

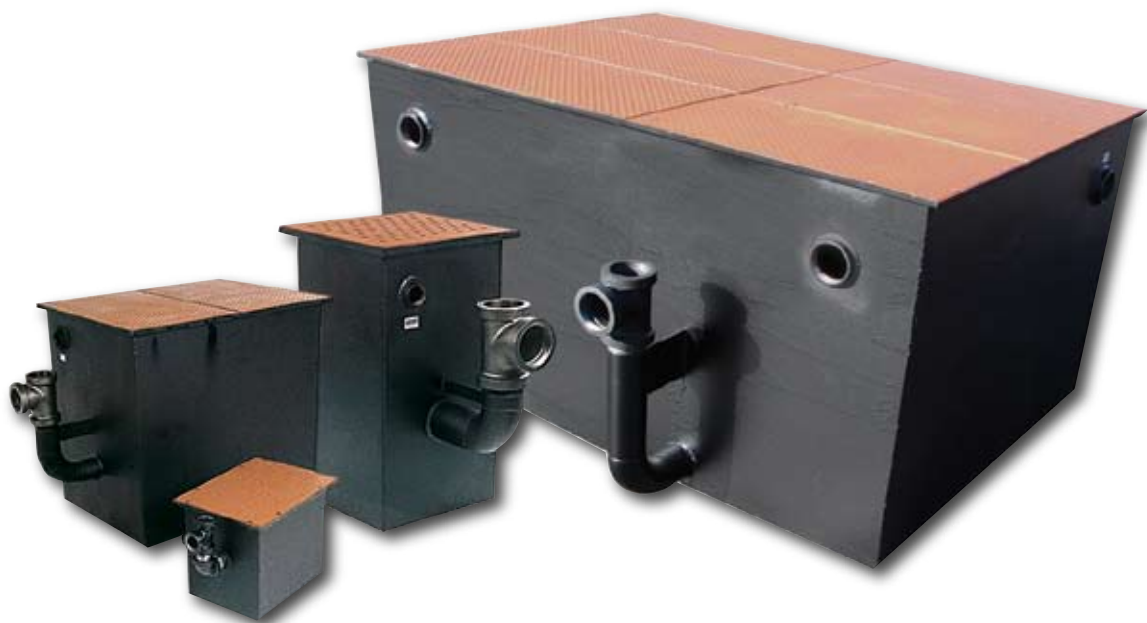


# PURE PERFORMANCE



**ROCKFORD  
SEPARATORS**

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# I. About Rockford Separators



## QUALITY SEPARATION SYSTEMS FOR OVER 35 YEARS.

With separation as its sole business, Rockford Sanitary Systems has supplied quality separation systems to the plumbing industry for over 35 years. More than 26 varieties in over 200 available sizes are engineered and custom-built in the USA for job-site specific applications and installed wherever separation systems are required. These include industrial plants, office buildings, multi-unit apartments, restaurants, food-processing plants, laundromats, health centers, retail and service centers.



Rockford Separators are used in separating and retaining numerous wastes: grease, oil, fuel, fats, lint, hair, soap residue, food solids, chemicals, sediment, solid waste, sand, gravel, sludge, plaster, precious metals, glass chips and grindings, fibrous materials, metal chips, and waxes. Architects, engineers, building officials, health agencies, plumbing contractors, and other specifiers have come to rely on Rockford Separators for the utmost in quality, precision engineering and quick turnaround time.

The principle behind a Rockford Separator follows nature's own law of gravity in separating lighter-than-water waste matter from heavier-than-water waste, retaining both in the separator. Clogged drain lines are virtually eliminated due to the unique, yet simple design incorporated into Rockford Separators: there is no straight in-and-out travel of waste water from the inlet to the outlet; instead, separator screens and a removable filter screen prevent grease, oil, and other wastes from entering the sewage system.

