

Grinding & Screening Technology



Celebrating 100 Years

**Franklin
Miller**®
SEE THE
DIFFERENCE

www.franklinmiller.com



FAMILY OWNED AND OPERATED FOR THREE GENERATIONS

Franklin Miller's (FMI) complete line of wastewater grinding and screening equipment provides an important solution for particle size reduction or removal of solids. These units protect and enhance the operation of pumps and other process equipment and reduce maintenance at wastewater treatment plants, pump stations, institutions and industrial facilities worldwide.

FMI's wastewater grinder line began with the introduction of the industry's first inline disintegrator designed to keep pipeline systems running smoothly. Our portfolio of patented equipment has since expanded with a continuing stream of innovative designs, including open channel grinders, inline grinders, septage receiving systems, screenings, washers and solid waste shredders.



Our expansion into screening equipment has grown into a wide range of screens including our **SPIRALIFT®** auger screens and **SCREENMASTER®** lines.

Cutter Cartridge® Technology



A TRADITION OF EXCELLENCE

Three generations of family ownership have propelled Franklin Miller into an industry leader with the continuous development of new and innovative solutions and a 100-year tradition of quality engineering and customer service excellence.

Today, Franklin Miller is a diversified manufacturer that has enjoyed continuous growth over the years. We have thousands of installations worldwide solving process problems and keeping systems running smoothly.



PROVEN SOLUTIONS

With a Franklin Miller processor, we are committed to delivering a unit engineered for world-class performance and quality assured through our rigorous shop testing. We specialize in matching proven solutions to your specific process problems — from stock and customized machinery to fully integrated systems.



HEADWORKS SOLUTIONS

Whether you want to grind solids in the stream or remove them, there's an FMI processor that meets your needs. Our wide variety of grinders and comminutors for open channels as well as inline applications offer effective designs, extremely reliable operation and easy maintenance. Our screening equipment includes bar screens, auger screens, drum screens, screenings washers and more.



SLUDGE PROCESSING

With our innovative hollow spherical rotor **SUPER SHREDDER®** and our **TASKMASTER®** twin-shaft grinders, we have the right processor for your needs.

Our grinders can improve the reliability, life and performance of your pumps, centrifuges, digestors and other process equipment.

Additionally, our grinders have proven their ability to combat plugging problems associated with sanitary wipes.



SEPTAGE RECEIVING

SPIRALIFT® SR septage receiving stations provide reliable screening and processing of septage received from waste haulers and more. With our sophisticated **Hauler Station** control and HaulerLogic® software, our equipment not only runs automatically, but records and controls hauler usage, transactions and billing information for a fully automated and organized septage receiving capability.



SCREENINGS PROCESSING

Franklin Miller offers a wide range of screening equipment and screening systems. From coarse screening to fine channel screens with auxiliary conveyors, washers and septage receiving, FMI has a choice of excellent and comprehensive systems.



BIOSOLIDS PROCESSING

Franklin Miller grinders and shredders are instrumental in biosolids processing. Whether your application is small or large scale, inline or gravity-fed, our processors are ideal for reducing bioenergy feedstock.



WASTE PROCESSING

Our shredders play a valuable role in the processing and recycling of industrial, municipal, electronic, agricultural, fishing or military waste. Whether you need to reduce solids for reprocessing or keep electronics or documents confidential, an FMI processor is right for the job.



TASKMASTER® TM8500

Voracious Twin-shaft Grinder

The TASKMASTER® TM8500 series of twin-shaft grinders provides powerful size reduction capabilities, easy maintenance and exceptional durability. The TASKMASTER reduces wood, rags, paper, sewage, sludge, tampons, cardboard, plastic, fabrics and waste items into fine particles, facilitating further processing or disposal. The TASKMASTER TM8500,

with its powerful capabilities and *Cutter Cartridge®* technology, provides a significant improvement over competing units.



Finely Ground Output | Prevents Ragging and Plugging | Highly Reliable
Rugged Construction | Cutter Cartridge® Technology | No Stack Re-tightening

Protects and Enhances Plant Processes

The TASKMASTER protects downstream process equipment and keeps systems running smoothly. These versatile units are used for sewage treatment, sludge, pumping stations, sanitary or disposal facilities, institutional waste and bulk solids reduction applications. The TASKMASTER, installed inline, significantly reduces pump downtime, ragging from stringy solids, sanitary wipes and premature filter press media failure.

Cutter Cartridge® Technology



The TM8500 employs two counter-rotating cutter stacks that intermesh at close clearance to intensively shear and shred solids into fine bits. The TASKMASTER has unique *Cutter Cartridge®* technology that combine six thin cutter and spacer disks of traditional designs into a rugged one-piece multi-tooth element.

The benefits include increased unit and cutter strength, resistance to cracking, and the complete elimination of stack loosening and subsequent re-tightening requirements. This reduces grinder maintenance and enhances unit life, resulting in unsurpassed grinder reliability. These cutters are available in a variety of profiles.

Construction

The TASKMASTER TM8500 is heavily constructed for long life, durability and smooth operation. The housings are provided standard in ductile iron. Stainless steel construction is also available as an option. Cutters and shafts are constructed of hardened 4140 steel. Highly reliable, severe duty mechanical seals are housed in convenient stainless steel cartridges protecting the bearings and containing fluids within the unit.

S260 Control System:

An S260 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure, 100,000 hour life LED indicators and more.

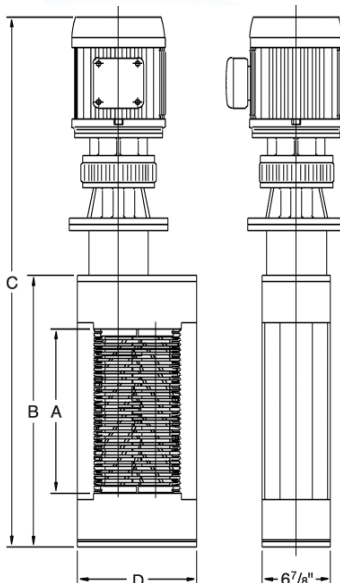


Options

Submersible Motors (IP68) | Manhole
Hydraulic Drives | Wet Well Frames
Stainless Construction | Guide Rails
Stand and Hopper



Configurations



The TM8500 can be configured for gravity feed, open channel or pipeline applications. Motor-driven units are supplied with a heavy duty, direct coupled gear drive. Optional configurations include shaft extensions, hydraulic drives or submersible explosion-proof motors. The TASKMASTER can be provided with guide frames for mounting to channels or wet wells, or with hoppers and stands for gravity-fed applications.



Above: Cutter Cartridges® are available in a choice of profiles for desired performance.



Left: The TM8500 features fewer moving parts for easy maintenance and durability.



A TASKMASTER inline grinder with flange housing.



This grinder is utilizing a submersible (IP68) motor.

