

# ROTEX<sup>®</sup>

## SCREENER CATALOG 209





Front cover photo: Six Model 81A ROTEX Screeners used for screening a fish food supplement.

Right, top to bottom:

- Multi-level installation of four Model 581A ROTEX Screeners for primary and secondary screening of diammonium phosphate.
- Four Model 54A ROTEX Screeners in a Canadian sugar refinery, each producing five separate grades.
- Sizing granulated sugar on a Model 542A ROTEX Screener in a Montana refinery

Below: Bank of ten ROTEX Screeners, Models 111A and 12A, performing high production screening of welding flux.



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# FAST PRODUCTION SCREENING OF DRY MATERIALS

ROTEX Screeners are self-contained production screening machines for separating dry materials according to particle size. Through their unique gyratory motion of the near-horizontal screen surface, combined with a positive screen mesh cleaning system, ROTEX provides unusually high efficiency and capacity - all the result of continuing development for hundreds of applications throughout scores of industries.

This catalog contains complete detailed descriptive information and specifications for the complete ROTEX line ...both Automatic Tensioning and General-Purpose Models, ranging from single screen surface models producing two grades (one separation) to five screen surface models producing six grades (five separations). For assistance with your specific application, call your ROTEX Representative or Application Engineers in our Cincinnati office.

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*Left: ROTEX /INC. Headquarters,  
Cincinnati, Ohio U.S.A.*

## **ROTEX INC.**

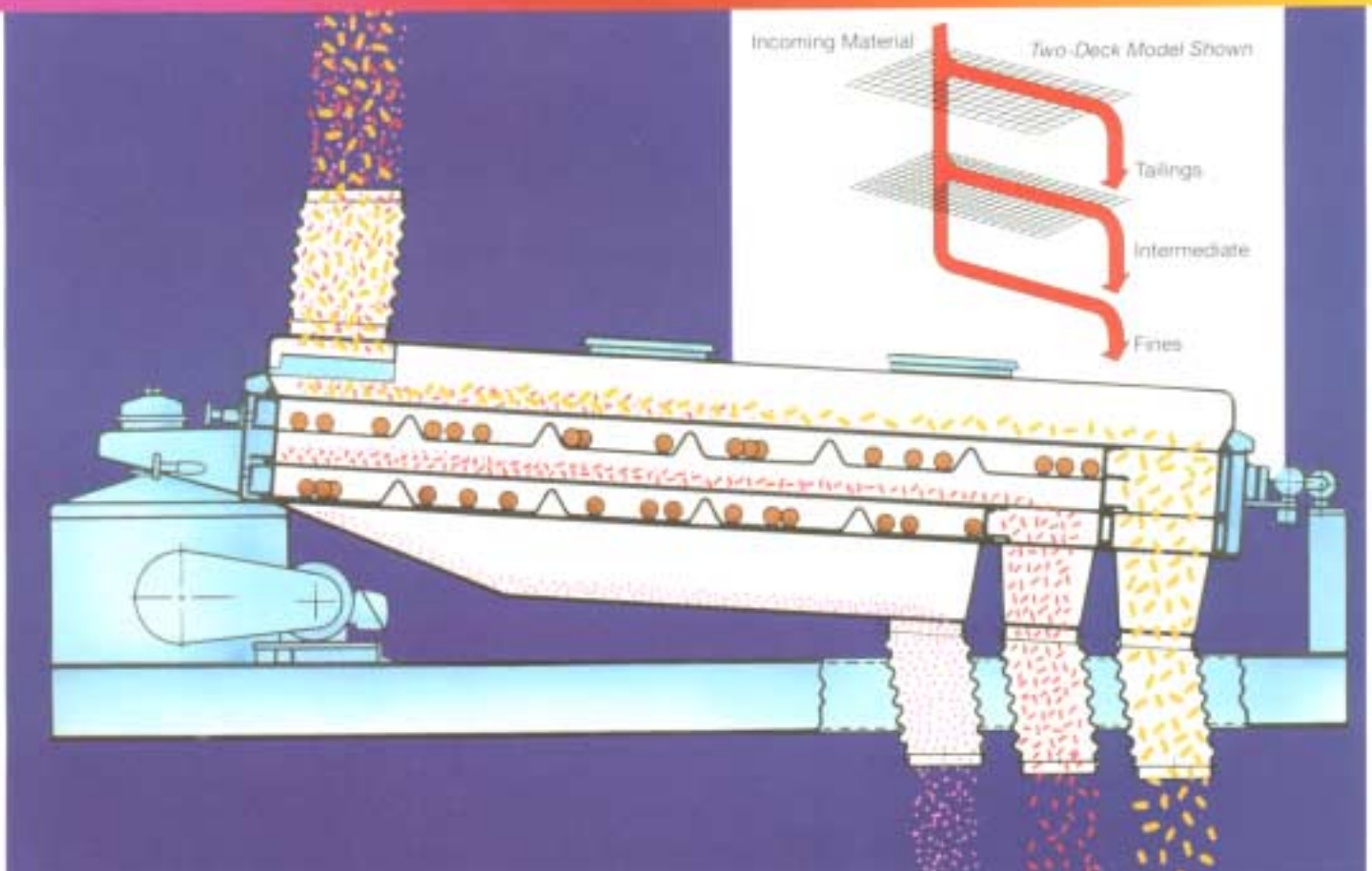
1230 Knowlton Street. Cincinnati, Ohio 45223-1845 U.S.A.  
Telephone 513-541-1236 o Fax 513-541-4888



## ROTEX FLOW OF MATERIALS... FAST • EFFICIENT • ACCURATE

ROTEX Screeners utilize a unique screening action that provides accuracy of separation at high production rates. As shown in the illustration below, material enters at top left where it is distributed over the entire width of the screen surface and conveyed toward the discharge end. Larger particles remain above the screen surface, while smaller particles pass through, as determined by the screen openings used for each particular application.

The model illustrated here is a typical two-surface ROTEX, which separates material into three different grades. Other ROTEX models have one to five screen surfaces, producing two to six separate grades.



## TWO SEPARATE ACTIONS

For low-cost screening on a production basis, screening machines must perform two distinct functions:

1. Give undersize material maximum opportunity to pass through the mesh openings but without the loss of oversize material at the same time.
2. Prevent the material from lodging in the mesh openings.

### 1. Gyrotory Motion ... Rapidly Distributes... Stratifies... Separates

The unique gyrotory motion imparts a combination of actions to the material as it passes along the screen surface. It begins with a horizontal circular motion at the feed end, gradually diminishing along the length of the machine to an elliptical path, and finally to an approximate straight-line motion at the discharge end. There is no vertical component to this motion - thus keeping the material in constant contact with the screen surface.

