

ROTEX
PELLET & CRUMBLE
SCREENERS

CATALOG 706

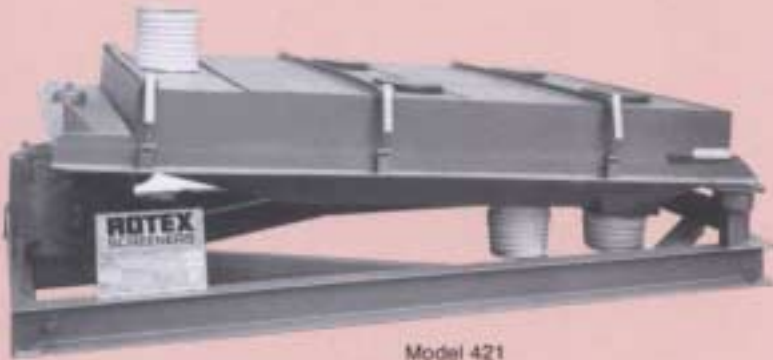


ROTEX[®]

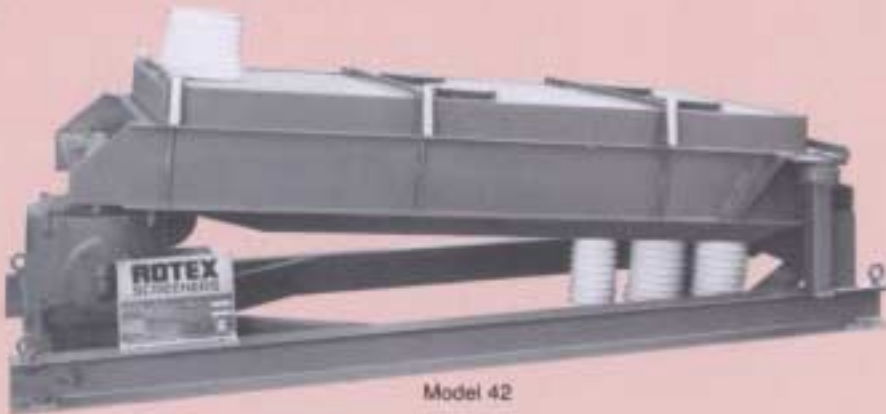
PELLET & CRUMBLE SCREENERS

ROTEX PELLET AND CRUMBLE SCREENERS are self-contained production screening machines for fast accurate separations of pellets, crumbles, range cubes and other animal and aquaculture feeds according to particle size. These machines are available in 21 standard models, ranging in application from fines removal on a single-surface machine, to separation of both pellets and crumbles on two-surface and three-surface models. All models use the unique ROTEX gyratory screening motion, which provides consistently sharp, well-defined separations without deterioration of pellets and crumbles. This motion is highly effective also on the smaller pellets typically produced for aquaculture feeds.

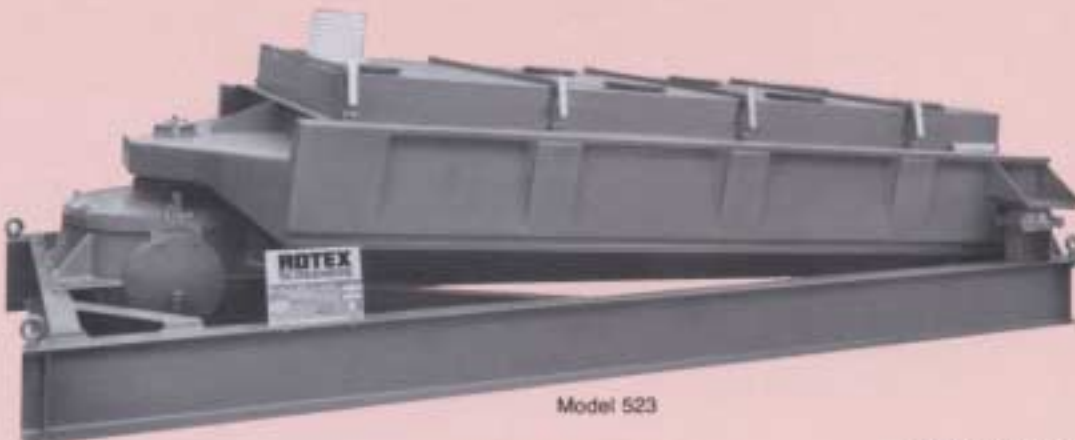
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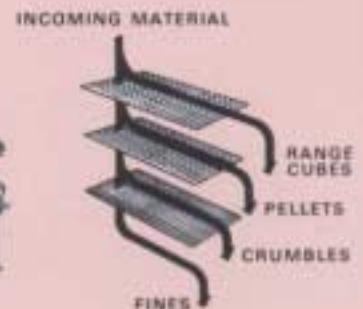
Model 421

