

WINGERT SEPARATORS

IT'S YOUR REPUTATION

SPECIFY THE BEST

Engineered for Performance

The powerful technology of centrifugal force has been harnessed by man and utilized in the field of solid-liquid separation for over a century. Designed to take full advantage of this technology, Wingert Separators are a highly efficient solid-liquid separation tool. Our pride in producing high quality process equipment for water and wastewater treatment applications is inherent in the entire line of Wingert Separators.

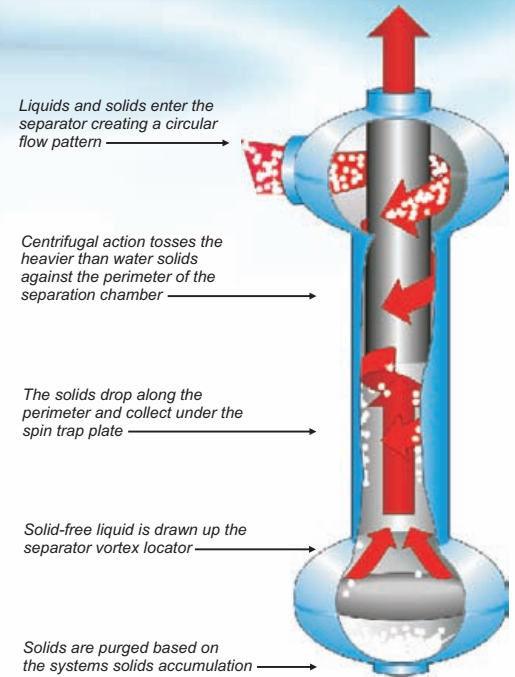


J.L. WINGERT CO.

HOW DO THEY WORK?

Systems influent passes through the Wingert Separator in a high velocity circular motion. Centrifugal force slings the particulates, sand, debris, and sludge outward to the separator wall and downward in a spiral motion. Gravitational force pulls the separated solid particles downward past the spin trap plate into the solids holding chamber. Cleansed effluent then rises through the vortex locator and returns back to the system.

The Wingert Separator has no screens, slotted baffles, moving parts or filter media to cause unnecessary pressure loss or use of large volumes of backwash water. No maintenance is required, however periodic opening of the purge valve is necessary to dispose of unwanted solids. Purging can be done manually or automatically through the use of a Wingert Purge Package.



FEATURES

Pressure / Temperature: 150 psi at 200° F max (1055 kPa at 93° C), higher ratings available

Inlet / Outlet Connections: 150 lb. ANSI RF/SO flanged or National Pipe Thread, others available upon request

Materials of Construction: Carbon steel or stainless steel, consult factory for other requirements

Maintenance: No routine maintenance or parts replacement, simple periodic solids purging only

Space Requirement: Up to 80% less space required than conventional filtration equipment

Technical Support: Selection and sizing, custom designs and systems, installation guidance

Options: Space saving designs

High temperature and pressure

A.S.M.E. code construction

Special coatings

Low profile (4" - 20" models)

Wall mounting brackets (½" - 3" models)

Removable legs (½" - 3" models)

Clean-out (4" x 6" door / 2" FNPT plug)

Internal inspection access

Removable purge chamber

Automatic, manual & continuous purge packages



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PERFORMANCE

Wingert Separators can remove up to 98% of the particles which are 40 microns and 1.8 specific gravity or greater. Particles less than 40 microns may be removed with greater effectiveness from liquids with a specific gravity less than water.

Solid/Liquid Criteria Range

Particle Size: > 40 micron up to 1 3/4", consult factory for other requirements

Pressure Drop: Minimum 4 psi with little to no fluctuations

Flow Range: 8 gpm to 13,953 gpm - higher & variable flow rates possible through manifolding

Fluid Loss: Minimal fluid loss achieved with continuous recovery system

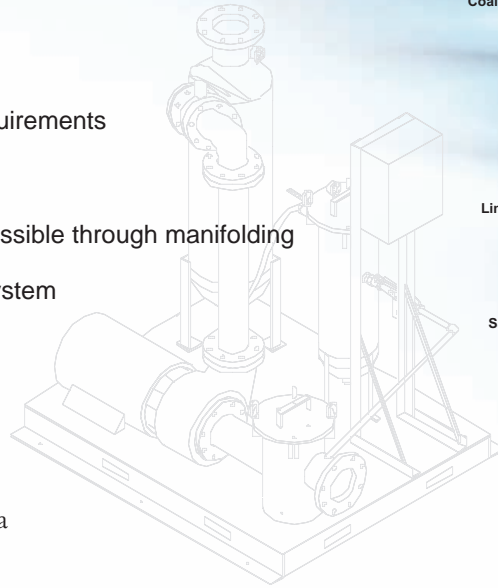
PARTICLE SIZE EQUIVALENT		
MICRONS	US STD. MESH	INCHES
15	800	.0006
37	400	.0015
40	363	.0016
44	325	.0017
53	270	.0021
62	230	.0024
74	200	.0029
88	170	.0035
105	140	.0041
125	120	.0049