#### • Circular motion at feed end

The gyrotory motion at the feed end of the machine immediately spreads the material across the full width of the screen surface to maximize screen utilization even though the feed is from a single point. At the same time, this motion stratifies the material, causing the fines to sink down against the screen surface. The particles that are appreciably smaller than the openings quickly pass through at this part of the screen.

#### • Changing to elliptical motion at center

As the circular motion diminishes into an elliptical path, the gentle *near-horizontal* motion causes the fine particles closer in size to the screen mesh - the near-size particles - to fall through the mesh openings.

#### • Straight-line motion at discharge end

The nearly linear reciprocating motion at the discharge end of the ROTEX Screener removes those particles closest in size to the mesh openings while gently conveying the oversize material off the screen. In addition, the unique ROTEX ability to advance or retard material flow at the discharge end allows further fine tuning to achieve the most efficient and accurate motion for the application.

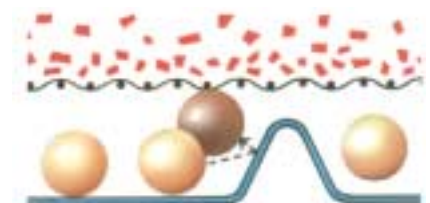
Many screening machines attempt to perform these two functions by a single screening action, which necessarily sacrifices the effectiveness of either or both. ROTEX Screeners perform these two functions by employing two distinct screening actions, thereby providing far more accurate separations and greater product yields at higher production rates.



### 2. Bouncing Balls ...Prevent Blinding

The second ROTEX action is performed by resilient balls confined in beveled pockets under each screen surface. The machine motion causes these balls to be deflected against the underside of the screen surface. This action...  
• Keeps the screen surface clear of lodging particles, or *blinding*  
• Keeps the screen surface alive, providing agitation to aid particle stratification and to separate particles that may tend to stick together.

This freedom from blinding enables the ROTEX user to choose screens with the exact openings required to achieve the desired separation, resulting in maximum yield of on-spec product.



ROTEX Screeners control screen blinding through a system of bouncing balls confined in pockets beneath each screen surface.

This highly efficient combination of actions achieves the desired separation without product deterioration, so as to yield more usable clean material per amount screened. Also, the ROTEX screen deck is inclined at 4', thus the material is exposed to the full mesh openings, ensuring consistently sharp, well defined separations at high production rates. This is in contrast to machines whose screens are appreciably inclined, where larger mesh openings are required to maintain throughput - a condition which allows oversize material to pass through, thereby reducing the sharpness of the separation.



## AUTOMATIC TENSIONING DESIGN INCREASES EFFICIENCY, SPEEDS MAINTENANCE

Automatic-Tensioning ROTEX Screeners feature a patented design for attaching screen clothing to unitized screen frames by means of spring tension clips. These unique *Quick-Snap clips* easily attach to the screen frame members and engage grommets set in the screen edging around the periphery of the screen. This design provides two important advantages:

### 1. Automatic Screen Tensioning

Quick-Snap tension clips insure a constant, uniform tension across the entire screen surface, providing...

- Superior screening accuracy
- Reduced screen blinding due to lodging particles
- Increased screen life

...all of which result in higher production and efficiency.

### 2. Easy Screen Removal

The ROTEX tension-clip design permits quick removal and replacement of screen clothing, which in turn...

- Greatly reduces downtime
- Eliminates need for spare screen frames
- Enables replacement screens to be rolled and easily stored.

Effective reductions thus are made in both initial cost and storage area.



### **Replace screen clothing easily and quickly.**

*Quick-Snap spring tension clips around periphery of the screen frame allow quick screen changeover with minimal operator time. Clips stay in place when screen is removed, so the screen clothing itself is the only loose part - no bolts or nuts to lose. Clips are available for aluminum, stainless steel and mild steel frame designs.*

## Unitized Screen Frames - Easy to Assemble, Clean, Maintain

The screen frames in Automatic-Tensioning ROTEX Screeners are of a unitized design. Peripheral members and longitudinal supports are welded to a one-piece perforated plate, which incorporates bevel strips to produce ball deflection. This unitized design greatly simplifies maintenance because...

- The one-piece frame is easily removed and reinstalled without tools
- The design eliminates difficult-to-clean joints and corners permitting faster and easier cleaning
- Cross partitions are an integral extension of the screen frames, providing for positive sealing continuously around the frame perimeter and between screened fractions.

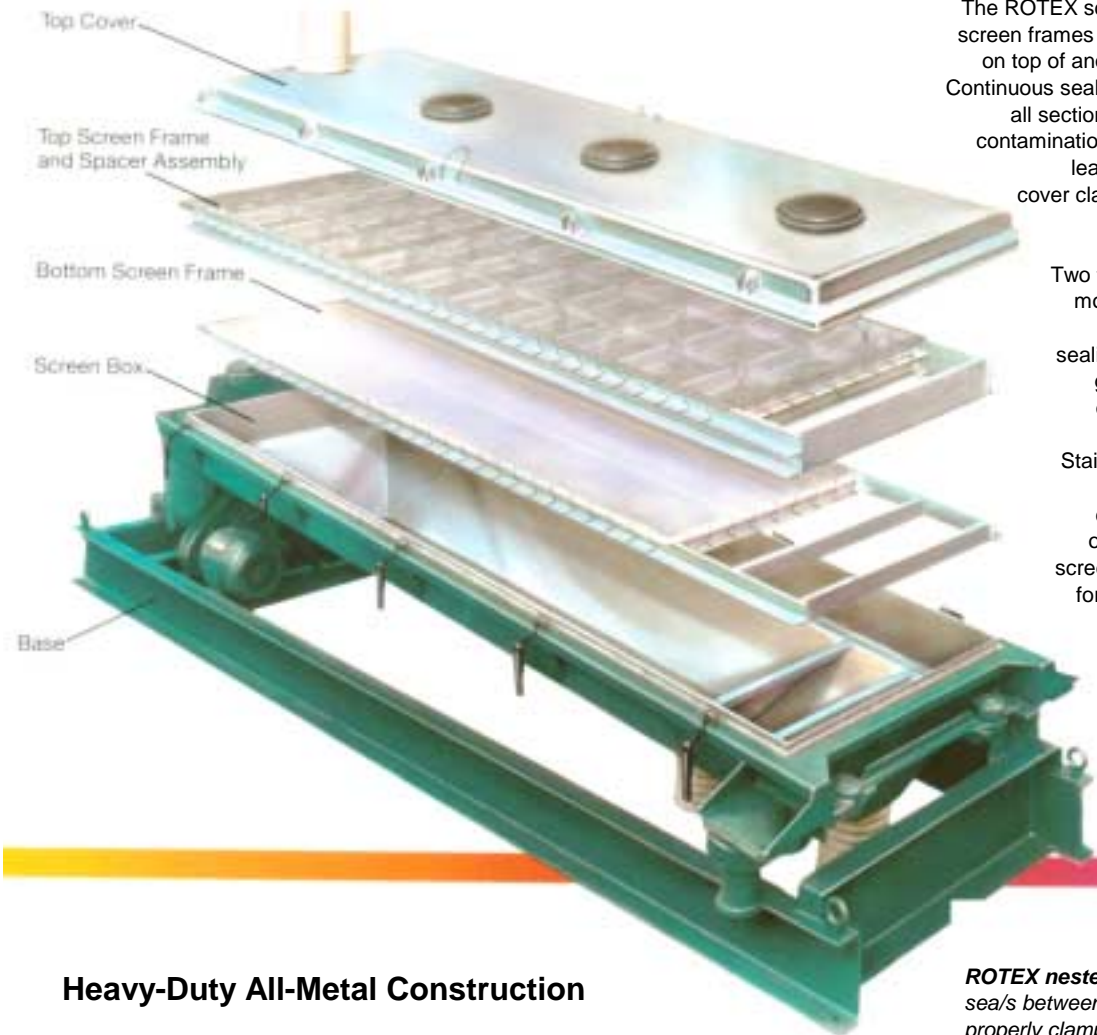
On multiple deck machines, spacers are included as an integral part of each screen frame, further simplifying assembly/ disassembly by eliminating another component.