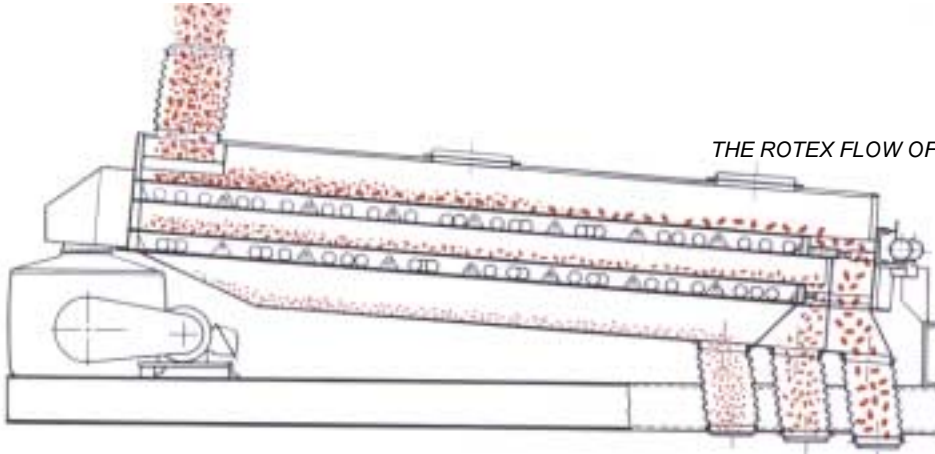


Model 42



Model 523





THE ROTEX FLOW OF MATERIALS IS FAST, EFFICIENT, ACCURATE

Feed material enters at top left, is distributed over entire width of screen surface and conveyed to discharge end. Larger particles remain above the screen surface, while smaller particles pass through, as determined by the screen meshes used for each particular application.

THREE BASIC TYPES TO SERVE EVERY APPLICATION

SINGLE-SURFACE ROTEX-Used principally for removal of fines from pellets or range cubes.

Model Number	Screen Dimensions Width x Length Inches (millimeters)	Pellet Capacity* TPH (MTPH)	Motor 1200 RPM at 60 Hz HP(kW)	Approx. Net Weight lbs. (kg.)
11	20 x 48 (510 x 1220)	6 (5.5)	0.5 (0.4)	530 (250)
3201	30 x 60 (760 x 1520)	13 (12)	2 (1.5)	1325 (600)
3221	40 x 56 (1000 x 1420)	16 (15)	2 (1.5)	1400 (650)
321	40 x 84 (1000 x 2130)	25 (23)	2 (1.5)	1675 (750)
3421	60 x 84 (1500 x 2130)	37 (34)	2 (1.5)	2100 (950)
81	60 x 120 (1500 x 3100)	50 (45)	3 (2.2)	3800 (1700)
521	60 x 144 (1500 x 3700)	60 (54)	7.5 (5.6)	6300 (2850)
581	80 x 144 (2000 x 3700)	85 (77)	7.5 (5.6)	6500 (3000)

TWO-SURFACE ROTEX-The screener most used for separating fines from either pellets or crumbles. Pellets pass over the top surface, through which fines are removed. Without a change in screen mesh, crumbles pass through the top surface and over the bottom screen, which is usually 14 to 20 mesh for fines removal.

