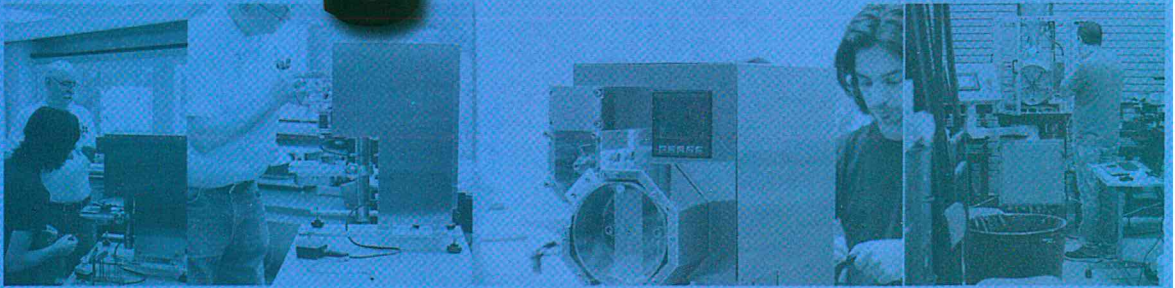


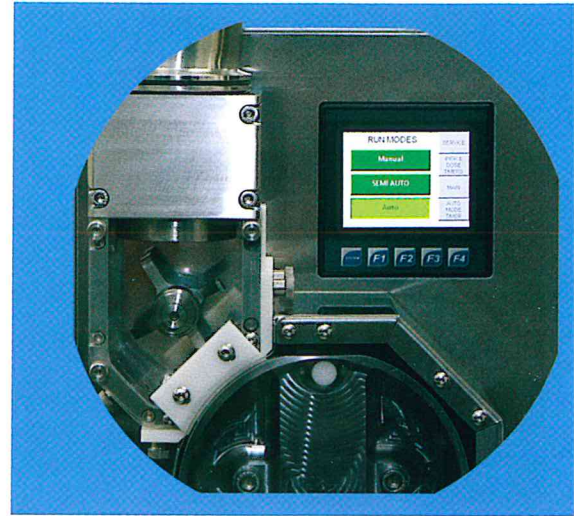
Model 5500/TX, Semi-Automatic, Bench Top Powder Filler



A filling machine w
with repeat



Model 5500/TX,
Semi-Automatic,
Bench Top Powder
Filler (CE)

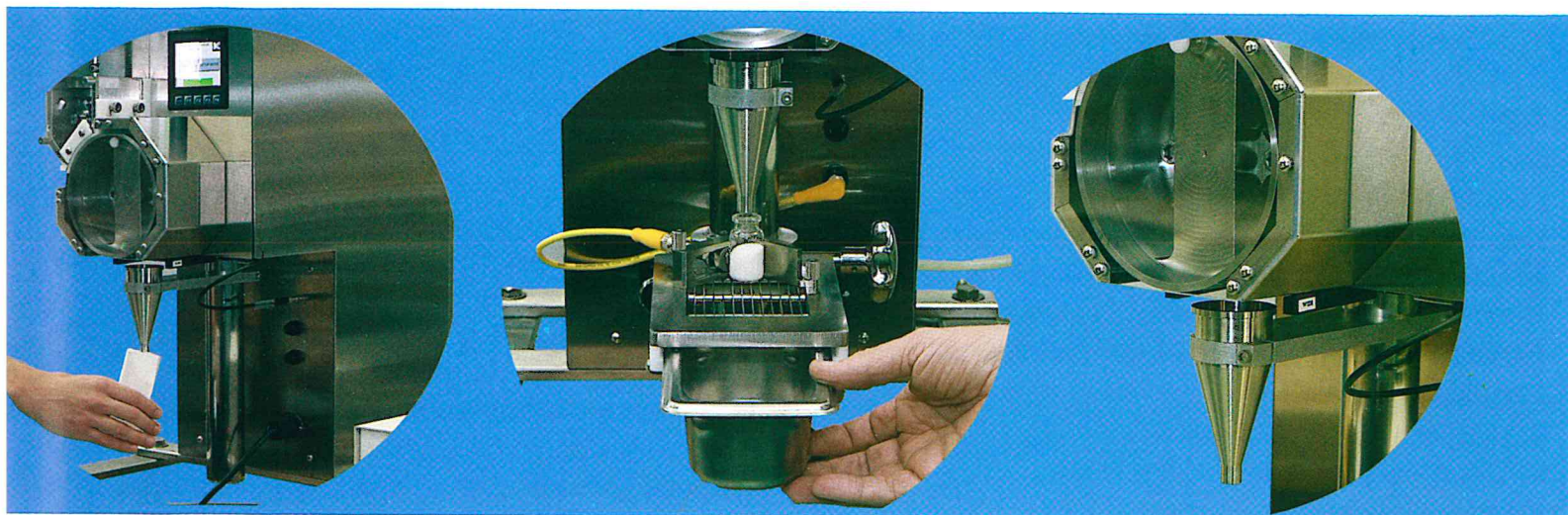


5500/RS

4400/VC



ich can deliver **small** doses of dry powdered product accuracy levels unattainable by any auger filler.