## Totally-Enclosed Design, Positive Sealing

The ROTEX screen box is constructed so that the screen frames nest completely within the box, one on top of another, with the cover directly on top. Continuous sealing strips are incorporated between all sections of the machine, preventing cross contamination in the product fractions as well as leakage out of the machine. When the cover clamps are engaged, the entire unit is completely enclosed and secure.

Two types of sealing strips are used. On models with aluminum top covers and screen frames, a dumbbell shaped sealing strip is plugged into an extruded groove which runs along the bottom of the top cover and screen frames.

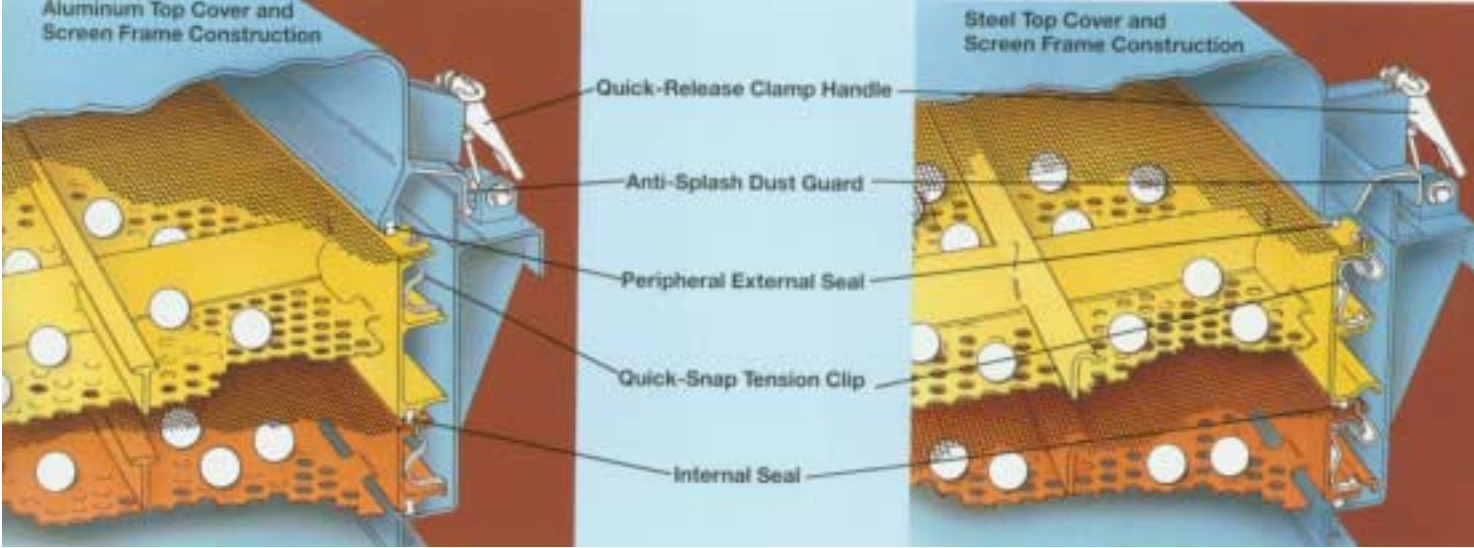
Stainless and mild steel top covers and screen frames are sealed with a continuous extruded strip that plugs into the bottom of the top cover and screen frames. Both seals are designed for easy removal and reinstallation for cleaning and replacement.



## Heavy-Duty All-Metal Construction

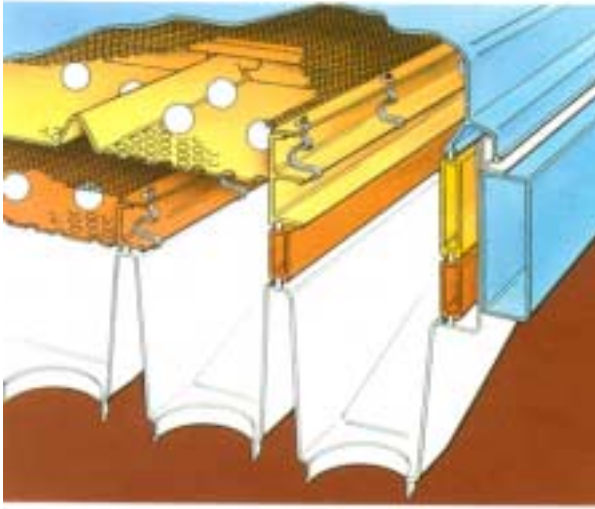
Automatic-Tensioning ROTEX Screeners are constructed of all-metal components. Top covers and screen frames on standard machines are constructed of 14 ga. mild steel, 304SS or .125" thick aluminum. Bottom pans are made of mild steel or 304SS. Special alloys can also be incorporated into the design ...contact ROTEX Application Engineers for information on the best material for your application.