## THE FAMILY OF ROCKFORD SEPARATORS INCLUDES:

- **G SERIES** Designed to protect drainage systems from grease stoppages and costly maintenance of rodding waste lines. Variations include: the **G-LO SERIES LOW-INLET MODELS** (for use on fixtures with a low waste outlet), the **G-C SERIES** (designed to fit into the small spaces of complete kitchen units), and the **G-FM FILTER MEDIUM** (for separating small particles such as plaster, hair, etc.).
- **GF SERIES** Flush-with-floor grease units including the GF-LO SERIES for use with low roughing-in of flush-with-floor and the GFE SERIES (extended units) for flush-with-floor installation when a deeper invert is needed.
- **RTO SERIES** (3 outlet locations provided).
- **GIS SERIES** To separate and retain greasy commercial and industrial wastes and prevent entry into drainage system.
- **GPS SERIES** For use in equipment discharging excessive amounts of grease and greasy wastes.
- **GSC SERIES** Steel in concrete for exterior installation to receive grease and greasy wastes from multiple fixtures.
- **RP SERIES** Grease Interceptor and **RPS SERIES** Solid Grease Interceptor.
- **RPD SERIES** Semi-automatic Draw-off Grease Interceptor.
- **R-POLY SERIES** Polyethylene PDI listed Grease Interceptor.
- **R-AGRUSERIES** Automatic Grease Recovery Unit.
- **OS/OST SERIES** Oil Separators including the **OS SERIES** (for use in projects requiring the retention and safe disposal of oil and other volatile liquids), and the **OST SERIES** (with integral storage compartment).
- **ST SERIES** Underground Steel Storage Tank.
- **RHS SERIES** Helicopter Port Fuel Interceptor.
- **RLS SERIES** For use in receiving waste coming from clothes washers and commercial laundromats.
- **GSSSERIES** Sediment Separator for use in mechanical washing facilities for vehicles.
- **SD SERIES** Separator Drain for use in garage and industrial floor drainage.
- **RSD SERIES** Garage Drain for use in garage structures and parking concourses to prevent any floor waste from entering the drainage system.
- **RD SERIES** Medium-Duty Trench Drains.
- **GD SERIES** Heavy-Duty Trench Drains.

A grease separator is a device designed and installed in the drain line to separate and retain various destructive, hazardous and other undesirable matter from water-borne waste so that they may be periodically removed; thus preventing their passage into the drainage system. Preventing grease from entering the sewer system (which results in clogging of laterals, mains and disposal difficulties at treatment plants) can be accomplished by the installation of efficient grease separators at the source of the grease.

**Some major points where greases enter the sewer system are:**

1. **Restaurants, cafeterias, hotels, hospitals and establishments with kitchen facilities.**
2. **Drains from soup kettles, stock kettles, meat, fish or fowl preparation in commercial facilities.**
3. **Animal slaughtering facilities, fowl, fish or meat packing establishments.**

When grease in large quantities enters the drainage system, it often causes clogging of house or building drains and sewers, resulting in poor fixture operation and the possibility of basement flooding during peak flows. Cleaning of such drains and sewers is inconvenient and expensive.

Large quantities of grease in sewage constitute serious nuisances and cause many difficulties in sewage treatment and disposal. Grease-laden wastes mix with cold sewage in the mains, causing the grease to congeal and adhere to the solids. By the time the sewage has reached the treatment plant, a thorough mixing of grease and solids has occurred. Since bacterial action on grease is slow, it does not decompose readily and is carried through the plant, affecting the operations at many points, depending on the type of treatment. Small amounts of grease adhering to grit and to the heaviest solids are removed in the grit chambers, where the sewage enters the disposal plant. Some plants have special separators designed to remove grease by flotation, separating it from solids by injecting air into the sewage, but this is only partially effective.

In settling basins used for the removal of solids, the greatest difficulty with grease is encountered. Some solids are carried to the top of the grease and decompose in contact with the air, giving off disagreeable odors. Others are held in suspension by the grease and are carried beyond the settling basins. Grease is also carried down with heavy solids to the bottom, thereby retarding normal bacterial action. When entering the digestion tanks, rising grease forms a scum on the surface, retarding the liberation of gases formed by digestion.

Grease is especially objectionable in trickling filters since spray nozzles can become coated with grease and result in uneven distribution on the filter beds. Filter material can become clogged and must be more frequently replaced. Heavily coated filter material considerably reduces efficiency. "Grease balls"



are formed in activated sludge plants, carried through the plant, and must be removed in the final settling tanks as aeration causes grease to rise and floating scum to form.