Model No.	A	B	C*	D	HP (kW)	WEIGHT	GPM (l/s)
TM8508	9" (229 mm)	17.9" (454 mm)	46.9" (1191 mm)	12" (305 mm)	3 HP (2.2 kW)	425 lbs (193 kg)	320 gpm (20 l/s)
TM8512	12.9" (328 mm)	21.7" (551 mm)	50.6" (1278 mm)	12" (305 mm)	3 HP (2.2 kW)	463 lbs (210 kg)	550 gpm (35 l/s)
TM8516	16.6" (422 mm)	25.4" (645 mm)	54" (1372 mm)	12" (305 mm)	3 HP (2.2 kW)	495 lbs (225 kg)	775 gpm (49 l/s)
TM8524	24.1" (612 mm)	32.9" (836 mm)	61.5" (1562 mm)	12" (305 mm)	3 HP (2.2 kW)	560 lbs (255 kg)	1200 gpm (76 l/s)
TM8532	31.6" (803 mm)	40.4" (1026 mm)	69" (1753 mm)	12" (305 mm)	3 HP (2.2 kW)	625 lbs (284 kg)	1650 gpm (104 l/s)
TM8540	39.1" (993 mm)	47.9" (1217 mm)	76.5" (1943 mm)	12" (305 mm)	3 HP (2.2 kW)	690 lbs (314 kg)	2100 gpm (132 l/s)
TM8552	50.3" (1278 mm)	59.1" (1501 mm)	90.9" (2309 mm)	12" (305 mm)	5 HP (4.0 kW)	870 lbs (395 kg)	2750 gpm (173 l/s)
TM8560	57.8" (1468 mm)	66.6" (1692 mm)	98.4" (2499 mm)	12" (305 mm)	5 HP (4.0 kW)	935 lbs (425 kg)	3200 gpm (202 l/s)
TM8524D	24.1" (612 mm)	32.9" (836 mm)	74.3" (1887 mm)	24" (610 mm)	5 HP (4.0 kW)	878 lbs (399 kg)	2640 gpm (167 l/s)
TM8532D	31.6" (803 mm)	40.4" (1026 mm)	81.8" (2078 mm)	24" (610 mm)	5 HP (4.0 kW)	988 lbs (444 kg)	3520 gpm (222 l/s)
TM8540D	39.1" (993 mm)	47.9" (1217 mm)	89.3" (2268 mm)	24" (610 mm)	5 HP (4.0 kW)	1099 lbs (499 kg)	4400 gpm (278 l/s)
TM8552D	50.3" (1278 mm)	59.1" (1501 mm)	106.2" (2698 mm)	24" (610 mm)	5 HP (4.0 kW)	1346 lbs (611 kg)	6160 gpm (389 l/s)

*For 3HP submersible motor, add 13"
For 5HP motor, add 18".

US gallon = 3.79 liters

For inline dimensions please contact factory.

TASKMASTER® INLINE

For Enclosed Pipe Systems

TASKMASTER® inline grinders employ a powerful twin-shaft mechanism and *Cutter Cartridge®* technology to reduce solids in pipeline systems. These versatile processors reduce rags, plastics, wood, tampons, sanitary napkins, sanitary wipes and more. They are invaluable in plant operations worldwide, keeping systems flowing, reducing pump downtime, and protecting dewatering equipment such as centrifuges, filter presses and more.

Operation

Two stacks of intermeshing cutters aggressively pull the solids in, reducing them to a fine size. These grinders can be installed in gravity or pressurized, vertical or horizontal pipe systems, on the suction or positive side of a pump.



Effective Twin-shaft Design | Cutter Cartridge® Technology | Reduce Pump Downtime
Reduces Wipes to Fine Particles | Highly Reliable Seal Design | Keep Pipelines Free Flowing

Cutter Cartridges



The TASKMASTER is provided with *Cutter Cartridge®* technology wherein six cutter disks and six spacer disks are replaced by a one-piece element for far greater strength, fewer components, no stack loosening or stack retightening.

Configurations

TASKMASTER inline grinders are available for 4" through 30" pipe sizes. These units feature severe duty mechanical seals, heat-treated hexagonal shafts and a direct, cycloidal gear drive. Each unit is supplied with an S260 Automatic Reversing Controller.

Available Styles

Drop-In: In this design, the grinder's entire working assembly can be lifted out of the pipe housing as one piece for fast and easy maintenance. **Tramp Trap:** (TT) This grinder features a built-in tramp trap to allow rocks and metal to settle out. **Optional:** Flange adapters are available for special sizes.

Tramp Trap (TT) Grinder

The TASKMASTER TT combines the powerful **TM8500** grinding capability with a pressure-rated tramp housing. This unit is designed for applications with occasional rocks and other heavy materials that can damage downstream equipment. The grinder assembly slides in and out of the collector housing for fast maintenance. The TT housing features a unique serpentine flow path which optimizes tramp collection efficiency. A gate valve provides fast unloading of collected tramp material into a bin or optional conveyor without manual lifting. The valve can be provided with an actuator for automatic tramp material unloading.

S260 Control System:

An S260 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure and 100,000 hour life LED indicators.



Above: The TM8500TT grinder features a built-in tramp trap. Available with 4 inch to 12 inch flanges.

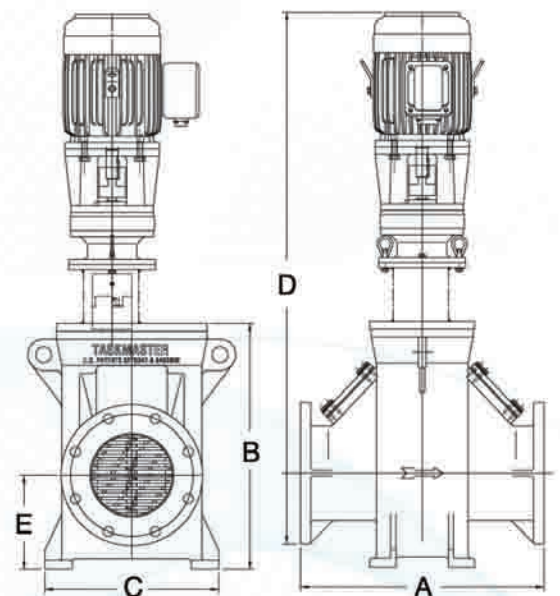
Right: Exploded view of the streamlined, high strength TM8500 with Cutter Cartridge® technology.

Dimensions

Model No.	FLANGE	A	B	C	D	E	FLOW GPM (l/s)
TM851204	4" (100 mm)	19.25" (489 mm)	24.375" (619 mm)	16.625" (422 mm)	54" (1372 mm)	8.25" (209 mm)	400 (25)
TM851206	6" (150 mm)	21.25" (540 mm)	23.375" (594 mm)	16.625" (422 mm)	53" (1346 mm)	8" (203 mm)	600 (38)
TM851208	8" (200 mm)	23.25" (591 mm)	23.5" (597 mm)	16.625" (422 mm)	52" (1321 mm)	9" (229 mm)	800 (50)
TM851610	10" (250 mm)	23.25" (591 mm)	27.375" (695 mm)	17.25" (438 mm)	56" (1422 mm)	10" (254 mm)	1000 (63)
TM852412	12" (300 mm)	31.25" (793.75 mm)	34.25" (870 mm)	17.125" (435 mm)	62.625" (1591 mm)	12" (305 mm)	1200 (75)
TM162012	12" (300 mm)	35.25" (895 mm)	36.75" (933 mm)	25.75" (654 mm)	79.5" (2019 mm)	13.5" (343 mm)	3200 (202)
TM162016	16" (400 mm)	43.25" (1098 mm)	36.75" (933 mm)	25.75" (654 mm)	79.5" (2019 mm)	15.37" (391 mm)	3800 (240)
TM163016	16" (400 mm)	43.25" (1098 mm)	46.75" (1187 mm)	25.75" (654 mm)	89.5" (2274 mm)	15.25" (387 mm)	5000 (315)
TM163018	18" (450 mm)	47.25" (1200 mm)	46.75" (1187 mm)	25.75" (654 mm)	89.5" (2274 mm)	16.25" (413 mm)	6100 (385)
TM163020	20" (500 mm)	49" (1245 mm)	46.75" (1187 mm)	25.75" (654 mm)	89.5" (2274 mm)	17.5" (445 mm)	6700 (422)

US gallon = 3.79 liters

Call one of our customer service representatives to discuss your particular application.