*ROTEX nested design includes continuous seal/s between each component. When properly clamped down, each screen deck is protected from cross-contamination of product fractions.*





## AUTOMATIC TENSIONING ROTEX SCREENERS WITH SANITARY DESIGN



*Semi-sanitary designs feature a one-piece screen box liner with integral flat bottom hoppers for each screened fraction.*

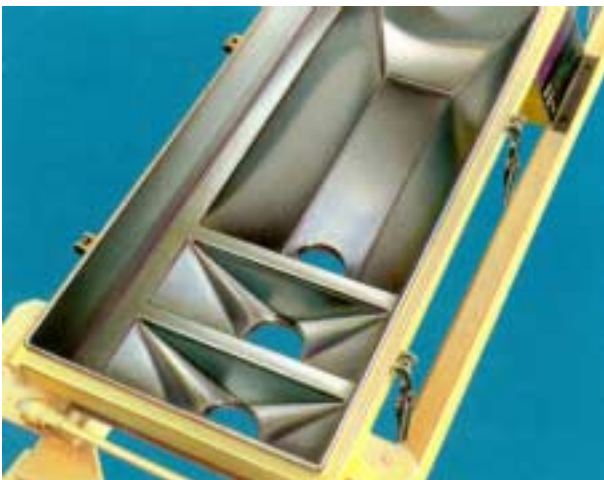
ROTEX Screeners can be provided with the sanitary design option for food, pharmaceutical and other applications which require a high degree of cleanability. Sanitary Design ROTEX Screeners include all of the screen tensioning and totally-enclosed sealing features of standard Automatic-Tensioning ROTEX Screeners. ROTEX "Code Sanitary" Screeners comply with the 3-A Sanitary Standard for Sifters. Special modifications to this sanitary design and construction can be made to meet specific local code requirements.

The standard "Commercial Sanitary" ROTEX Screener is detailed in the specifications below. This design can be modified to include aluminum top covers and screen frames, which provide a weight savings where all stainless steel contact parts are not required. Further modifications include a "Semi-Sanitary" option, in which all welds that come into contact with the process material are ground to a smooth, convex profile. This is followed by an abrasive blast to remove weld discoloration.

For specific information regarding your sanitary application, contact your ROTEX Representative or Application Engineers in our Cincinnati office.

### "Commercial Sanitary" Specifications

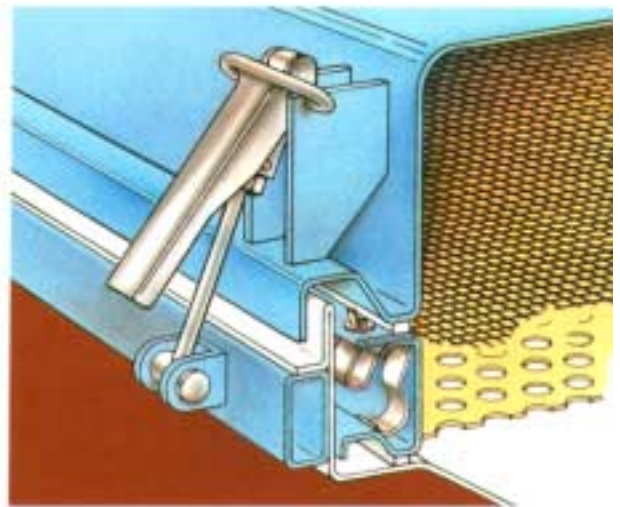
- All components are easily accessible and removable for ease of disassembly and cleaning.
- All interior permanent joints are butt-welded continuously, ground flush with adjacent metal and polished to 80 grit.
- All product contact surfaces are equivalent to a No. 4 stainless steel sheet finish, or 2B mill finish as required.
- All interior corners have a minimum 1/4" radius.
- Exterior is designed for easy cleaning. Exterior permanent joints are either welded continuously, or strip welded and filled with epoxy. Tubular members are used for the base wherever possible.



*Interior of Sanitary-Automatic-Tensioning ROTEX Screener with screen frames removed. Every aspect of construction is designed to facilitate cleanliness, including fully transitioned hoppers.*

### Screen Box Assembly – One-Piece Construction

The standard ROTEX screen box consists of a side frame and mechanically fastened bottom pan. The sanitary design incorporates a full liner pan which eliminates any area where material can collect. The product hoppers in this one-piece liner are integrally formed (see illustration), making this the most cleanable of screener designs.



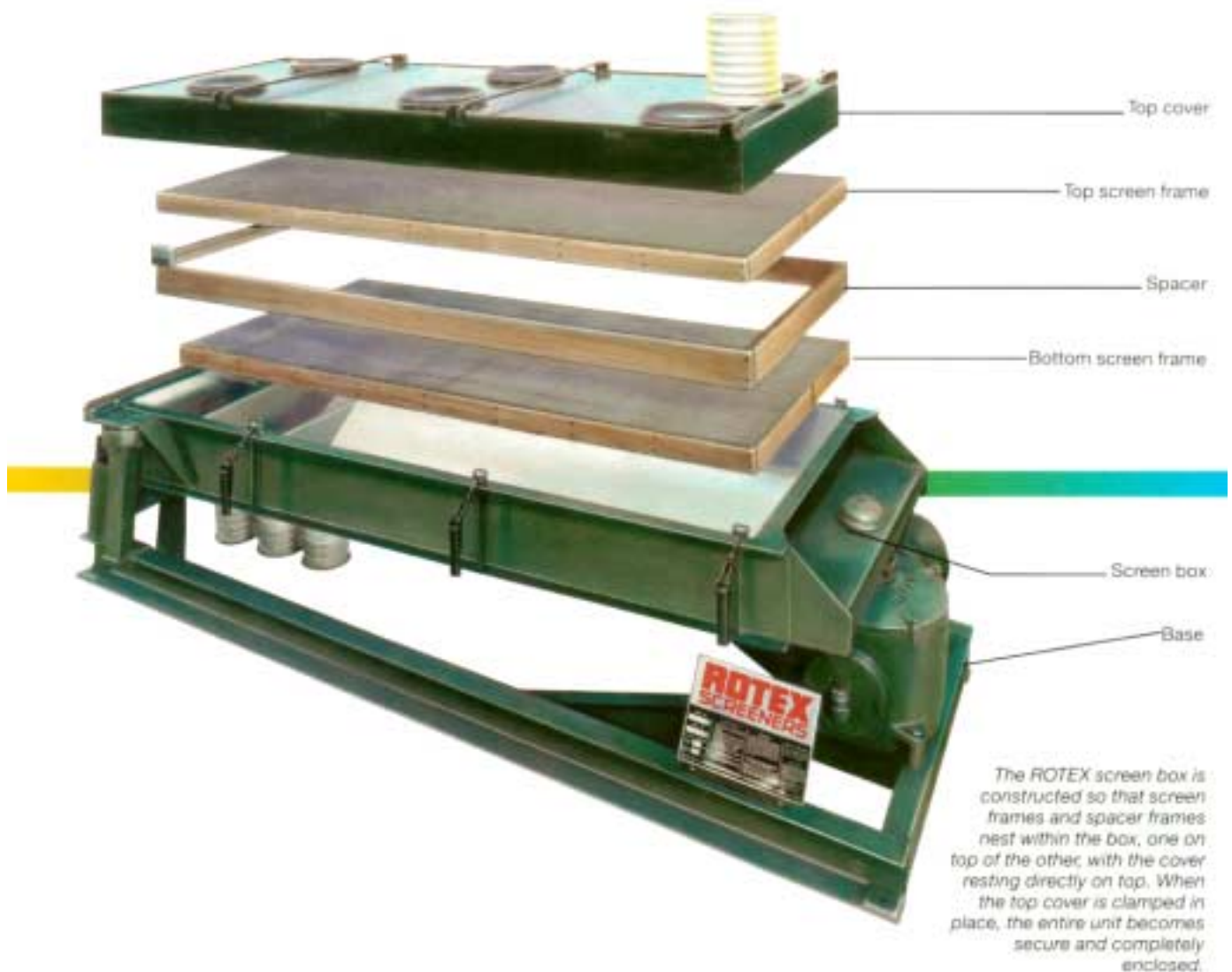
*Sanitary construction — all stainless steel contact parts with integral screen box liner.*