**SEPARATORS/INTERCEPTORS FALL INTO TWO BASIC CATEGORIES:**

1. **Gravity Type**
2. **Mechanical Type**

**SEPARATORS/INTERCEPTORS MAY BE CLASSIFIED FOR TWO TYPES OF OPERATIONS**

1. **Intermittent Flow**
2. **Continuous Flow**

Intermittent flow operation is usually batch dumping, or periodic use for short periods.

**Continuous flow** operation is usually associated with manufacturing operations as in product processing installations. This type of separator is usually large, either constructed of fabricated metal or poured-in-place concrete. The retaining of large amounts of solids is normally associated with this type and must be taken into account in the design of such separators. The removal of accumulated grease and solids must also be considered in the design and installation.

Besides grease, separators may be employed in separating and retaining numerous other wastes, such as precious metals, glass chips and grindings, fibrous materials, metal chips, waxes, plaster, hair and lint, and others too numerous to mention. In many instances, the product recovered by the separator more than pays for itself in salvage value. Also, the prevention of clogged drain lines and the constant cost of rodding are eliminated. However, a simple means of removing these solids must be incorporated in the design of the separator. Operation is based on grease tending to separate from water at low velocities of flow; grease rises to the surface because of its low specific gravity, while water is discharged to the drainage system.

An effective separator must have a large enough cross-section so that the velocity of the flow through it does not exceed the velocity at which the grease will separate. The flow of waste

water must be evenly distributed over the cross-section so that the maximum allowable velocity will not be exceeded at any point.

In designing drains and fixtures, present day methods produce high rates of flow. Ordinances have been revised to require larger drain lines, and fixtures are designed to be "quick discharging," expediting the removal of wastes and preventing stoppages.

When entering a separator in small amounts at low rates of flow, grease is easily retained. Difficulties occur in fixtures capable of discharging at high rates. However, a separator must be capable of efficiently handling the maximum discharge rate of the fixture which it serves.

When it is desirable to reduce the rate of flow to the separator, it should be done at the fixture outlet, rather than at the separator inlet.

Considerable velocity is attained in the drain line, depending on the length of the vertical and/or horizontal run and other hydraulic conditions. When the inlet is restricted, the waste water is jetted into the separator at high velocity. Since the velocity in the separator must be low, there must be a great reduction of velocity at the inlet. This can be done by increasing the size of the inlet or by an internal inlet baffle. The entrance velocity is more easily controlled when the inlet is low.

Some separators direct the flow entirely towards the bottom. The objection to this is that high velocities continue into the separator when they should be checked at the inlet. Short circuiting is produced when water is allowed to pass under the inlet baffle, and along the bottom of the separator, directly to the outlet at a velocity too high to permit grease separation. This undesirable condition is encountered when the evacuation and/or ejection of solids from the separator is attempted along with grease separation.

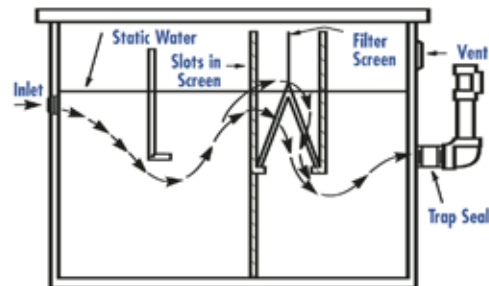
Directing channels, by inducing tortuous flows, confine the area of flow to a smaller cross-section of water, thereby maintaining high velocities for evacuation and/or ejection of solids. This defeats the purpose of the separator.

#### METHOD OF OPERATION

The exceptionally high efficiency of the Rockford Separator in retaining foreign waste matter in the unit is made possible by its design for maximum water travel through the separator without turbulence and by the filtering action of its screens.

Note course of water travel in cut-open view. Arrows designate course from inlet, under and through separator screen and flow-regulator filter screen, to outlet. There is no straight in-and-out travel from inlet to outlet. Note also separation and retention, through gravity action, of lighter-than-water matter.

Arrows indicate course of waste water through separator



The inlet closes when the separator's holding capacity is reached if the unit has been properly sized, installed correctly, and short circuiting devices and methods are not used.

**A Rockford Separator has a built-in flow control; it needs no external flow control.**

#### TRAVEL OF WASTE WATER

Although it has the outward appearance of a straight-through unit, there is no straight in-and-out travel of waste water from inlet to outlet, incorporating Rockford Separator standard features in maintaining minimum turbulence, internal flow regulation through its filter screens, and maximum length of water travel.

