloy, or other F.D.A. approved materials. Motors and pumps are damped for quiet, vibration-free operation. Finally, each unit is hand assembled with meticulous care, under rigorous quality control. This adds up to years of dependable, maintenance-free operation, even under the most demanding of production schedules.

### *Thirteen Month Warranty...*

Kinematics & Controls Corporation offers a limited, Thirteen-Month Extended Warranty on all of its products. We thought you might like to have an extra month's peace of mind... and frankly, we're not worried about offering it to you!

**KINEMATICS & CONTROLS CORPORATION**

*Experts in Precision Filling, Metering, Dosing and Dispensing of Liquids and Powders.*

15151 Technology Dr., Brooksville, FL 34604-0690 • Phone: 352-796-0300 • Fax: 352-796-4477 • Toll Free 800-833-8103

www.kcontrols.com • email: sales@kcontrols.com

## Ordering Information...

The Model 4400/TX, Rotary Shuttle Powder Filler is put together by purchasing the Base Machine, plus at least one Shuttle Disk Assembly. Other options are also listed. Call the factory directly for a current price quotation. All prices are quoted f.o.b. Deer Park, NY. Standard Terms and Conditions of Sale are furnished with each quotation.



### Base Machine

Available in either 115 VAC. (50/60 Hz.) or 230 VAC. (50/60 Hz.) versions. The Base Machine is comprised of the two major elements, "a" and "b", indicated below.

(Note that the Shuttle Disk Assembly is not included as part of the Base Machine package):



#### a.) Vacuum Console Assembly (4400/VC)

Is packaged separately, with its integral pump, compound vacuum/pressure gage, valving, filters and controls, foot switch assembly, a length of vacuum/pressure tubing, and complete operating instructions.

Console dimensions:	12.5"W. X 7.5"H. X 13.0"D. (31.8 cm. X 19.1 cm. X 33.0 cm.)
Carton dimensions:	16.5"W. X 10.5"H. X 18.5"D. (41.9 cm. X 26.7 cm. X 47.0 cm.)
Shipping Weight:	4400/VC-115V. .... 26 Lbs. (11.8 Kilos).
	4400/VC-230V. .... 38 Lbs. (17.2 Kilos).



#### b.) Rotary Shuttle Mechanism (4400/RS )

The 4400/RS contains the shuttle's drive mechanism, the system's programmable logic controller (P.L.C.), a covered 7.0 liter stainless steel hopper, powder conditioning agitator box, dust collector assembly, stainless steel machine base with leveling legs, Start/Stop/Toggle controls, pair of I/O Cables and complete set of operating instructions.

Machine dimensions:	See Drawing...
Crate dimensions:	16.25"W. X 28.25"L. X 30.5"H. (41.3 cm. X 71.8 cm. X 77.5 cm.)
Shipping Weight:	4400/RS-115V. .... 150 Lbs. (68.0 Kilos).
	4400/RS-230V. .... 162 Lbs. (73.5 Kilos).



### Shuttle Disk Assembly

In addition to the Base Machine, a minimum of one shuttle disk assembly is needed to complete the Model 4400/TX filling system. However, because of the almost unlimited variety of powders, dose sizes and container.

#### FEATURES:

- No Container/No Fill
- User Selectable Dwell Period
- Dust Collection Bin
- Optional Dose Funnel
- Solid State, Programmable Controller
- Modular Construction/User Serviceable
- Optional Hopper Stirring Mechanism

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