## GENERAL-PURPOSE ROTEX SCREENERS

For applications not requiring all-metal construction. ROTEX offers the General-Purpose models, which provide an economical alternative to the all-metal design without sacrificing screening performance. The screen box is constructed of mild steel using a nesting arrangement similar to that in the Automatic-Tensioning models. The top cover is of mild steel or aluminum construction. Screen frames are lightweight yet strong, well-seasoned wood construction.

The outer frame members and longitudinal center ribs are of poplar, while the screen frame wearing points, such as the beveled ball deflectors, are constructed of hard maple. The screen clothing is attached to the perimeter of the screen frames. Mortised construction is used throughout for extra rigidity in operation and handling. All the nested screen box members are sealed using continuous sealing strips for isolation of screen compartments.



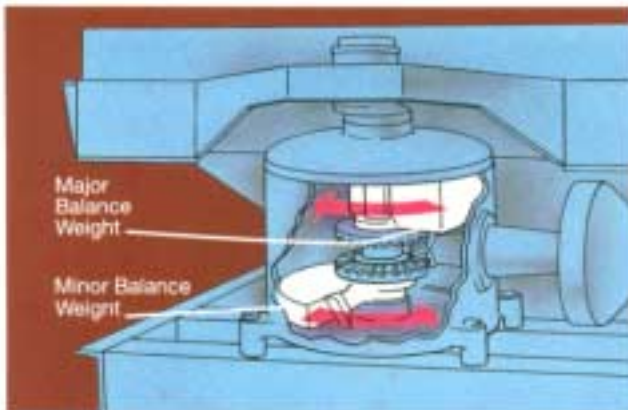


## STANDARD DESIGN FEATURES PROVIDE ECONOMY IN INSTALLATION, OPERATION AND MAINTENANCE

ROTEX Screeners are designed for low-cost installation, operation and maintenance. Rugged construction and simplicity of design make ROTEX Screeners dependable in performance even when operated 24 hours a day, 7 days a week. Scheduled lubrication is limited to a semi-annual change of the drive head oil and/or periodic greasing of a few bearings. For minimum attention, permanently sealed bearings are used wherever possible.



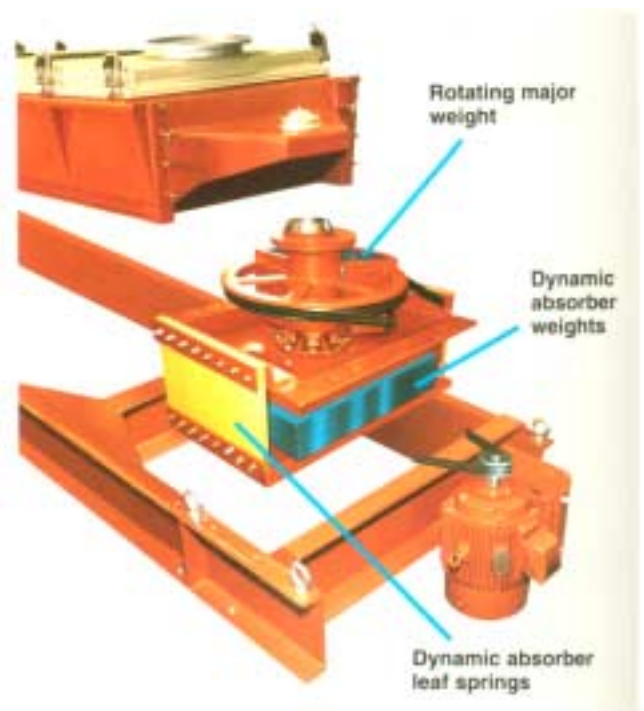
### Drive System - Balanced Motion



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 to counterbalance the out-of-balance forces of the screen box. These dual-weight drives are offered in 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.

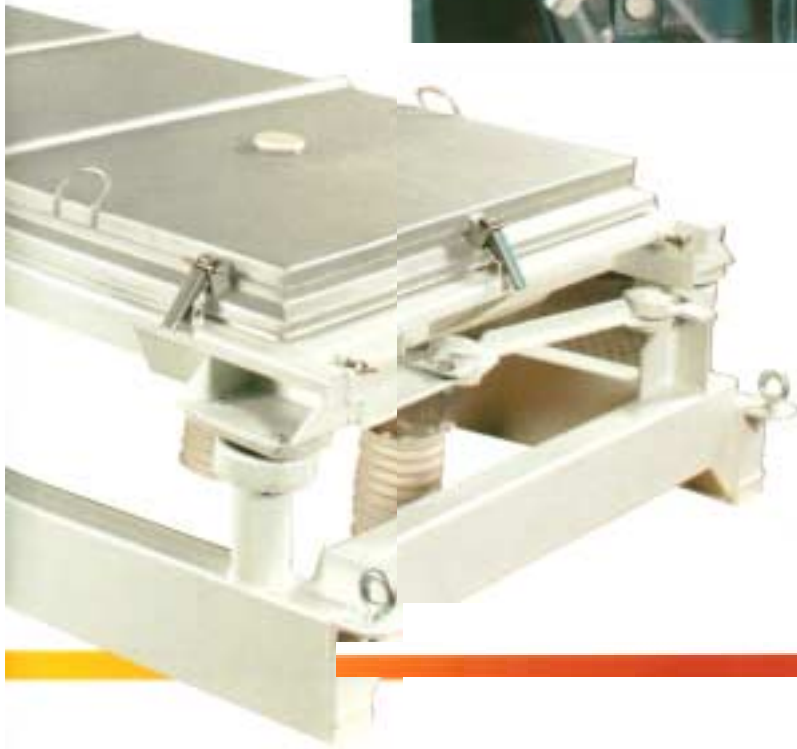


## Top Cover Design Enhances Performance

**Quick-Release cover clamps** ensure a positive seal of the top cover to screen box, yet also permit fast disassembly and reassembly of the screen box components for screen clothing changes or cleaning. Using a strong rugged design, the clamps provide consistent positive locking with overthrow stops and a long operating stroke for easy clamping on multiple deck machines. Adjustment is easily made for correct clamping pressure.