#### CONSTRUCTION

The Rockford Separator is built of all-welded heavy gauge steel for maximum structural strength and durability.

Gasketed cover is fastened to unit body by bolt assemblies, cross-tightened by hand to assure leakproof and airtight fit.

The M units (straight through) have a non-removable separating screen and one filter screen to regulate flow and filter waste water, making outside flow control or retarder unnecessary. The filter screen lifts out for easy cleaning of separator.

The L and R units have a removable separating screen (U-shaped) and filter screen (V-shaped) that lift out for easy cleaning of the unit. The slotted wall of the separator screen faces away from the inlet.

The outlet is separated from main body of the unit (accepted by all plumbing codes). This provides an outside visible trap seal which protects against entry of sewer air. Outlet may be vented off vertical rise on tee or off horizontal run from unit. Standard tapped inlet and outlet are furnished.

All units can be constructed of Cor-Ten® high-strength, low carbon steel or with all-stainless steel construction.

### LOCATION OF SEPARATOR

When deciding on the location for the separator, be sure there is headroom to lift out the screens for cleaning; otherwise use flush-with-floor model. Locate separator as close to fixture as possible. Venting is necessary on outlet leg to prevent siphonage. On larger models with internal rear vent, the separator body must be vented. Comply with local code requirements on all installations of separators.

### CLEANING THE SEPARATOR/INTERCEPTOR

Many products are sold as aids to seemingly clean grease separators. These include acids and caustics with known hazards in handling, or so-called "miracle enzymes" with limited conditions and special instructions. There are also self-cleaning type separators with complicated operating instructions, as well as solids evacuating type separators with small print stating: "periodically remove accumulated solids."

Grease and oil fall into two classifications with different characteristic designations. They are saponifiable or unsaponifiable. The saponifiable materials are those that will combine with caustics to form soap. Mineral or petroleum oils do not possess this characteristic.

Cleaning a grease separator with a caustic material can always be determined after removing the cover: if a large mass of dry hard matter is exposed on the surface – this is soap! A portion of the caustic, along with some grease, passes through the separator and mixes together to form soap, gradually building up and forming an obstruction in the drainage line. Particles of solids evacuated from the separator become part of this mixture and add further complications.

Cover gaskets are necessary to seal against gases and to prevent excessive surges from causing overflows. They must be heavy and elastic enough to give easy sealing.

Covers should be easy to remove. A superior cover bolt is constructed of eye bolts and nuts that swing down to remove the cover. When a separator is set in the floor, a non-ferrous metal bolt should be used (brass bolts are too easily stripped; steel bolts become rust locked).

*NOTE: Separators not easily opened for cleaning will not be cleaned regularly.*

### ENGINEERING SERVICE

Plumbing installations are becoming increasingly complicated with the variety of fixtures and appliances on the market. It is, therefore, impossible to make exact recommendations to fit each job, but we can recommend or design the right separator or drain for any job if you will send us a sketch of the present drainage layout, the number and type of fixtures to be served, G.P.M. flow, and peak load for a 24-hour period.

### USE OUR ENGINEERING SERVICE FOR:

- by-product recovery
- canneries
- commercial laundry
- flotation of emulsified grease and oil
- food-processing plants
- high-rise buildings
- hospital kitchens
- industrial waste pre-treatment
- large restaurants
- manufacturing plants
- special waste-processing projects

Allow headroom for lifting out screens for cleaning.



**UNITS AVAILABLE WITH M, L OR R OUTLETS**

*Specify M (Outlet opposite Inlet), L (Left Hand Outlet), or R (Right Hand Outlet) on your order.*

Outlet opposite Inlet M

Left Hand Outlet L

Right Hand Outlet R

# III. Automatic Grease Recovery Unit

## R-AGRU Series



**ROCKFORD SEPARATORS MODEL R-AGRU** (Auto Grease Recovery Unit) grease interceptors are designed to intercept and remove large quantities of fats, oils, and grease commonly known as “fog”. This fog discharged from food service facilities and large commercial/institutional kitchens interferes with proper drainage and treatment of wastewater. Rockford’s **R-AGRU** grease interceptors range in size from the small 20 gpm unit for installation near the kitchen sink to the large high volume units that are located outside of the kitchen area (larger units are available upon request).