Model Number	Screen Dimensions Width x Length Inches (millimeters)	Pellet Capacity* TPH (MTPH)	Motor 1200 RPM at 60 Hz HP(kW)	Approx. Net Weight lbs. (kg.)
12	20 x 37 (510 x 940)	5 (4.5)	0.5 (0.4)	530 (250)
322	40 x 56 (1000 x 1420)	15 (14)	2 (1.5)	1500 (700)
342	40 x 84 (1000 x 2130)	25 (23)	2 (1.5)	2100 (950)
842	60 x 84 (1500 x 2130)	37 (34)	3 (2.2)	3775 (1700)
852	60 x 100 (1500 x 2540)	44 (40)	3 (2.2)	4000 (1800)
52	60 x 120 (1500 x 3100)	50 (45)	7.5 (5.6)	5660 (2600)
522	60 x 144 (1500 x 3700)	60 (54)	7.5 (5.6)	6400 (2900)
582	72 x 144 (1800 x 3700)	72 (65)	7.5 (5.6)	7000 (3200)

THREE-SURFACE ROTEX-For multi-purpose screening. Without changing screens, range cubes as well as pellets and crumbles can be screened. Range cubes pass over the top surface, through which fines are removed... the middle and bottom screen surfaces are employed for pellets and crumbles as in a two-surface machine.

Another method is to utilize the top surface for fines removal from pellets, with the middle and bottom screen surfaces producing two different grades of crumbles.

Model Number	Screen Dimensions Width x Length Inches (millimeters)	Pellet Capacity* TPH (MTPH)	Motor 1200 RPM at 60 Hz HP(kW)	Approx. Net Weight lbs. (kg.)
3203	30 x 60 (760 x 1520)	13 (12)	2 (1.5)	1625 (750)
343**	40 x 84 (1000 x 2130)	20 (18)	2 (1.5)	2300 (1100)
843	60 x 84 (1500 x 2130)	35 (32)	3 (2.2)	4300 (1950)
523	60 x 120 (1500 x 3100)	50 (45)	7.5 (5.6)	6150 (2800)
73	80 x 144 (2000 x 3700)	85 (77)	10 (7.5)	13000 (6000)

*When screening crumbles, rated capacity is reduced by 31%. Capacities do not apply for aquaculture applications—consult ROTEX INC.
**For maximum capacity, install Model 343 with base at an additional four degree angle.

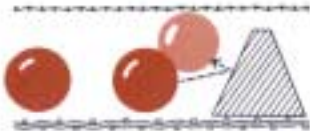
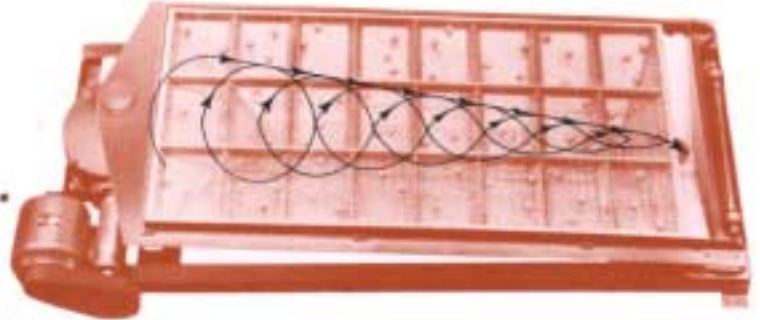
ROTEX

PELLET & CRUMBLE SCREENERS

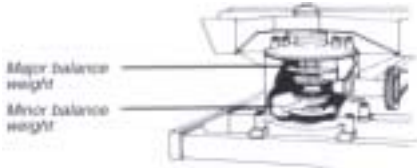
Efficient screening action without product deterioration

The ROTEX gyratory motion of the near-level screen box varies from a circular motion at feed end, to a longitudinal stroke at discharge end. The circular action immediately distributes and stratifies material over entire width of screen surface, causing fines to quickly sink down, against the screen mesh. Since there is no violent agitation or vertical hop, fines hug the screen surface and readily pass through. At the same time, larger particles are gently and steadily conveyed toward the discharge end, where the ROTEX longitudinal motion effectively removes all near-size particles.