**Spreader plate** - To prevent feed material from impinging directly onto the screen surface, a spreader plate is positioned beneath the inlet. This aids in spreading the flow, improving screen life and reducing maintenance costs.

**Inspection ports** are provided on all top covers (optional on sanitary machines) for easy inspection of the screen surface without having to remove the top cover. Caps are made of stainless steel with a flexible synthetic insert that maintains a snug fit on the inside diameter of the inspection port.



Cable Suspension

Low Headroom Design



Because of their smooth counterbalances drive, ROTEX Screeners can be cable-suspended at any structurally sound location to meet space or building limitations. Cable suspension effectively isolates the horizontal out-of-balance screening forces, significantly reducing the costs of structure and installation. In addition to overhead suspension, ROTEX can be cable-suspended within a floor-mounted cradle for those applications where the ceiling structure cannot support the load.



Because of the near-horizontal screening angle of the ROTEX Screener, the machine has a lower silhouette than most other types of screening equipment. This provides two major advantages:

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

In addition, less space is required around ROTEX for removal of screens -in contrast to other machines which may require substantial space at front and back in order to pull out screens.



## Two-Deck Independently Fed Surfaces

For applications requiring a large screen area in limited space, ROTEX utilizes a unique design which employs two independently fed surfaces. Each surface is fed by its own inlet and has its own bottom pan - in effect, providing two single surface machines in one. The result is double the available screen area in a given footprint.



Model 532 ROTEX Screeners, each with two independently fed surfaces.

## STANDARD DESIGN OPTIONS

While standard ROTEX Screeners are designed to suit most applications, process requirements can vary widely. ROTEX engineers have, over the years, designed machines to meet the specific needs of many different applications.

Shown here are some of the ways in which this design flexibility can work to your advantage. You can count on ROTEX to customize a screener to meet your application requirements.

### Inlets and Outlets

The standard ROTEX design has inlets and outlets on the centerline of the machine. Inlets and outlets can be offset, however, to accommodate special ducts, spouts or building structures. These options include designs that provide discharge chutes out the side or over the discharge end of the machine.

Also, when required, ROTEX Screeners can be outfitted with specially-shaped inlets and outlets. To obtain the most effective sealing, such shapes should be designed to accommodate properly matched connecting sleeves. ROTEX application engineers can assist you in this selection.

### High Temperature Modifications

Automatic Tensioning ROTEX Screeners can be equipped with temperature compensating features that permit handling materials at temperatures up to 375° F (190° C).



### Pneumatic Clamp Handles

Pneumatic clamp handles serve as an alternative to the standard ROTEX clamp handle. The system can be quickly and easily engaged by a single actuator, or individually at each clamp location as shown above. Being pneumatic, the clamping features self-adjustment to insure that the top cover remains securely in place and that sealing is maintained.

### Aspiration

ROTEX Screeners can be equipped with aspirating hoods for applications where light material is to be removed. These include such applications as meat meal, ground tires and soybeans, where lightweight material is aspirated to enhance the screener's efficiency.

### Abrasion-Resistant Linings

Many process materials which are abrasive in nature may tend to prematurely wear machine components. ROTEX Screeners can be easily modified to include abrasion-resistant linings on all wear surfaces, including:

- Inlet chutes and spreader plates
- Bottom pans and outlet hoppers
- Product contact points

In addition, coned inlet/outlet rings divert product flow away from the connecting sleeve and help prevent premature sleeve wear.



Model 523GC ROTEX Screener equipped with aspirators and coarse scalping screen for grain cleaning.

## INSTALLATION OPTIONS

Because of the ROTEX counterbalanced drive, many installation options can be employed without sacrificing screening performance or transmitting undesirable vibration to the surrounding structure.



*Conventional floor mounting (above) and mounting on elevated stand (below)*



*Cable suspension from overhead structure (above\_ and from a cradle type floor stand (below)*



### Floor Mounting

The low transmitted forces of the ROTEX counterbalanced drive allow the unit to be floor mounted in properly designed structures where some other types of equipment cannot. Mounting may be directly on the floor or on an elevated structural steel framework, the elevated position permitting drums or other equipment to be located under the machine. ROTEX Application Engineers can recommend a stand for any specific application.

### Cable Suspension

ROTEX Screeners can be cable-suspended from the four corners of the machine, thereby isolating out-of-balance screening forces from the surrounding structure. Accurate counterbalancing of the ROTEX Screener makes possible this installation option. If the existing overhead structure is not suitable for cable suspension, or is structurally unable to support the cable-suspended unit, the ROTEX Screener can be suspended from a floor-mounted cable support stand. As with conventional cable suspension, this option effectively isolates the horizontal out-of-balance screening forces, helping to minimize costs for new structures as well as permitting their use of older structures which might not otherwise support cable suspended equipment.