### DESIGN & OPERATION

With Rockford’s simple design there are no moving parts to create maintenance issues allowing for trouble-free operation. **R-AGRU** interceptors are designed to sit on the floor, in a vault, or on the floor below. Grease enters the inlet and is directed through the solids strainer basket removing the solids before the flow is directed into the separation and retention chamber of the interceptor. The grease is retained in the

retention chamber until the timer control initiates the draw-off cycle to begin, which is typically done in the off-hours. The heater is activated and, when the unit reaches temperature (approximately 130 degrees), the draw-off valve will open to allow the liquefied grease to flow into the provided grease collection box, from which it can be properly disposed.

### CONSTRUCTION

R-AGRU grease interceptors are constructed of all 304 stainless steel and are tig welded for exceptional quality. Standard units are furnished with a two-segment, air-tight, gasketed cover, with hinged solids basket access cover, secured with stainless toggle clamps.

### ENGINEERING SERVICE

When individual problems or large projects require special applications, the assistance of our engineering department is recommended.

Our simple design is a perfect application of the principle of nature's own law of gravity in separating lighter-than-water wastes from heavier-than-water matter. These light-density substances, as well as oily, greasy sludge or solids, are retained in the Rockford Separator.

Note the course of water travel in cut-open view. The arrows designate the course from the inlet through the first separating screen, upward and through the second separating screen, downward through the filter and flow regulator screen to the outlet, and upward to the drainage line. There is no straight in-and-out travel from the inlet to the outlet of the separator. For continuous or severe operation, consult our Engineering Department.

### APPLICATION

Rockford Oil Separators are designed to receive, directly from plant equipment or floor drains, various kinds of oils, gasoline, kerosene, naphtha, benzene, other volatile liquid waste, and sludge. They retain this harmful waste matter and prevent its entry into the drainage system, providing triple advantages.

### ADVANTAGES

The safe retention of this flammable material reduces:  
(1) the hazards of fire and explosions inside the building,  
(2) the pollution of our soil and waterways caused by the indiscriminate disposal of waste material, and (3) the loss of a salable or reusable by-product.

### CONSTRUCTION

The separator is built of all-welded heavy-duty steel plate for maximum strength and durability. Both the interior and exterior are coated to resist acid corrosion. These units have removable covers for on-the-floor, partially recessed or flush-with-floor installation, suitable for pedestrian traffic or reinforced for heavy traffic. The cover is secured to the body with recessed stainless steel bolts and includes an extra-heavy leakproof gasket. Separating screens and a flow-regulator filter screen regulate flow and filter waste water, making outside flow control or retarder unnecessary. An extra-large inlet compartment has adjustable oil draw-off. The outlet is separated from the main body of the unit, meeting all plumbing code requirements of an outside visible trap seal. Independent internal vent connection on the inlet compartment dissipates excessive fumes and vapors from evaporating gases and volatile liquids. The outlet of the separator is vented to prevent siphoning of its contents into the drainage system. All units are available in double-wall construction with leak detection if specified.

### COR-TEN® INFORMATION

Cor-Ten® high-strength, low carbon steel with its high strength and outstanding resistance to atmospheric corrosion is available where maintenance cost savings are prime considerations. Even in an unpainted condition, Cor-Ten® has



a tightly adherent oxide surface which stops further oxidation. Painted or coated, this characteristic is further enhanced. The reliability and strength of this material has been proven in many applications, such as railroad cars, bridges and two of the tallest buildings in the world: the John Hancock Building and the Sears Tower in Chicago.

*Also available in all stainless steel construction.*

### METHOD OF OPERATION

The basic requirement for efficient retention of non-soluble oil or other volatile liquid wastes is the absence of turbulence in the waste water movement. This is accomplished in the Rockford Separator by its design for maximum water travel without agitation and by the filtering action of its screens. The combination of two separating screens and a flow-regulator filter screen reduces the turbulence to allow proper separation, and prevents the evacuation of solids into the drainage system. The absence of a solids-evacuating channel is additional proof of the non-turbulent flow through the separator.

