

SMITH

SMITH NUT CLUSTER MACHINE

(U. S. AND INTERNATIONAL PATENTS PENDING)

First machine of its kind! This breakthrough design produces top quality clusters by extrusion for hand made appearance without molds . . . Uses a broad variety of nuts, coconut, raisins, cereals, or any other free flowing filler.

Requires only a conveyor belt for three or more simultaneous multiple deposits . . . Intended for placement at stringing/decorating station of coating line for direct pass of clusters through cooling tunnel . . . Continuous conversion of raw materials to finished goods without hand labor! . . . Separate Smith Con-Rad Cooling Tunnels also available, complete with fixed or variable speed drive and easily integrated into your present or future coating line for unsurpassed chocolate cooling efficiency.

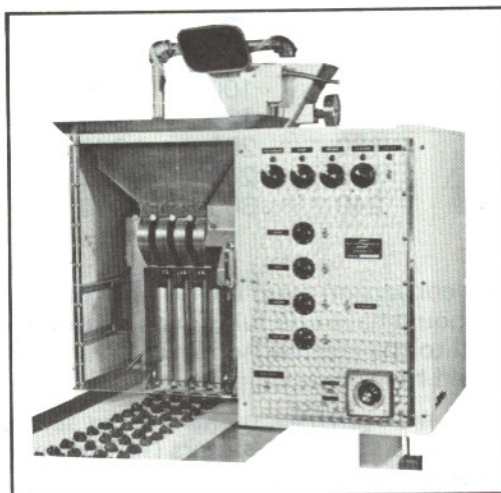
Multiple extrusion tubes have fully cantilevered mounting from left or right vertical post on sturdy frame and base . . . Entire unit is portable on casters for easy roll to operation or storage . . . Requires only regular supplies of tempered chocolate and filler to individual receiver hoppers . . . The Smith Tru Temp Automatic Tempering Unit is an excellent continuous chocolate source . . . Only utility is a single electrical connection to any standard world current specified.

**Candy^{Snack}
INDUSTRY**

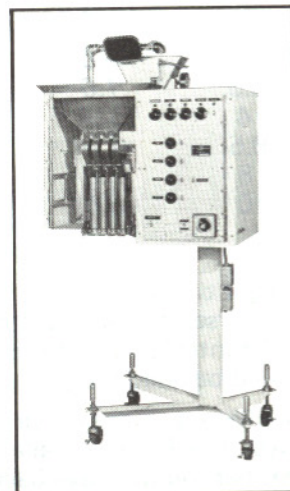
**TECHNOLOGICAL
ACHIEVEMENT
AWARD**

**SMITH NUT
CLUSTER MACHINE**

**LEFT HAND MODEL
4 EXTRUSION TUBES**



Smith Nut Cluster Machine extrudes uniform product in clusters or bars.



Cantilever structure easily rolls over or away from tunnel belt.

How Does It Work?

Each vertical extrusion tube is fitted with a rotating augur screw. Nuts or other filler materials are fed by chute from a hopper into the open top of the tube and drawn down by the augur. Tempered chocolate is injected into the tube at a side port from a separate hopper. The augur continuously mixes the chocolate and filler, and meters the mixture to the tube bottom. There, a timed cutoff knife cuts individual clusters and drops them on the conveyor belt.

What are the Operating Controls?

The unit is completely equipped with variable controls to give the operator total control over cluster formation:

Variable Augur Speed governs basic flow rate of cluster mixture to be deposited.

Variable Chocolate Feed and Variable Filler Feed are independently set to determine proportions of each and combined supply to augur.

Variable Cutoff sets knife timing to determine size of extrusion to be cut and dropped.

Four separate variable heaters control tempered chocolate delivery system and extrusion tube temperatures to obtain "stiff" or "flat" clusters. A large dial thermometer checks chocolate in receiver hopper.

Within an hour or two anyone can operate this machine. Experience builds quickly on operating factors. For example, cereal fillers have greater binding effect in cluster formation than large nuts. Control settings give highly reproducible results.