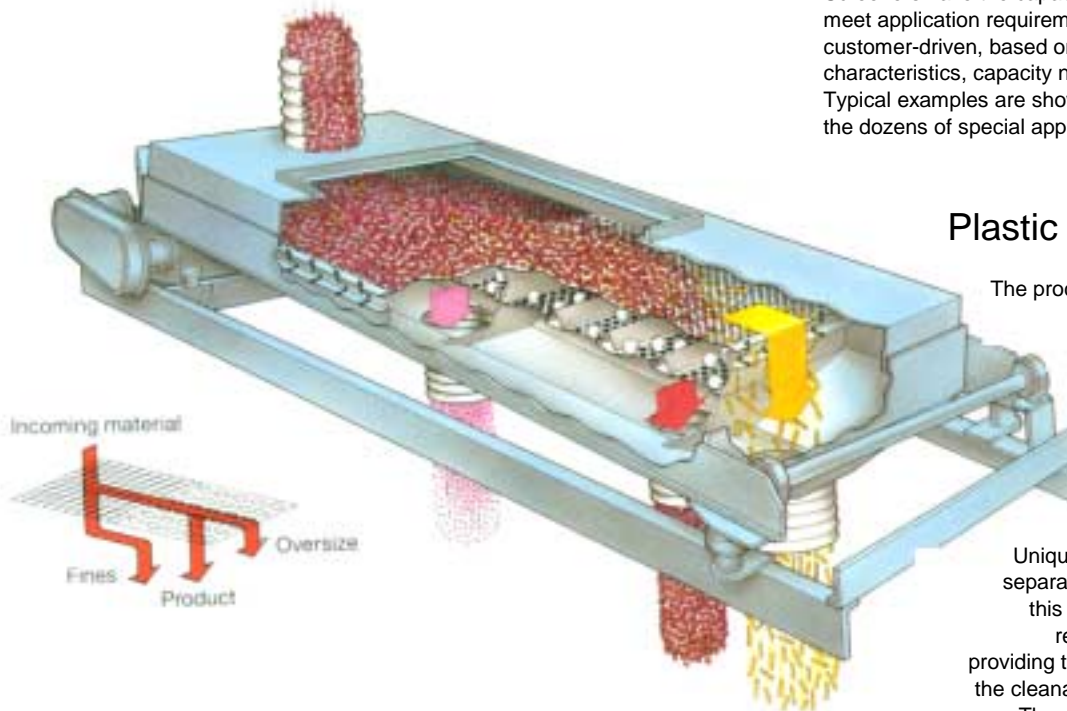


*Bank of ten Model 82-SAN ROTEX Screeners for sizing citric acid.*



## DESIGN FLEXIBILITY FOR SPECIAL APPLICATIONS

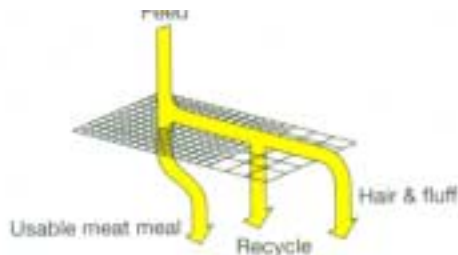
In addition to applying standard design options, ROTEX Screeners have the capability for extensive modification to meet application requirements. Such redesign is customer-driven, based on type of material, flow characteristics, capacity needs or other process parameters. Typical examples are shown here, but these are only a few of the dozens of special applications served by ROTEX.



### Plastic Pellet Screening

The processing of plastic pellets provides a good example of how the standard ROTEX Screener can be modified to suit a particular industry. The ROTEX Plastic Pellet Screener was developed in response to input from plastic pellet producers, who require cost-effective separations producing high-quality pellets.

Unique Split Screen Design provides two separations on a single screen surface! In this design, both fines and oversize are removed on a single screen surface, providing the flexibility of two separations with the cleanability ease of a single screen deck. The split deck combined with the motion



*This Model 81 Automatic-Tensioning ROTEX Screener with single split screen is used for screening meat meal. Usable meal passes through at the leading end of the split screen, while oversize recycle material is conveyed toward the discharge end where it passes through the coarser screen mesh section. Hair, fluff and very large oversize material are discharged together off the top.*

of the ROTEX Screeners enables the plastic pellet producer to achieve greater rates and better separations on smaller machines than possible with other types of screening equipment.

These two distinct functions are performed on the same surface:

1. Fines removal through a wire screen or perforated plate on the first section of the screen deck, where the gyratory motion quickly stratifies the material.
2. Usable pellets separated through perforated plate on the remainder of the deck, with overs conveyed off the top.

The near-horizontal motion of the moving screen box, which has virtually no vertical vibration or hop, proves ideal for removing oversize and fines from plastic pellets. Strands, clusters and long pellets lie flat on the screen surface and do not tend to upend as they commonly do with a vibratory type screening motion. The reciprocating motion at the tail end of the ROTEX quickly discharges troublesome oversize as reject, preventing it from passing through with on-size particles.

In addition, special inlet/outlet chutes and other features, such as pellet cooling, can be custom-designed for plastic pellet screening. Every design feature serves to reduce both initial installation costs and operating costs while maintaining high quality separations.

The split screen concept is effective in other applications, most notably in meat meal screening. The horizontal screen surface and gyratory motion combine in these cases to stratify the material for quick fines removal as well as effective oversize removal.

# ROTEX Applications – Partial List

ROTEX Screeners are operating at hundreds of locations, screening literally thousands of different materials. While not all inclusive, the following list details some of the industries and applications where ROTEX is the screener of choice.

**Abrasives** - Accurate high yield screening of glass beads, crushed slag, aluminum oxide, sand and other abrasive materials

**Animal Feed** - Feed pellets and crumbles, meat meal and pet food

**Carbon Products** - Coke, graphite and charcoal are among the carbon products handled on ROTEX Screeners

**Chemical** - Hundreds of different chemical compounds are screened on ROTEX Screeners, taking advantage of the accurate and high yield separation capability

**Clay** - Product sizing

**Fertilizer** - Raw material grading as well as sizing of finished product. Includes ammonium nitrate, phosphates, potash, urea and other blended compounds

**Food Products** - Sugar, flour, milk powder, coffee, grains, cereals, rice, nuts, spices, cocoa, dextrose, cornstarch and breadings are among the many food products that are screened on Sanitary Design ROTEX Screeners

**Grain Cleaning** - Scalping and cleaning of corn, wheat, barley, soy beans and other grains; dehulling cracked beans

**Minerals** - Sand, roofing granules, limestone, soda ash and salt are all screened at high volumes on ROTEX Screeners

**Paper Pulp Chips** - Grading, thickness screening and fines removal on a high volume efficient basis

**Particle Board** - Wood chip, shavings and sawdust screening for high-quality particle board components

**Pharmaceutical** - Accurate and efficient separations, as well as cleanability, make the Sanitary Design ROTEX Screener the choice of many of the largest pharmaceutical producers

**Plastic Pellets** - Flexibility of design enables ROTEX to suit the specific needs of the plastic pellet producer

**Powdered Metals** - Aluminum, copper, iron, nickel, steel, zinc, and many other metal powders rely on accurate ROTEX separations

**Recycling** - Includes recycling centers, PET, drywall scrap and ground rubber among the many recycle and reclaim projects using ROTEX Screeners

**Steel Shot** - Accurate grading at high volumes, to both steel shot and grit specifications



## Pharmaceutical Applications

High-quality separations and high yields are critical to the pharmaceutical field. Equally important is the cleanability of the process machinery. Both of these objectives are met on sanitary design ROTEX Screeners. The gyratory motion and near-horizontal screen deck combine to give high yield, high quality separations, usually on a smaller machine than required by other types of screeners. ROTEX Screeners are flexible in degree of cleanability as well. From commercial to code sanitary finishes, to the machine shown above - which includes polishing of all interior and exterior welds and surfaces, and plating on the exterior castings - ROTEX can manufacture a screener to meet your process and sanitary requirements.