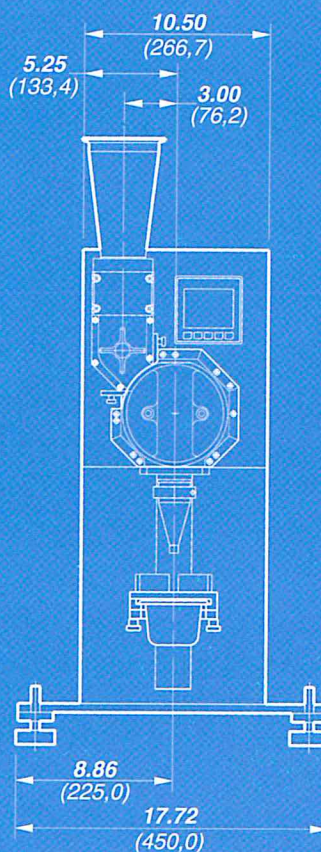
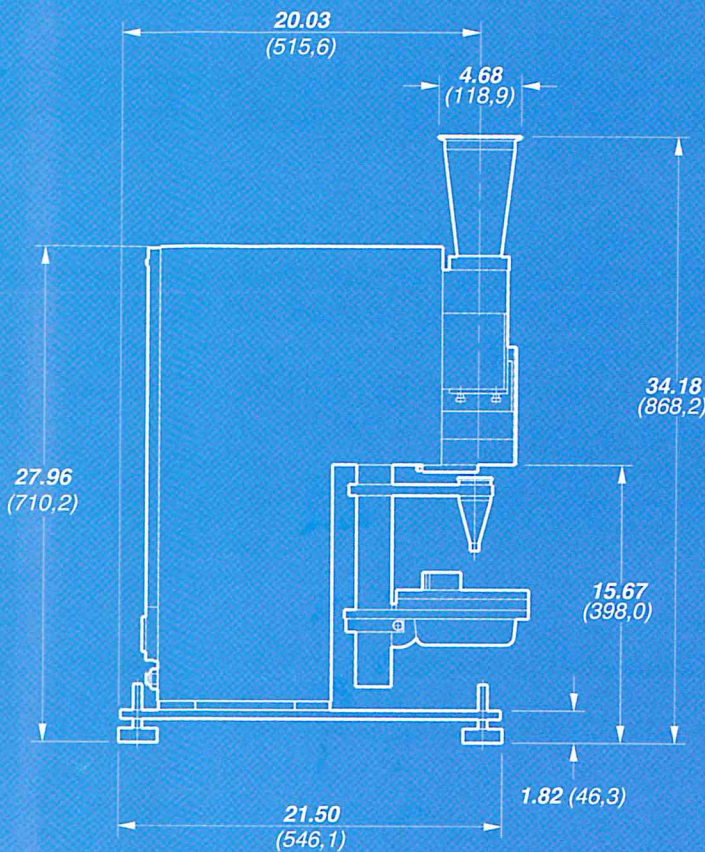


FEATURES

- Delivers Free-Flowing, Non-Free Flowing, Dense or Fluffy Powders
- Closely Repeatable Dose Weights of up to 180 gm.
- More Accurate Delivery of Small Doses when Compared to Auger Fillers
- Production Rates of up to 25 Fills/Min.
- User Selectable Modes of Operation
- Modern Drive Technology
- Certified 316 S.S. Construction
- Ideal for Small-Scale Production or Laboratory Applications.