For inline dimensions please contact factory.

TASKMASTER® TITAN®

High Flow “Full Cut” Grinder

The TASKMASTER® TITAN® twin-shaft grinder features a design breakthrough that is as simple as it is innovative. This unit provides powerful solids reduction performance, a high-flow capability, low headloss and a great improvement in effectiveness — all with a unique simplicity that enhances durability.

The TITAN employs two counter-rotating shafts but unlike previous twin-shaft grinders, one cutter stack intermeshes with a second which has a much larger diameter. The results are dramatic. The unit has a liquid handling capability that is double that of typical high-flow twin-shaft grinders. It has a much larger throat opening that is capable of handling bulky or round objects. Solids are more effectively fed into the cutters. With the TITAN's increased cutting surface, cutter life and unit strength are enhanced.



Large Throat Opening Handles Larger Solids | High Flow Capability
Rugged and Durable | Low Headloss | Fine Output | No Diverter Screens



The TITAN's cutters powerfully reduce wastewater solids while allowing fluids to pass through freely.

The TASKMASTER TITAN provides unsurpassed reduction of solids such as sneakers, wood, rags, paper, mops and bottles while allowing the liquid flow to pass through freely with minimal headloss.

The TITAN is impressive in the protection of pumps, filter presses and other downstream equipment, producing a finely ground output which is easily handled by process equipment. It improves centrifuge and belt filter press reliability, resulting in less downtime. With the TASKMASTER TITAN, there's no need for weak plastic diverters, chains or sprockets, and there's no chance of solids bypassing grinding.

How it Works

The TASKMASTER TITAN employs a cutter arrangement that optimizes the benefits of twin-shaft grinding and brings new capabilities to it. As the high-speed cutters intermesh with the low-speed cutters, solids are intensively ground and shredded to small bits.

The high percentage of open area allows flow to pass through in high volume. Wear is reduced due to the unique configuration of the large and small cutter stacks. Additionally, solids are positively ground across the entire throat opening of this "full cut" grinder so there's no need for flow restricting baffles.

S260 Control System:

An S260 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure, and 100,000 hour life LED indicators.



Configurations

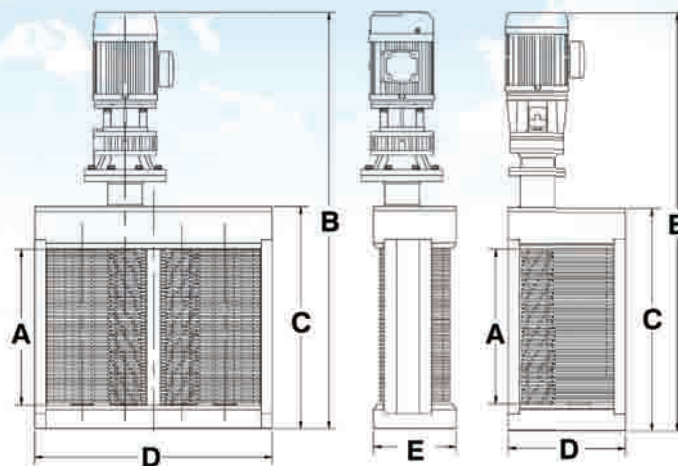
The TITAN is available with a variety of optional configurations and is provided with a choice of electric, submersible electric or hydraulic drives. A choice of channel frames is available for narrow or wide channels or wetwell installations. The TITAN is also available as a solids shredder and can be provided with a horizontal stand and hopper. When supplied as part of a SPIRALIFT® system, this unit provides an effective fine screening and conditioning system.

TASKMASTER TITAN TM14000 Series

Model No.	A	"B" TEFC	"B" SUBM XPF	C	D	E	FLOW MGD (l/s)	HP (kW)
TM14024	24.1" 612 mm	61" 1549 mm	74" 1867 mm	32" 813 mm	17.25" 438 mm	12" 305 mm	2.6 114	3 2.2
TM14032	31.6" 803 mm	69" 1753 mm	81" 2057 mm	39.5" 1003 mm	17.25" 438 mm	12" 305 mm	3.8 166	3 2.2
TM14040	39.1" 993 mm	76" 1935 mm	95" 2405 mm	47" 1194 mm	17.25" 438 mm	12" 305 mm	5.1 223	3 - 5 2.2 - 3.7
TM14052	50.4" 1280 mm	88" 2223 mm	106" 2692 mm	58.3" 1481 mm	17.25" 438 mm	12" 305 mm	6.9 302	3 - 5 2.2 - 3.7
TM14060	57.9" 1470 mm	95" 2418 mm	114" 2883 mm	65.8" 1671 mm	17.25" 438 mm	12" 305 mm	8.1 355	3 - 5 2.2 - 3.7
TM14024D	24.1" 612 mm	61" 1555 mm	74" 1867 mm	32" 813 mm	34.4" 874 mm	12" 305 mm	5.2 228	3 2.2
TM14032D	31.6" 803 mm	69" 1753 mm	81" 2057 mm	39.5" 1003 mm	34.4" 874 mm	12" 305 mm	7.6 333	3 2.2
TM14040D	39.1" 993 mm	76" 1935 mm	95" 2405 mm	47" 1194 mm	34.4" 874 mm	12" 305 mm	10 438	3 - 5 2.2 - 3.7
TM14052D	50.4" 1280 mm	88" 2235 mm	106" 2692 mm	58.3" 1481 mm	34.4" 874 mm	12" 305 mm	13.8 605	3 - 5 2.2 - 3.7
TM14060D	57.9" 1470 mm	95" 2418 mm	114" 2883 mm	65.8" 1671 mm	34.4" 874 mm	12" 305 mm	16.2 710	3 - 5 2.2 - 3.7

US gallon = 3.79 liters

For inline dimensions please contact factory.