## Recycling Applications

From grading reground tires and reusable plastics to assisting in the separations at recycling centers, ROTEX Screeners are playing an important part in the recycling effort. The long stroke, low frequency motion enables the ROTEX Screener to make the required separations while conveying bulk oversize material off the screen surface. This ensures that the screener will not be a bottleneck in the recycling operation.



## COMPLETE CUSTOMER SERVICE ...BEFORE, DURING AND AFTER THE SALE

ROTEX INC. has specialized in process screening equipment for more than 80 years. ROTEX engineers and manufactures screeners for a wide range of applications, with more than 100 standard models from which to select. A variety of standard design options and special application designs enable each ROTEX Screener to be customized exactly to suit the specific need.

In addition to this screening experience extending over three-quarters of a century, ROTEX has made a long term commitment to state-of-the-art computer design and manufacturing systems.

Recognizing the need for quality factory support after every sale, the ROTEX Customer Service Department is charged with meeting the needs of thousands of ROTEX users. From maintenance questions to 24-hour emergency parts orders, experienced customer service personnel handle your requirements so that your ROTEX Screener continues to provide the same reliable service as the day it began operation.



## Material Testing Service

Selecting the proper screening equipment for any application requires careful evaluation of many variables - such as feed rate, speed of the machine, screen mesh size, capacity, accuracy of separation, material characteristics and many more. Products to be screened consist of countless sizes, shapes and materials, adding to the complexity of selecting the right size machine and best combination of machine settings for a (given application).

ROTEX takes the guesswork out of this selection process by maintaining a fully-equipped materials testing laboratory staffed with experienced screening technicians. Here materials are analyzed and tests conducted under simulated production conditions, to help determine the appropriate machine size, optimum screen openings and machine settings.

The material testing services of the ROTEX lab are made available at no charge. The customer is asked to supply a sample (two to three cubic feet) of typical feed material, shipped freight prepaid to ROTEX, Cincinnati, along with any applicable Material Safety Data information, attention Application Testing Lab. Please obtain a lab sample control number prior to shipping by contacting the ROTEX Test Lab Supervisor. ROTEX also encourages customers to visit during the material tests so they can learn first-hand how their material screens under varying operating conditions.



## MAINTENANCE AND REPLACEMENT PARTS

It is not unusual for ROTEX screening machines to perform reliably and efficiently over many decades of operation. Regular maintenance by the user and ready availability of proper replacement parts from ROTEX are key to this long term service.

Copies of the comprehensive ROTEX Installation, Operation and Maintenance Manual are supplied with every ROTEX Screener shipped to a user. The manual provides complete instructions for every phase of operation, along with details to facilitate parts reorders when necessary.

### Connecting Sleeves

**Molded connecting sleeves** used as inlet and outlet connections on ROTEX Screeners are designed with extra deep corrugations, making them highly flexible, yet able to hold their shape and wear longer than other designs. Annular grooves fit over metal beaded rings on ROTEX and on adjacent spouts, forming a secure attachment that is fully-enclosed, yet easy to attach and remove. Available from stock in four standard diameters 4", 6", 8" and 10", each 10-3/4" overall length (9 1/2" bead-to-bead). Molded from highest grade natural rubber, resistant to abrasion and fatigue. Neoprene or propylene also available for special applications.

**ROTEX flexible connectors of fabric** are specially developed using a non-toxic synthetic fabric of inherent high strength and durability, offering increased life over previous fabric designs. These connectors adjust easily for any rounded, oval or irregular shape and withstand temperatures up to 250°F (120°C). A built-in center ring prevents collapse and keeps the sleeve open for maximum



*Deep corrugations in ROTEX Molded Connecting Sleeves provide maximum flexibility and long life.*

imum material flow. Easy to install or remove without special tools. Standard sizes 4", 6", 8" and 10" dia., each 12 1/2" long; other sizes up to 30" dia. and in any required length.

### Sliding Inlet Connectors

The Rotex slider-mounted inlet connector (patented) permits the inlet connecting sleeve to remain stationary while the screener continues its gyratory screening motion. This is ideal for applications involving particularly abrasive materials, and provides much longer sleeve life, plus the assurance of reduced downtime and a consistently reliable seal against the environment. A wear cone on the inside prevents material from impinging on the inside of the connecting sleeve and causing undue wear. The sliding inlet is available on all Rotex models, or can be retrofitted on existing machines.

## Wire Cloth and Screen Clothing

The type of wire cloth or screen clothing selected greatly influences the operation and performance of any screener. A poor selection can cause reduced capacity, out-of-spec material and excessive screen replacement costs. ROTEX INC. offers a complete selection of meshes, weaves and materials - in full rolls, cut pieces, cut and edged sizes, with or without tensioning, and with plastic, metal or canvas edging. A new heat-resistant edging for elevated process temperatures is also available.

To obtain maximum screening efficiency for your application, consult ROTEX INC. -where experience in thousands of installations and applications assures the proper selection for your process requirements.

**For further information, request Catalog 309  
"ROTEX Wire Cloth and Screen Clothing"**



*ROTEX INC. offers screen clothing in a complete selection of meshes, weaves and materials.*



## SPECIALISTS IN PRODUCTION SCREENING AND SIEVE ANALYSIS

ROTEX INC. has been dedicated through the years to innovative design in response to customer needs. The original unique ROTEX designs have provided the most accurate and efficient screening separations for more than 80 years. During this time, ROTEX design teams have led the way with innovations that have become the standard of the industry. Among the ROTEX developments are ■ unique gyratory screening motion ■ automatic-tensioning screen attachment ■ ball mesh screen cleaning ■ dual counterbalanced drives ■ Quick-Release top cover clamps.



*Innovative product development through modern CAD systems has helped ROTEX lead the way in process screening technology.*

In further response to industry requirements, ROTEX INC. has developed other innovative products used world-wide for efficient process control. These include the widely-recognized MEGATEX and HI-CAP High Capacity Screeners, LIQUATEX Liquid-Solid Separators, and most recently GRADEX Particle Size Analyzers for automatic sieve analysis.

ROTEX INC. ...Specializing in products for production screening anti sieve analysis.



*ROTEX INC. headquarters and manufacturing facility, Cincinnati, Ohio.*



*This computer-controlled machining center (left) and computerized cutting table (right) typify the advanced precision methods used in manufacturing ROTEX products.*



ROTEX Screeners



LIQUATEX Screeners



MEGATEX Grain Cleaners



HI-CAP Chip Screeners



GRADEX Particle Size Analyzers

# ROTEX INC.

1230 KNOWLTON ST, CINCINNATI, OHIO 45223-1845 U.S.A./TELEPHONE (513) 541-1236. FAX (513) 541-4888

**ROTEX INC. REPRESENTATION**  
Call TOLL-FREE 1-800-453-2321 for name of your nearest ROTEX INC. Representative. They are located in the following major markets...

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