### SAFETY FEATURES

Visible double-wall outside trap seal with vent connection prevents siphoning. Separate internal vent connection keeps pressure from building up inside the unit and from forcing contents into the drainage system. The independent vent also releases any fumes which may build up inside the unit. The wet inlet design prevents the entry of sewer air into the premises.

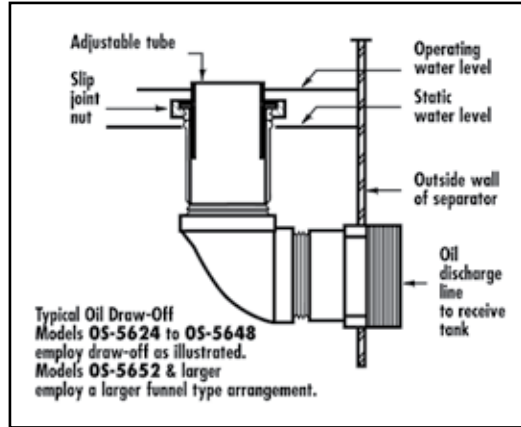
### ENGINEERING SERVICE

Where individual problems or large projects require special applications, the assistance of our Engineering Department is recommended.

### OIL DRAW-OFF

The oil draw-off funnel is adjustable to the gravity height of oil and gallon-per-minute flow. It leads into the oil discharge pipe, from which a suitable disposal of oil can be made in the most economical way. After the separator is installed, establish the operating water level by running water through the separator at the maximum flow rate expected. Adjust the vertical draw-off pipe 1/8" to 1/4" above the water line. Periodic checking of this level after the separator is in operation will ensure the

proper functioning of the oil draw-off. If draw-off oil contains any water, raise the vertical draw-off pipe until only oil flows from the separator.



### INTERMITTENT FLOW OIL SEPARATORS

The maximum amount of waste water containing non-soluble oil that can be discharged through any listed separator is two (2) times the stated flow rate in g.p.m. For example, a separator rated at 50 g.p.m. may only have 100 gallons discharged through it in a one-hour time period. This is usually accomplished by a batch dumping process. However, 100 gallons may be discharged continuously if the flow rate is monitored at the rate of 1.66 g.p.m.

### COALESCING PACK

(Optional Feature) Removable polypropylene coalescing pack within a stainless steel framework is used to separate droplets of oil too minute to be removed by separation alone.

### FILTER MEDIUM (OPTIONAL FEATURE)

Some oil-laden wastes carry with them small particles of suspended matter. For such installations, we recommend the OS Series separator be ordered with a filter medium. This will keep the tiny particles of suspended matter with attached oil globules from passing into the drainage line. Replacement filter screen with factory-installed filter medium is available as a replacement part.

### SIZING FOR TYPICAL CODE REGULATIONS

#### VEHICLE SERVICING

When an oil separator is installed in an automobile, truck, bus, or tractor garage, in a service station or in a repair shop with facilities for motor or transmission overhauling, it must have a minimum static water depth of 24 inches below the invert of the separator outlet and a minimum static water capacity of 6 cubic feet.

This regulation applies to facilities where not more than three vehicles are serviced. For each additional vehicle up to and including ten, 1 cubic foot of static capacity shall be added. For each vehicle over ten, an additional 0.25 cubic foot shall be added.

#### VEHICLE STORAGE

In motor vehicle storage facilities, a combination separator-drain shall be installed with a static water level of 1 gallon for every 100 square feet of area to be drained.

#### VEHICLE STORAGE AND SERVICING

Where motor vehicles are serviced and stored, an oil separator shall be installed with a static water capacity of 1 cubic foot for every 100 square feet of area to be drained. The oil separator shall have a minimum static water level of 6 cubic feet. Check local codes for specific requirements.

#### MECHANICAL CAR WASHING

In facilities designed especially for mechanical washing of motor vehicles, a sand and gravel separator shall be installed to receive the waste water from all washing facilities. A minimum static water level of 2.5 feet and a minimum static water capacity of 50 cubic feet shall be maintained.

Where motor cleaning services are rendered at mechanical car washing facilities, an oil separator shall be installed in that section of the drainage system which receives waste water from this operation. No outlet from a sand and gravel separator shall be discharged to an oil separator.

#### MANUAL CAR WASHING

In a one-car washing facility, a combination separator-drain shall be installed with a minimum static water capacity of 30 gallons.