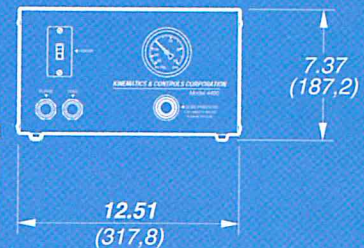
Traditional auger fillers have their place in filling applications which require the delivery of relatively large doses of dry powdered or granular products. However, they are inherently unsuitable for use in filling applications which call for the delivery of small doses with close-tolerance repeat accuracy. The all-new Kinematics' Model 5500/TX, rotary shuttle, vacuum/volumetric, powder filler meets this latter challenge. Now, the world has serious bench-top powder filler with the capability of cleanly delivering accurate and repeatable small doses of dry powder in amounts of up to 180 gm. at fill rates of up to 25 fills/minute. The filling principle employed in the Model 5500/TX is exactly the same as in all of our other powder fillers.

KINEMATICS



SHIPPING DIMENSIONS:

- Console: (Foam Lined Carton) 10.5"(26,7 cm.) W. x 18.5"(47,0 cm.) D. x 16.5"(41,9 cm.) H.
- Shuttle Mechanism: (Wooden Crate) 30"(76,2 cm.) W. x 26"(66,0 cm.) D. x 38"(96,5 cm.) H.
- SHIPPING WEIGHTS:
- 4400/VC-115 V. Console: 26 Lbs. (11.8 Kilos)
- 5500/TX115 V. Shuttle Mech.: 250 Lbs. (113 Kilos)
- 4400/VC-230 V. Console: 38 Lbs. (17.2 Kilos)
- 5500/TX230 V. Shuttle Mech.: 250 Lbs. (113 Kilos)
- ELECTRICAL:
- Consoles: 2.6 Amps.@115 V50/60 Hz. (1.3 Amps.@230 V50/60 Hz.)
- Shuttle Mechanisms: 5.0 Amps.@ 115V 50/60 Hz. (2.5 Amps.@ 230 V50/60 Hz.)
- COMPRESSED AIR: N/R

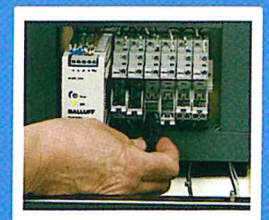
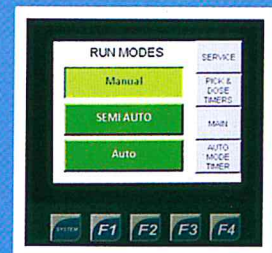


Simply stated, the principle is, "If we fill a fixed volume chamber with dry powdered product, compact it to a controlled even density, then fully discharge it, the weights of consecutive doses will be extremely close and repeatable." Using vacuum to compress the powders to a controlled density is the key to achieving the high level of repeat accuracy.

The Kinematics' Model 5500/TX was designed around a Ø6" O.D. dose wheel with a maximum chamber size of Ø1-5/8" I.D. and a maximum length of draw of about 4" L. This puts the projected maximum deliverable dose at approximately 180 gm.

Everything on the machine is directly driven. In a sense, you can compare its design to the "fly-by wire" technology that is employed in many of today's modern jet aircraft. There are no belts, pulleys or clutches in the design. The machine's dose wheel is directly driven by a programmed stepper motor drive. The product agitator shaft is directly driven by a small A.C.

induction gear motor. The panel mounted, full-color, touch-screen HMI allows the user to field-configure its operation by selecting any of several pre-programmed modes of operation. We have taken all of the control relays out of the P.L.C. With no integral mechanical components, the life expectancy of the P.L.C. is significantly extended. Furthermore, there will never be any need to replace an entire, expensive P.L.C. because of a simple mechanical relay failure. The control relays in the Model 5500/TX are robust, solid-state plug-ins, mounted on easily accessible DIN rail segments. If a relay fails, simply unplug it and replace it. There are also no mechanical switches to foul. Solid-state sensors are employed throughout for all sensing, i.e., "container-presence", "product-drop" and "low-hopper level".



The Model 5500/TX offers five (5) user-selectable modes of operation.

Modes of Operation

The Model 5500/TX offers five (5) user-selectable modes of operation.

I. Auto Cycle

In this mode, powder doses are automatically & repeatedly dropped from the shuttle disk on a fixed time interval. The user selects the cycle rate at which the product is to be delivered. Once the sequence is started, the machine will continue to drop repetitive doses regardless of whether or not there is a container in place to receive the delivered dose. Filling in this manner does carry some risk of spilling product.

Fill directly into hand-held rigid containers. Fill directly into rigid containers placed on the container platform. Not ideal for use with pouches or with non-free flowing products through a funnel.

II. Foot Switch Actuate (Single/Multi-Shot Fill Cycle)

In this mode, a footswitch closure initiates each dose cycle. The filler will deliver a single dose or multiple doses (if selected) with a single depression of the footswitch without regard to whether or not there is a container present at the fill station.