TASKMASTER TITAN TM20000 Series

Model No.	A	"B" TEFC	"B" SUBM XPF	C	D	E	FLOW MGD (l/s)	HP (kW)
TM20024	23.5" 596.9 mm	65" 1651 mm	83" 2108.2 mm	36.2" 919.48 mm	22" 558.8 mm	16" 305 mm	3.5 153	3 - 5 2.2 - 3.7
TM20032	30" 762 mm	72" 1828.8 mm	90" 2286 mm	43.8" 1112.52 mm	22" 558.8 mm	16" 406 mm	5.3 232	3 - 5 2.2 - 3.7
TM20040	37.5" 952.5 mm	80" 2032 mm	98" 2469.2 mm	51.5" 1306.1 mm	22" 558.8 mm	16" 406 mm	7 307	3 - 5 2.2 - 3.7
TM20052	48.8" 1239.5 mm	91" 2311.4 mm	109" 2768.6 mm	62.5" 1587.5 mm	22" 558.8 mm	16" 406 mm	7 307	3 - 5 2.2 - 3.7
TM20024D	23.5" 596.9 mm	65" 1651 mm	83" 2108.2 mm	36.2" 919.48 mm	42.5" 1079 mm	16" 406 mm	7 307	5 3.7
TM20032D	30" 762 mm	72" 1828.8 mm	90" 2286 mm	43.8" 1112.5 mm	42.5" 1079 mm	16" 406 mm	7 307	5 3.7
TM20040D	37.5" 952.5 mm	80" 2037 mm	98" 2469.2 mm	51.2" 1301.7 mm	42.5" 1079 mm	16" 406 mm	14 613	5 3.7
TM20052D	48.8" 1239.5 mm	91" 2311.4 mm	109" 2768.6 mm	62.5" 1587.5 mm	42.5" 1079 mm	16" 406 mm	19.2 841	5 3.7
TM20060D	56.2" 1427.48 mm	98" 2489.2 mm	116" 2945.4 mm	70" 1778 mm	42.5" 1079 mm	16" 406 mm	22 964	10 7.4

TASKMASTER TITAN TM22000 Series

Model No.	A	"B" TEFC	"B" SUBM XPF	C	D	E	FLOW MGD (l/s)	HP (kW)
TM22020	20" 508 mm	80.5" 2045 mm	97.8" 2483 mm	34" 864 mm	27.6" 701 mm	18" 457 mm	2.8 123	10-15 7.5
TM22030	30" 762 mm	90.5" 2299 mm	107.8" 2737 mm	44" 1118 mm	27.6" 701 mm	18" 457 mm	5.1 223	10-15 7.5
TM22040	40" 1016 mm	100.5" 2553 mm	117.8" 2991 mm	54" 1372 mm	27.6" 701 mm	18" 457 mm	7.4 324	10-15 7.5
TM22050	50" 1270 mm	110.5" 2807 mm	127.8" 3245 mm	64" 1626 mm	27.6" 701 mm	18" 457 mm	9.7 425	10-15 7.5
TM22060	60" 1524 mm	120.5" 3061 mm	137.8" 3499 mm	74" 1880 mm	27.6" 701 mm	18" 457 mm	11.9 521	10-15 7.5
TM22020D	20" 508 mm	81.7" 2075 mm	99.0" 2413 mm	35.2" 894 mm	51.7" 1313 mm	18" 457 mm	5.6 245	10-15 7.5
TM22030D	30" 762 mm	91.7" 2329 mm	109.0" 2767 mm	45.2" 1140 mm	51.7" 1313 mm	18" 457 mm	10.2 447	10-15 7.5
TM22040D	40" 1016 mm	101.7" 2583 mm	119.0" 3021 mm	55.2" 1402 mm	51.7" 1313 mm	18" 457 mm	14.8 648	10-15 7.5
TM22050D	50" 1270 mm	111.7" 2837 mm	129.0" 3275 mm	65.2" 1656 mm	51.7" 1313 mm	18" 457 mm	19.3 846	10-15 7.5
TM22060D	60" 1524 mm	121.7" 3091 mm	139.0" 3529 mm	75.2" 1910 mm	51.7" 1313 mm	18" 457 mm	23.9 1047	10-15 7.5

The following United States Patents may apply: : 5,169,075; 5,406,865, 6,938,845

TASKMASTER® TM1600

Heavy Duty Grinder

The TASKMASTER® TM1600 powerful twin-shaft grinder can handle a large volume of rags, sludge, solid waste, institutional waste, screenings and more.

The TASKMASTER TM1600 has proven its heavy-duty capabilities and valuable service in hundreds of installations worldwide. This heavy-duty grinder employs up to a 20HP motor and drive to reduce a wide variety of tough solids. It can finely shred heavy screenings, correctional institution sanitary waste, wipes, rejects and returns, garments, filters, bottles, containers, plastics, turnings, wood, packaging, paper, electronic components, concession waste, newspapers and more.



Heavy Duty Construction | Heavy Solids Capability | Rugged 2-3/4" Hex Shafting
Proven Reliable Mechanical Seals | Channel, Gravity or Pipe Systems

Features

The TASKMASTER TM1600 features an open or flanged pipeline housing, 2-3/4" hardened hex shafting, mechanical seals, direct inline or optional right-angle gear drive, a choice of cutters, optional cleaning combs, flanges, stand and hopper. Units are also available in stainless steel. A model S260 Automatic Reversing Controller is supplied standard. Cutters are available with spacers as one piece for enhanced unit strength and reduced parts.



*TASKMASTER TM1630
with optional right
angle gear drive.*



*Left: Unique integrated cutter and spacer
combinations enhance unit strength.*

Construction

The TASKMASTER TM1600 is constructed for long life, durability and smooth operation in heavy institutional or industrial applications. The unit housings are provided standard in ductile iron. Stainless steel construction is also available as an option. The TM1600 cutters and shafts are constructed of AISI 4140 alloy steel. A choice of cutter profiles is available for desired output. Highly reliable, severe duty mechanical seals, housed in convenient stainless steel cartridges, protect the bearings and contain fluids within the unit.

S260 Control System:

An S260 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure, and 100,000 hour life LED indicators.



Twin-shaft cutting chamber.



An inline TASKMASTER TM1630-18 being fed by an 18" force main.

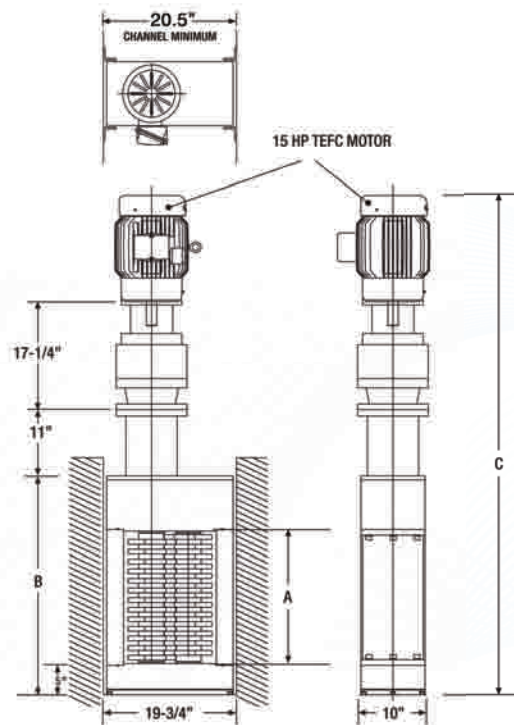
Right: The TASKMASTER TM1620 with a hopper and stand for gravity feed.



Configurations

The versatile TASKMASTER TM1600 can be configured for liquid channels, wet wells, water inlets or pipeline installations. It can also be used in gravity-fed installations, such as for screenings discharged from a bar screen. Units can be provided with a stand and hopper for a variety of gravity-fed shredding applications.