## LINT SEPARATORS

Our simple design is a perfect application of the principle of nature's own law of gravity in separating lighter-than-water wastes from heavier-than-water matter. These light-density lint substances, as well as buttons and other waste coming from clothes washers, are retained in the Rockford Separator.



Note the course of water travel in cut-open view. The arrows designate the course waste water enters inlet, passing through the primary filter and on thru the secondary filter and then the flow is directed downward to outlet opening, up through the outside visible trap, and finally through the horizontal opening in outlet tee to the drainage system. There is no straight in-and-out travel from the inlet to the outlet of the separator. For continuous or severe operation, consult our Engineering Department.

### CONSTRUCTION

The RLS Separator is built of all-welded heavy-duty steel plate for maximum strength and durability. Both the interior and exterior are coated to resist acid corrosion. These units have removable covers for on-the-floor, partially recessed or flush-with-floor installation, suitable for pedestrian traffic or reinforced for heavy traffic. The cover is secured to the body with recessed stainless steel bolts and includes an extra-heavy leakproof gasket.

Separating screens and a flow-regulator filter screen regulate flow and filter waste water, making outside flow control or retarder unnecessary. The outlet is separated from the main body of the unit, meeting all plumbing code requirements of an outside visible trap seal.

All units are available in double-wall construction with leak detection if specified

Available in Cor-Ten® high-strength, low carbon steel with its high strength or all stainless steel construction.

### SAFETY FEATURES

Visible double-wall outside trap seal with vent connection prevents siphoning. Separate internal vent connection keeps pressure from building up inside the unit and from forcing contents into the drainage system through the vent; also releases any fumes which may build up inside the unit. To combat suds blow up, contact our Engineering Department.

### METHOD OF OPERATION

There is no straight in and out travel from inlet to outlet. Waste water enters inlet, passing through the primary filter and on thru the secondary filter and then the flow is directed downward to outlet opening, up through the outside visible trap, and finally through the horizontal opening in outlet tee to the drainage system. The number of filters will vary depending on the size of the unit. When the primary filter becomes clogged the flow is directed downward and to the next filter. This process continues until the final filter becomes clogged. When this occurs the flow through the separator will slow down and eventually shut off. Slow down of the flow is an indication that the filters need cleaning and/or replacing.

## COMBINATION SEPARATOR - DRAINS

### OPERATION

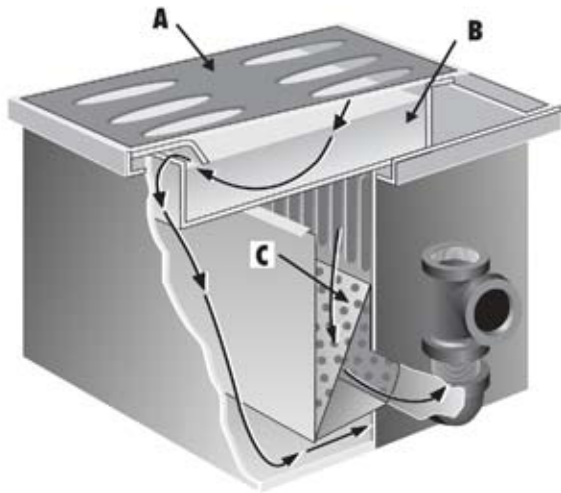
Note course of water travel in cut-open view. Arrows designate course from inlet grate A into sediment and mud pan B, under and through separator screen and flow-regulator filter screen C, to outlet. Also note separation and retention, through gravity action, of heavy sludge in sediment pan. A seal against foul odors is formed by the water in the sediment pan B.

### RELATED INSTALLATIONS

For complete protection of garage and similar types of floor drainage, other Rockford drainage units are recommended for use in conjunction with the SD Series.

### CONSTRUCTION

The SD Series Separator-Drain is built of all-welded heavy steel for maximum structural strength and durability. It is enamel coated inside and asphalt coated outside for resistance to corrosion. Unit has removable heavy-duty, non-breakable steel inlet grate. The grate can also be furnished in stainless steel. Separator screen (U-shaped) and filter screen (V-shaped) regulate flow and filter the waste water. They lift out for easy cleaning of the separator-drain, as does the removable sediment and mud pan which traps heavy solids. Standard tapped outlet is separated from main body of unit, providing an outside, visible trap seal. Independent internal vent connection releases trapped fumes.