This efficient gyratory action removes all fines and dust without causing deterioration of pellets and crumble material. In addition, because the screen surface is near level (only 4° from horizontal), ROTEX utilizes the screen's full mesh openings-ensuring consistently sharp, well-defined separations even at high production rates.



BOUNCING BALLS ELIMINATE SCREEN BLINDING by continuously tapping the underside of the screen mesh. This bouncing action dislodges particles by direct contact, and at the same time keeps the screen alive and aids in stratifying the material.



ROTEX DRIVE PROVIDES BALANCED MOTION

ROTEX Screeners utilize a patented counterbalanced motion to drive the screen box, providing smooth, quiet operation for years of dependable service. When a heavy load of material hits the screen and maximum screening action is required, the ROTEX positive displacement stroke will not dampen out; its screening action is designed to remain constant and steady even under such heavy loading.

On smaller ROTEX models, the counterbalancing is achieved by a single rotating weight. On larger machines, dual weight drives are used in either of two types:

- Dual Counter-Rotating Weights-ROTEX introduced the dual weight drive to solve the problem of balancing larger screeners. It uses two weights, a major and a minor, driven by a pinion shaft through spiral bevel gears-see illustration above.

- Dynamic Absorber-The patented new Dynamic Absorber drive combines the counterbalancing effect of a dual weight drive with the simplicity of a single weight drive. The Dynamic Absorber is harmonically tuned to the operating frequency of the screener to absorb the excess forces generated by the screener's motion. The absorber itself is simply a set of weight plates suspended by leaf springs on the sides of the drive. It is not motor driven; rather it absorbs energy when set in motion by the machine's natural base movement.

ROTEX DESIGN SAVES SPACE, SIMPLIFIES INSTALLATION

ROTEX Screeners are designed with a lower silhouette than most other types of screening equipment. Consider the advantages:

- 1) Lower headroom permits operation in confined areas, reducing costs of building construction and maintenance.
- 2) Less conveying equipment is required for elevating material to the feed point.



Furthermore, little space is required around ROTEX for removal of screens, in contrast with other machines which require substantial space at front and back in order to pull out screens.

Because of their smooth counterbalanced drive, ROTEX Screeners can also be cable-suspended at any desired location to meet space or structural limitations. Cable suspension eliminates any possibility of transmitted motion to or from adjacent

ROTEX Screeners may be cable suspended



ENCLOSED CONSTRUCTION

The ROTEX design is completely enclosed, every joint and connection fully-sealed to prevent contamination of surrounding atmosphere. Interior sealing, too, prevents cross-contamination of materials between the various screen surfaces-thus ensuring the consistently high quality separations inherent with the ROTEX screening action.

ROTEX ARE EASY TO MAINTAIN

Rugged construction and simplicity of design make ROTEX dependable in performance even when operated 24 hours per day, 7 days a week, continuously.

The only lubrication requirements are a semi-annual change of oil in the drive mechanism or periodic greasing of some bearings. For minimum attention, permanently sealed, lubricated-for life bearings are used where applicable. All slide bearing assemblies (except 70 Series) employ graphite-impregnated carbon block material, which is fully self-lubricating. The 70 Series ROTEX models use a steel slide ball and have a fitting for grease lubrication.

For maximum life, all areas subject to wear incorporate abrasion-resistant components, which are readily accessible should replacement ever become necessary.

Another ROTEX feature Quick-Release Cover Clamps



Quick-Release Cover Clamps on the top cover permit fast disassembly for screen changes. Usually, 15 minutes is more than sufficient to replace screen frames in a ROTEX. In addition, ROTEX does not require special edging strips for attaching screen clothing.

OTHER COST-SAVING ADVANTAGES

The high efficiency and counterbalanced drive of ROTEX permit the use of smaller machines and motors for any given job-an obvious cost advantage, both initially and in use. With smaller machines, screens and perforated plates are also smaller, reducing supply costs. From every standpoint, ROTEX Pellet and Crumble Screeners offer you excellent opportunities to increase production, improve quality and reduce costs.

ROTEX INC.