These units can be installed for full or occasional submergence with our unique submersible explosion-proof motor and drive. They can be supplied with support frames or channel frames as well as guide rails to facilitate removal from wet wells. A variety of drive configurations is available to meet most installation requirements including standard electric motors, submersible explosion-proof motors, extended shafts or hydraulic systems.



Model No.	HP (kW)	A	B	C	GPM (l/s)
TM1620A	10 / 15 (7.5 / 11)	20.625" (524 mm)	33.75" (857 mm)	78.25" (1988 mm)	900 (57 l/s)
TM1630A	10 / 15 (7.5 / 11)	30.4375" (773 mm)	43.75" (1111 mm)	88.25" (2242 mm)	1900 (120 l/s)
TM1640A	10 / 15 (7.5 / 11)	40.875" (1038 mm)	53.75" (1365 mm)	98.25" (2496 mm)	2900 (185 l/s)
TM1650A	10 / 15 (7.5 / 11)	50.875" (1292 mm)	63.75" (1619 mm)	108.25" (2750 mm)	3900 (250 l/s)

US gallon = 3.79 liters

*Dimensions include flange adapters (not shown).

Call one of our customer service representatives to discuss your particular application.

SUPER SHREDDER®

Inline Disintegrator

The SUPER SHREDDER® inline disintegrator reduces tough solids entrained in pipeline systems. This unit combines world class size reduction capabilities with a streamlined, easy-to-maintain design that features only two working elements. The SUPER SHREDDER is ideal for applications requiring a heavy-duty size reduction processor that can handle high flows with minimal headloss.

The SUPER SHREDDER utilizes a low speed and high torque action to chop, grind and shred solids into fine bits that can be easily processed by downstream equipment. Its innovative open-center spherical rotor design maintains a high percentage of open area—making this unit practically invisible to the flow. In fact, it can handle higher flows than any other inline grinder available.

Right: One piece hardfaced spherical rotor.



Powerful Grinding Capabilities | Finely Ground Output | High Flow Capability
Low Headloss | Few Moving Parts | Hardfaced Stainless Steel Cutters

As the rotating cutting edges precisely intermesh with stationary cutters at close clearance, solids are finely reduced with a scissor-like action. This unique design effectively handles round, even-shaped solids as well as irregular objects.



Applications

The SUPER SHREDDER easily installs into straight-through pipe systems via 150 lb. flanges. It quickly goes to work reducing solids such as wood, rags, sludge, wipes, paper and plastics. The SUPER SHREDDER stops pumps and valves from ragging and plugging, protects filter presses from expensive punctures and incomplete dewatering and protects centrifuge operation. It can process waste sludge, agglomerates, oil solids, animal waste, paint sludge, pulp and paper, tannery waste, fish scrap, dredge and more.

Construction



With only two cutting elements, SUPER SHREDDER construction and maintenance is greatly simplified. The cutters are constructed of stainless steel with a heavy abrasive-resistant fused coating precisely applied to all cutting surfaces. These corrosion-resistant cutters provide long dependable service without the embrittlement associated with hardened alloys. With its bidirectional cutters, wear is further reduced via automatic reversing of the unit's direction of rotation. Two convenient cartridges house the unit's seals and bearings. Each cartridge consists of a primary seal, a severe duty mechanical seal, oil seal, heavy duty tapered roller bearings and stub shaft. This seal design has proven highly dependable and easy to maintain.

S250 Control System:

An S250 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure, and 100,000 hour life LED indicators.



The SUPER SHREDDER in an arsenal configuration protects a major metropolitan wastewater facility.



A SUPER SHREDDER in a sludge re-circulation line.

Call one of our customer service representatives to discuss your particular application.

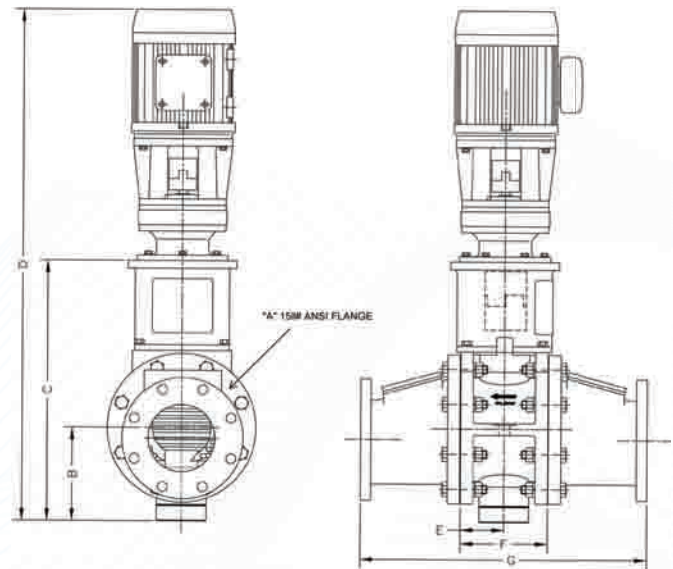
Options

Submersible Motor | Low Flow Configuration | Guide Rails
All Stainless Construction | Special Purpose Seals
DIN Flanges | High Pressure Seals | Special Adapters

Configurations

The SUPER SHREDDER is provided with a cylindrical interior housing to closely match the connected piping for optimized flow. A direct-coupled heavy-duty gear drive provides the unit's smooth, low-speed, high torque rotation.

A model S250 Automatic Reversing Controller is supplied with the unit that senses jam conditions and automatically reverses the bidirectional cutters. Additionally, the controller periodically reverses the operation of the unit.



Model No.	HP (kW)	A	B	C	D	E	F	G	GPM (l/s)
SS4-8000	3 (2.2)	4" (100 mm)	8.44" (214 mm)	23.75" (603 mm)	45" (1143 mm)	4" (100 mm)	8" (203 mm)	24"* (610 mm)	400 (25)
SS6-8000	5 (3.7)	6" (150 mm)	8.44" (214 mm)	23.75" (603 mm)	49.25" (1251 mm)	4" (100 mm)	8" (203 mm)	26"* (660 mm)	800 (50)
SS8000	5 (3.7)	8" (200 mm)	8.44" (214 mm)	23.75" (603 mm)	49.25" (1251 mm)	4" (102 mm)	8" (203 mm)	-	1200 (76)
SS1000	7.5 (5.6)	10" (250 mm)	9.125" (635 mm)	25" (232 mm)	52.875" (1343 mm)	8" (203 mm)	16" (406 mm)	-	2200 (139)
SS1200	10 (7.5)	12" (300 mm)	11.56" (294 mm)	32.125" (816 mm)	61.5" (1562 mm)	6" (305 mm)	12" (305 mm)	-	3000 (189)
SS1600	10 (7.5)	16" (406 mm)	15.31" (389 mm)	40.44" (1027 mm)	69.875" (1775 mm)	8" (203 mm)	16" (406 mm)	-	4800 (303)
SS1800	15 (11)	18" (450 mm)	16.75" (426 mm)	42.56" (1081 mm)	74.875" (1902 mm)	9" (229 mm)	18" (450 mm)	-	5700 (360)
SS2400	20 (15)	24" (600 mm)	21.625" (549 mm)	55.625" (1413 mm)	91.19" (2316 mm)	12" (300 mm)	24" (600 mm)	-	9200 (580)

US gallon = 3.79 liters

*Dimensions include flange adapters (not shown).