Available in Cor-Ten® high-strength, low carbon steel with its high strength, or with all stainless steel construction.

#### DESIGN

The SD Series Separator-Drain for garage and industrial floor drainage is designed to retain mud, sediment, and greasy sludge or so-called solids in its sediment pan and sludge compartment. In addition, it separates and retains greasy and oily wastes, preventing their evacuation into the drainage lines where they cause blocking and stoppages. Another exclusive feature is the automatic shut-off against incoming waste water when the holding capacity of the

sediment and mud pan has been reached. The trap formed where the water passes into the lower section of the unit is the point where stoppage occurs until the drain has been cleaned.

Square corners make the SD Series separator-drain ideal for use with any type of tile, eliminating costly tile cutting required by old-fashioned round drains and assuring proper pitch for water run-off without unsightly puddles around the drain.

#### WHEN TO CLEAN THE DRAIN SD AND RSD SERIES:

When the holding capacity of the sediment and mud pan has been reached, it will stop entry of incoming waste water through the inlet grate. This is the signal that the separator drain needs cleaning. However, it is best not to wait until this happens. A gradual sluggishness in off-the-floor draining is a warning that the unit is ready for cleaning.

#### HOW TO CLEAN THE DRAIN

1. Remove the inlet grate.
2. Remove sediment and mud pan, and clean it.
3. Lift out V-shaped filter screen and U-shaped separator screen.
4. Scoop out heavy sludge from bottom of unit.
5. Replace U-screen, sediment and mud pan, and inlet grate.

## SEDIMENT SEPARATORS

#### DESIGN

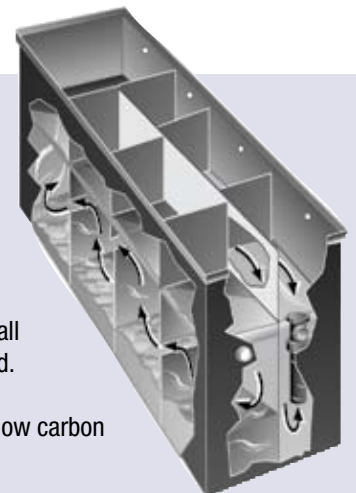
The GSS Series Separator is designed for the specific purpose of retaining and separating sand, gravel and similar waste material, in addition to any oily or greasy wastes contained therein. This is accomplished through the characteristic features of minimum turbulence, maximum length of water travel, and internal flow regulation through its screens. The Rockford design utilizes the principle of nature's own law of gravity in separating lighter-than-water waste, retaining both in the separator. Light oily and greasy waste matter rises to the surface, while the heavy solids and sand sink to the bottom (refer to cut-open view above). Mechanical pumping is the customary method of cleaning out the accumulated waste matter.

#### CONSTRUCTION

Built of all-welded 1/4" heavy-duty steel plate for strength and durability. Removable covers constructed of 3/8" nonskid diamond pattern treadplate for flush-with-floor installation suitable for pedestrian traffic and secured to body of unit with recessed stainless steel bolts. (Covers can be reinforced for installation in an area subject to vehicular traffic.) Extra-heavy leakproof and airtight gasket. Standard tapped inlet and outlet. Four independent internal

vent connections to prevent pressure build-up and to release fumes of spilled gasoline, solvents, etc., which are major fire hazards. Protective seal outlet acceptable to all plumbing codes. Finished with oil/acid-resistant coating inside and outside. All units are available in double-wall construction with leak detection if specified.

Also available in Cor-Ten® high-strength, low carbon steel or all stainless steel construction.



#### METHOD OF OPERATION

The flow of waste water through the separator is controlled by ingeniously spaced stationary baffles which divide the separator into compartments of varying sizes, as shown in the cut-open view above. From the inlet, the waste water is directed upward and downward through the openings at varied positions in the strategically placed separating baffles on the inlet side of the separator. Then it is guided in a flow across the large end compartment. When it reaches the outlet of the unit, it is again directed in an upward and downward movement through a second series of separating baffles. Its final course is downward through the flow control filter screen and then upward through the outlet to the drainage system.



# **ROCKFORD SEPARATORS**

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