This is an Ideal mode for filling hand-held pouches.

III. Foot Switch Actuate w/Container "Present" Confirmation (Single or Multi-Shot Fill Cycle)

In this mode, a footswitch closure is used to initiate each dose cycle. However, the machine controls will allow delivery of a dose, or multiple doses (if selected.) only if there is additional confirmation that a container is "present" at the fill station. The container "present" sensor must be actuated before a fill cycle is allowed to be initiated. In multi-shot mode, the container is held in place against the sensor until the programmed number of doses is dispensed. Once a cycle is completed, the filled container is removed and a new empty container is put into position to await footswitch actuation.

For rigid containers placed & filled directly on the container platform, or

for rigid containers placed on the container platform & filled thru the funnel. This mode is not used for filling pouches.

IV. Container Actuate (Single or Multi-Shot Fill Cycle) No Footswitch Required.

In this mode, the container "present" sensor alone initiates the fill cycle. A powder dose or multiple doses (if selected.) is delivered each time that a container is placed in position to receive powder against the container-present sensor. The container is held in position under the shuttle disc until the total number of shots selected for the cycle is dropped. Removing the container resets the P.L.C. for the next fill cycle. For rigid containers placed & filled directly on the container platform. For rigid containers placed on the container platform & filled thru the funnel. This mode is not used for filling pouches.

V. Hand Shaking (Integrated Automatic Fill)

When the Model 5500/RS filler is integrated into a larger, fully-automatic filling system, it operates in a symbiotic "hand-shaking" mode with the host system's P.L.C. The host P.L.C. starts each fill cycle with a switch closure. The fill cycle is then completed and the Model 5500's P.L.C./HMI actuates a relay which signals back to the host P.L.C. that the cycle has been completed. A "product-dropped" sensor is also included to provide a signal to verify that product has actually been dropped. A successfully completed cycle comprises a verified, full up-and-down index of the shuttle disk as well as verification that the correct number of powder charge was actually dropped. The host P.L.C. is expected to maintain overall responsibility for integrating these independent signals. Also, in this mode the powder filler's program will not be looking for a container-present signal to allow cycling. The host system will be responsible for verifying container presence before it sends a start-cycle signal to the filler.



Configure your 5500/TX purchase the way you need it... All with a full 2-year Factory Warranty.

Choose only the features you need to configure your filler. The **Model 5500/TX** filler is comprised of two modules, the base **Model 5500/RS** rotary shuttle mechanism and the **Model 4400/VC** vacuum console unit.

Base Machine, Model 5500/TX. (This base machine is always required.) It includes:

- (1) Model 5500/RS rotary shuttle mechanism.
- (1) Heavy-duty, stainless-steel mounting base.
- (1) Model 4400/VC vacuum console unit w/footswitch.
- (1) Small product hopper.
- (1) A.C. power cable.
- (2) I/O interconnection signal cables.
- (1) Vacuum/pressure line.
- (1) External RS232 com port; (For communication with the P.L.C..)
- (1) 4-Pin, 12 mm. output signal cable assembly.
- (1) "Product-Dropped" sensor w/cable.
- (1) Emergency Stop Switch.
- (1) Full documentation package.

Tooling

Required tooling is sold separately. At least one set of tooling, comprising a custom Ø6" Shuttle Disk Assembly, is needed to complete the basic system. The adjustable volume fill chamber of each shuttle disk is bored and honed to meet the customer's specific range of fill weights.

Dose weight is fully variable over a wide range within the specific chamber size for the tool.

Container Platform Assembly

This option includes the container platform with its integral grating assembly; slide-in waste pan; container centering blocks; container present sensor and sensor cable. (This option is normally used for filling rigid containers and requires having the Column Assembly option for mounting.)

Column Assembly.

This assembly provides the means for supporting and adjusting the height of both the container platform assembly and the funnel assembly.

Funnel/Funnel-Clamp Assembly.

This assembly is used for filling small-mouthed containers or pouches with doses of free-flowing powder. A straight-sided funnel is available for dropping non-free-flowing powders into wide mouthed pouches. (Use of the Funnel/Clamp Assembly requires the Column Assembly option for its mounting.)

Large Product Hopper.

An optional 12,8 liter product hopper is available to replace the standard small product hopper. This optional item allows for fewer hopper refills when dispensing larger doses.

Low Product Level Sensor.

Adapts to either the small or the large product hopper. Used for detecting low product levels.

Relay contact output provides means for activation of external audible/visual alarm(s), or actuation of an automatic refill means.

Scan the QR code below
to be directed to our website