DIMMINUTOR®

Powerful Channel Grinder

The DIMMINUTOR® provides automatic screening and grinding of liquid borne solids with a straight through open channel design. This unit effectively reduces plastics, wood, vegetable matter, disposables, and other oversized items to fine particules. The unique features of the DIMMINUTOR are heavy precision construction, dependable operation and simplified maintenance, earning it a solid reputation amongst operators and specifying engineers worldwide.



Keeps Systems Running Smoothly | High Flow, Low Headloss | Rugged Seamless Screen
Efficient Design | Individually Replaceable Cutters | No Bottom Seals or Bearings

Continuous Torque Rotation

The DIMMINUTOR employs a smooth, continuously rotating high torque design. As its three bidirectional rotary cutters intermesh at close clearance with stationary cutters, solids are finely reduced to a size small enough to pass through a sizing screen. The DIMMINUTOR is designed for unobstructed flow even during reversing cycles. The DIMMINUTOR design has no gaps or openings between the screen and cutters, so output is controlled and complete reduction assured.

Features



The DIMMINUTOR is designed for reliable operation and easy maintenance. With its cantilevered design, the DIMMINUTOR needs no seals or bearings near the gritty channel floor. The unit's screen is stationary so it never wears against bottom grit. Each cutter is interchangeable and cutters can be removed or adjusted independently. The unit's seals and bearings are immersed in an oil bath for long life and low maintenance. Cutters can be removed in the channel without requiring the unit to be disassembled. Maintenance of the DIMMINUTOR is quicker and easier than any other unit on the market today.

Construction

Each DIMMINUTOR component is constructed for long life and precision. The cutters are constructed of hardened stainless steel for superior corrosion resistance. With the DIMMINUTOR's unique Clear-slot™ system, the cutters actually penetrate the individual slots of the screen and clear them with each revolution. The screens are precision cut from heavy stainless steel plate and designed for high strength.

S250 Control System:

An S250 Control System monitors unit operation and automatically cycles the grinder in case of an overload condition. This industrial control panel is supplied complete with a NEMA 4X FRP enclosure, and 100,000 hour life LED indicators.



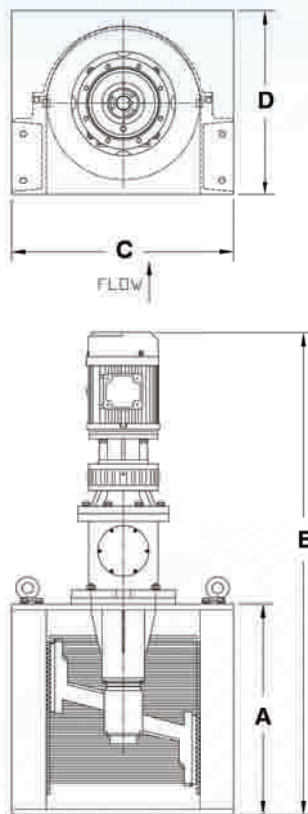
Above Left: A pair of T15's installed at plant headworks.



Options

Submersible Motors | Hydraulic Drives | Overflow Bar Screen
Shaft Extensions Channel Frames | Wet Well Frames | Guide Rails
Stainless Construction | S250 Control System

Configurations



The DIMMINUTOR is designed for ease of use and versatility. These units can be installed in straight through channels, wet wells or water inlets. They can be installed for full or occasional submergence. Units can be supplied with a standard bolt down sole plate or channel frames. Guide rails can also be supplied to facilitate removal from wet wells. A variety of drive configurations is available to meet most installation requirements including standard electric motors, dry running, (IP68) submersible explosion-proof motors, extended shafts or hydraulic systems.

MODEL NO.	A	B	C	D	FLOW RANGE AVG. MGD (m³/hr)	CAPACITY Max MGD (m³/hr)	WEIGHT	HP (kW)
DM-T15	22.62" (575 mm)	58" (1473 mm)	19" (483 mm)	15.3" (387 mm)	0.4 - 3.7 (70 - 680)	5.0 (790)	750 lbs (340 kg)	3 (2.2)
DM-T20	27.5" (699 mm)	64" (1626 mm)	29" (737 mm)	24" (610 mm)	0.8 - 6.4 (130 - 1010)	8 (1260)	1000 lbs (450 kg)	3 (2.2)
DM-T25	35" (889 mm)	72" (1829 mm)	35" (889 mm)	29" (737 mm)	1.3 - 9.7 (210 - 1500)	13 (2050)	1600 lbs (730 kg)	3 (2.2)
DM-T36	44.62" (1133 mm)	84" (2134 mm)	47" (1194 mm)	42" (1067 mm)	2.4 - 17.2 (370 - 2710)	22.9 (3610)	2800 lbs (1270 kg)	3 (2.2)
DM-T36XF	58" (1473 mm)	112" (2845 mm)	47" (1194 mm)	42" (1067 mm)	3.5 - 24.9 (550 - 3920)	32 (5050)	3400 lbs (1540 kg)	5 (3.7)
DM-T42	58" (1473 mm)	112" (2845 mm)	53" (1346 mm)	47" (1194 mm)	4.6 - 32.6 (720 - 5190)	42.5 (6200)	4400 lbs (2000 kg)	5 (3.7)

US gallon = 3.79 liters

Call one of our customer service representatives to discuss your particular application.

The following United States Patents may apply: 4,186,888; 8,727,248

SPIRALIFT® SL Series

Fine Screening & Washing

The SPIRALIFT® is a highly reliable screening system with few moving parts that is as simple in design as it is effective in operation. This unit screens, washes and transports solids to a convenient discharge point. The SPIRALIFT is provided in several configurations to closely match your application size, capacity and screening requirements.

The core of the SPIRALIFT system is an inclined shaftless screw screen. Solids carried by the liquid flow are captured in a fine semicircular screen basket and swept from it by special nylon brushes affixed to the perimeter of the auger. The solids are washed by high-impact spray nozzles and conveyed up the unit transport by the auger. As the solids move up the transport, liquids drain back into the system reducing the moisture prior to discharge.



*The SPIRALIFT SL:
intergrated with a
grinder.*



*The SPIRALIFT S:
precision screw
screen.*

Dependable Fine Screening and Washing | Output Particles Emit Less Odor
Organics Remain in the System | Low Headroom Above Discharge | Superior Solids Capture

The SPIRALIFT SL offers the benefits of shaftless screw screen technology coupled with a rugged TASKMASTER grinder. In operation, the solids are first ground by the TASKMASTER grinder. The ground particles are washed by the turbulent channel flow and then captured by the SPIRALIFT screen basket where they are further washed by a high-impact spray wash system. The washed solids are conveyed and discharged as a cleaned and homogeneous confetti-like material, ideal for disposal.



TASKMASTER® Grinder

The TASKMASTER grinder preconditions the solids prior to screening, enhancing its overall operation. The ground output is more thoroughly washed and is more easily and reliably conveyed. TASKMASTER grinders employ unique *Cutter Cartridge®* technology. With this design, every six cutters and six spacers are combined into a one piece monolithic element for high strength and easy maintenance.



The SPIRALIFT SL with grinder is installed at the newly designed wastewater facility in Arizona.



The SPIRALIFT's rugged, nylon brushes sweep the screen of debris with each rotation. The brushes are fastened in sections to the auger with stainless steel for easy maintenance.