NOTE: Lower limit for naked eye = 40 microns

SOLIDS TYPICALLY REMOVABLE

SPECIFIC GRAVITY REFERENCE

- Aluminum (2.7)
- Antimony (6.6)
- Barium (3.7)
- Bismuth (9.7)
- Boron (2.5)
- Brass (9.0)
- Cadmium (8.6)
- Carbon, Amorphous (1.8 - 1.9)
- Coal, Anthracite (1.3 - 1.9)
- Copper (8.9)
- Glass, Crystal (3.0)
- Gold (19.3)
- Granite (2.5 - 3.0)
- Graphite (2.3)
- Gypsum (2.4)
- Iron (7.9)
- Lead (11.4)
- Limestone, CaCO₃ (2.8)
- Manganese (7.3)
- Molybdenum (10.2)
- Nickel (8.9)
- Platinum (21.4)
- Sand, Quartz (2.6 - 2.8)
- Sandstone (2.3)
- Silver (10.5)
- Soapstone (2.7)
- Steel (7.8)
- Tantalum (16.6)
- Tellurium (6.25)
- Tin Ore (7.1)
- Titanium (4.5)
- Tungsten (19.1)
- Vanadium (5.8)
- Zinc (7.1)



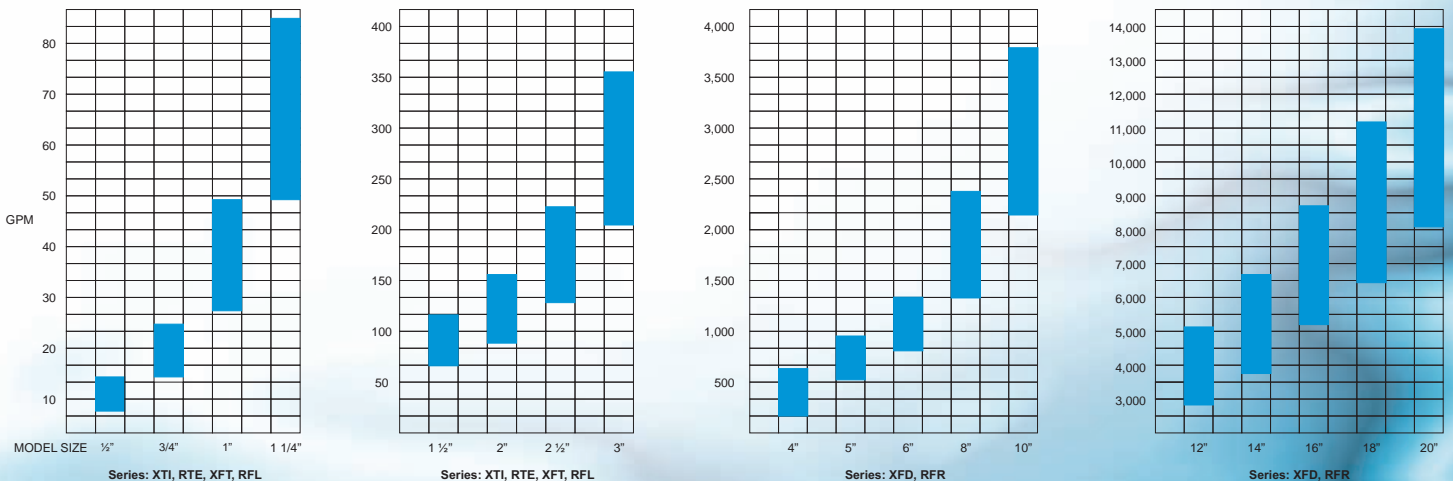
MODEL SELECTION GUIDE

Solid-liquid separation efficiency depends on velocity. When sizing a Wingert Separator, be sure to use the application flow rate chart.

Model Series	Particle Size			Solid Concentration			Flow Rate	
	Fine 40 microns - 15/16" material	Irregular Sinuous, stringy, long material	Large 40 microns - 1 3/4" material	Low	Medium	High	8 - 355 GPM	352 - 13,953 GPM
XTI, XFT	Yes	No	No	Yes	No	No	Yes	No
RTE, RFL	Yes	Yes	No	Yes	Yes	No	Yes	No
XFD	Yes	No	No	No	Yes	Yes	No	Yes
RFR	No	Yes	Yes	No	Yes	No	No	Yes

- Solids concentration capacity can be increased with the use of a continuous purge package
- For processes with larger particle sizes, consult factory

Flow rates data developed at an independent testing facility on a gravimetric flow stand, traceable to The National Institute of Standards and Technology (N.I.S.T.), USA.



PURGING, SOLIDS HANDLING & LIQUID RECOVERY

To complete the basic separator operation, the separator collection chamber will periodically need to be purged of solids. This simple operation, when done on a regular basis, will ensure that your Wingert Separator will perform trouble-free. Three kinds of purge packages are available - manual, automatic or continual.

Manual

- Best suited for smaller units that require infrequent purging
- Full port ball valve easily opens with a simple quarter turn
- Purging can be done without noticeable performance loss

Automatic

- Push button programming provides exact on/off time settings
- Heavy duty motorized ball valve
- Nema 4X water tight housing for extreme environments or standard drip proof enclosures available

Continual

- Ideal for collection and handling of purged solids while recovering the liquid and returning it to the system
- Minimal water and chemical loss
- Polyester felt filter bag captures solids
- Optional audible or visual alarm package available



APPLICATIONS

*Commercial / Industrial Wastewater
Coolant Loops
Cooling Tower Basins
Cooling Tower Loops
Flume Water
Fruit / Vegetable Wash Circuits
Ground Water Systems
Paint Spray Booths
Parts Washing Tanks
Quench Pits
Salt Water Conversion Systems
Sumps
Tanks
Wet Scrubbers*



INDUSTRIES

*Agricultural
Car Wash
Chemical Process (CPI)
Domestic
HVAC
Industrial
Laundries
Logging
Mining
Municipal
Power Plant*

PROTECTS

*Cutting & Cooling Fluid
Filtration Equipment
Heat Exchanger
Impellers
Pressure Tanks*

*Probes
Pumps & Seals
Spray Nozzles
Small Orifices
Valves*