S270 Control System:



An S270 Automatic Control System monitors and controls system operation. This PLC-driven unit is provided standard in a NEMA 4X FRP enclosure. System functions include sequence timing, grinder and spiral jam sensing and jogging function, level control override and spray-wash solenoid control.



Optional fully enclosed bagger.

Options

Discharge Bagger | Compaction Zone | Takeaway Conveyors | Heat Tracing
Explosion-proof Components | Stainless Steel Grinder or Auger Construction
Differential Level Sensors | Submersible Grinder Motor | 316L Construction
Special Mounting Frames | Custom Fabricated Stainless Steel Channels

Design and Construction

The SPIRALIFT is provided in a number of models with different grinders, screen diameters, screen perforations or wedge wire to meet specific application requirements. The unit's housing and screen basket are constructed of AISI 304L stainless steel. The auger is provided standard in high strength alloy steel. The SPIRALIFT can be configured to be installed at 35 or 45 degree angles of inclination. The unit is supplied with a special pivoting stand that allows the entire machine to be rotated out of the channel for service. The SPIRALIFT's rugged brushes are provided in multiple segments and are easy to replace with the provided stainless steel hardware. The SPIRALIFT is typically driven by a 2HP motor and a heavy-duty helical gear drive rated for long life. The grinder is driven by a 3Hp - 5HP motor and a shock resistant cycloidal speed reducer. The unit is provided standard with an ultrasonic level sensing system coupled to a PLC based control system. A special stainless steel frame is provided for wider channels for easy mounting and removal.

Typical Models

Model No.	Max. Flow Level	Channel Width	Screen Diameter	Grinder Model	Max. Flow MGD (l/s)	Grinder HP (kW)	Screen HP(kW)
SL12 S12*	12" - 60" (305 - 1524 mm)	14" - 24" (356 - 610 mm)	12" (305 mm)	TM8500 -	3.5 (153)	3 - 5 (2.2 - 3.7)	2 (1.5)
SLT12	14" - 60" (356 - 1524 mm)	18" - 40" (457 - 1016 mm)	12" (305 mm)	TM14000	7.8 (342)	3 - 5 (2.2 - 3.7)	2 (1.5)
SLD16 S16*	18" - 60" (457 - 1524 mm)	36" - 60" (914 - 1524 mm)	16" (406 mm)	TM14000D -	13.5 (591)	5 (3.7)	2 (1.5)
S20*	20" - 60" (508 - 1524 mm)	22" - 32" (559 - 813 mm)	20" (508 mm)	-	12.9 (565)	-	2 (1.5)
S24*	24" - 60" (610 - 1524 mm)	26" - 36" (660 - 914 mm)	24" (610 mm)	-	15.7 (688)	-	2 (1.5)
S28*	30" - 60" (762 - 1524 mm)	33" - 42" (813 - 1067 mm)	28" (711 mm)	-	19.8 (867)	-	2 (1.5)
SLX12	14" - 60" (356 - 1524 mm)	22" - 24" (559 - 610 mm)	12" (305 mm)	TM1600	3.5 (153)	7.5 - 15 (5.6 - 11.2)	2 (1.5)
SLX16	18" - 60" (457 - 1524 mm)	22" - 28" (559 - 711 mm)	16" (406 mm)	TM1600	5.6 (245)	7.5 - 15 (5.6 - 11.2)	2 (1.5)

*SPIRALIFT without grinder.
Contact factory for additional model choices.

US gallon = 3.79 liters



SPIRALIFT with optional stainless steel fabricated channel.

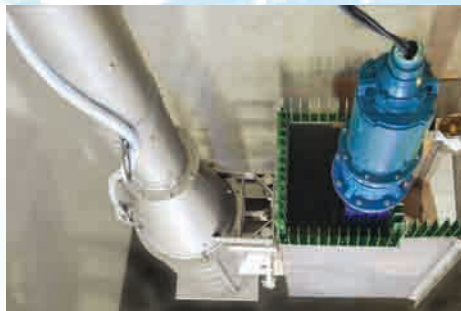


Optional wedge wire screen basket.

SPIRALIFT® SLV

Screening with Vertical Lift

The SPIRALIFT® SLV is a unique vertical screen system that conveys solids straight up so it fits in tight places where no other screen can be installed. This unit combines TASKMASTER® grinding technology with a vertical screw screen to provide fine screening of solids entrained in liquid flows. The SPIRALIFT SLV is ideal for pump stations and wet wells.



Fits into Tight Locations | Vertical Screw Screen
Protects Pumps | Fine Screening and Conveying

Operation

The solids are first reduced and conditioned by a TASKMASTER® grinder. The reduced solids and liquids then flow into the screen area. The solids are swept from the perforated screen by brushes mounted on the perimeter of the rotating auger. Next, they are conveyed vertically up the unit's transport tube and dropped out of a discharge tube into a bin, bag or container. The unit's drain tube returns liquids to the system.



The TASKMASTER TM8500 cutting chamber.



Segmented nylon brushes offer high strength and convenience.

Construction

The SPIRALIFT SLV is provided in three models for flow rates up to 3.8 mgd (155 l/s) and up to 34 ft (11 m) in height. The high-strength, easily replaceable segmented brushes are provided in sections and are removable by simply unbolting. The unit's housing is constructed of corrosion-resistant stainless steel. A system controller and level sensor are provided with the unit. Options include: submersible motor, heat tracing, bagger and FRP wet well enclosure.

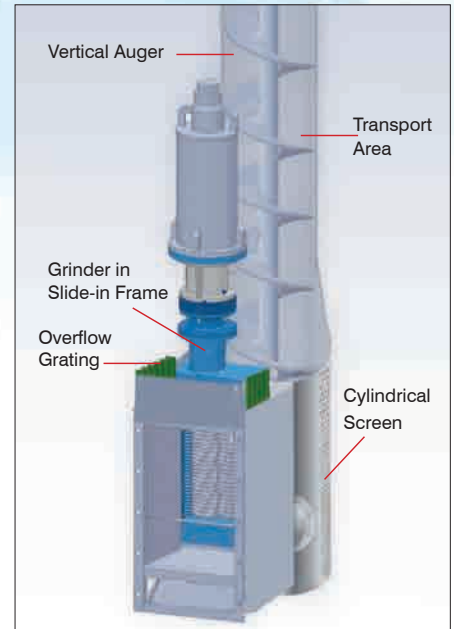


The TASKMASTER TM8500 grinder employs Cutter Cartridge® technology which reduces maintenance and increases unit strength.



Features

The SPIRALIFT SLV features a vertical auger and cylindrical screen basket with 1/4" (6 mm) perforations. Heavy duty nylon brushes are bolted onto the auger perimeter and sweep the screen. The brushes can be accessed and replaced with the unit in place by unbolting the screen flanges. The TASKMASTER® grinder slide-in frame provides for independent removal of the grinder. An overflow grating is provided at the unit inlet. All hardware is stainless steel.



Front of auger housing removed for illustration purposes.

S270 Control System:

An S270 Automatic Control System monitors and controls system operation. This PLC driven unit is provided standard in a NEMA 4X FRP enclosure. System functions include sequence timing, grinder and spiral jam sensing and jogging function, level control override and spray-wash solenoid control.



Standard Models

Model No.	Max. Flow Level	Channel Width	Screen Basket Diameter	Max. Flow MGD (l/s)	Grinder HP (kW)	Screw HP (kW)
SLV12	24" - 54" (610 - 1372 mm)	16" - 36" (406 - 914 mm)	12" (305 mm)	0.6 (25)	3 - 5 (2.2 - 3.7)	2 (1.5)
SLV20	40" - 60" (1016 - 1524 mm)	24" - 48" (610-1219 mm)	20" (508 mm)	1.6 (70)	3 - 5 (2.2 - 3.7)	2 (1.5)
SLV28	40" - 60" (1016 - 1524 mm)	32" - 60" (813-1524 mm)	28" (711 mm)	3.5 (155)	3 - 5 (2.2 - 3.7)	2 (1.5)

US gallon = 3.79 liters

Contact factory for certified drawing.



Convenient continuous bag hose for safe and convenient disposal.

SPIRALIFT® SC

Screenings Conditioner

The SPIRALIFT® SC Screenings Conditioner provides efficient washing, compacting and deodorizing of screenings. It can be installed behind a new or existing mechanical bar screen installation and quickly goes to work enhancing the screenings output. The processed solids are discharged as ground, uniform particles in a compacted plug, ideally conditioned for economical disposal.



Effective Two-Stage System | Reduces Disposal Costs | Conditions & Washes Grinds to Loosen Organics | Clean, Homogenous Output

The SPIRALIFT SC utilizes a rugged TASKMASTER screenings grinder to reduce solids to a small size exposing multiple surfaces. The ground solids are intensively washed to remove contaminants and organics. The screenings are then compacted and conveyed by the unit's powerful screw press and organics are returned to the flow.

The SPIRALIFT SC is a compact unit that can be easily placed in tight plant locations. The unit can be mounted in a fixed location or configured for portable operation to handle the output from multiple sources. The press



unit housing and hoppers are constructed of durable stainless steel. A PLC-based control system is supplied to monitor and integrate the entire system. Two models are available: the SC1620 and the low headroom SC8520.

Operation

As screenings drop into the SC hopper, they are washed by the upper spray nozzles and then ground by the TASKMASTER® shredder. Next, the SPIRALIFT SC intensively washes organics and flushes them back into the system. The screenings are then compacted in the unit's press zone. Finally the processed screenings pass through a discharge pipe and are deposited into a bin, bag or conveyor — washed, ground and reduced in weight. The grinder and press technology, along with highly rugged construction, makes the SC uniquely effective.



The discharged solids are cleaned and compacted.



Construction

The SPIRALIFT SC is provided complete with hopper, shredder, tank enclosure, solenoid valves, spray manifolds and controller. The PLC- based controller monitors and integrates the entire system.

The SPIRALIFT SC is provided in several models: The SC1620 features a 10HP TASKMASTER shredder and a 3HP shaft-mounted auger drive. It handles up to 175 ft³/hr of solids. The SC8520 features a 5HP grinder, 3HP auger drive for up to 50 ft³/hr of solids. Other sizes can be provided.

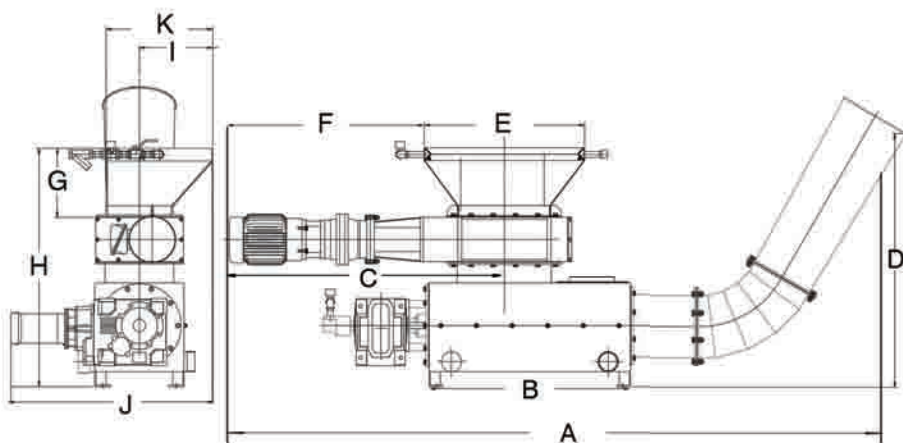
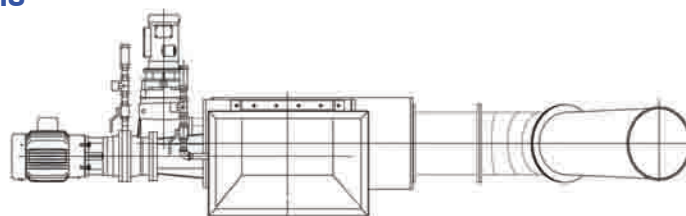


Two SPIRALIFT SC1620 receive screenings from the discharge of two screens.

Options

**Casters | Wash Press Without Grinder | T316 Stainless Steel | Bagger
Extended Discharge Tube | Discharge Diverter**

Dimensions



S270 Control System:

An S270 Automatic Control System monitors and controls system operation. This PLC driven unit is provided standard in a NEMA 4X FRP enclosure. System functions include sequence timing, grinder and spiral jam sensing and jogging function, and level control override and spray-wash solenoid control.



Standard Models

Model No.	A	B	C	D	E	F	G	H	I	J	K
SC8520	105" (2667 mm)	40" (1016 mm)	44" (1118 mm)	44" (1118 mm)	32" (813 mm)	28" (711 mm)	12" (305 mm)	38" (965 mm)	12" (305 mm)	38" (965 mm)	16" (406 mm)
SC8500*	95" (2413 mm)	40" (1016 mm)	33.5" (851 mm)	44" (1118 mm)	32" (813 mm)	18" (457 mm)	12" (305 mm)	31" (791 mm)	12" (305 mm)	38" (965 mm)	16" (406 mm)
SC1620	152" (3861 mm)	42" (1067 mm)	62" (1575 mm)	65" (1651 mm)	36" (914 mm)	44" (1118 mm)	16" (406 mm)	54" (1372 mm)	17" (432 mm)	45" (1143 mm)	24" (610 mm)
SC1600*	142" (3607 mm)	41" (1041 mm)	62" (1575 mm)	65" (1651 mm)	36" (914 mm)	23" (584 mm)	16" (406 mm)	44" (1118 mm)	17" (432 mm)	45" (1143 mm)	24" (610 mm)

*SPIRALIFT SC without grinder.

Contact one of our customer service representatives to discuss your particular application.

SPIRALIFT® SR

Septage Receiving System

SPIRALIFT® Septage Receiving Stations facilitate the clean and efficient offloading of septage trucks and reduce the wear on downstream equipment. These pre-engineered, fully enclosed systems feature shaftless screw technology and more. With the optional S270-SRH Hauler Control, the SR authenticates, monitors and records hauler access automatically, substantially saving plant personnel time. The SPIRALIFT SR is part of a wide range of Franklin Miller receiving septage solutions.



Effectively Separates & Washes Solids | Orderly Receiving from Septage Haulers
Shaftless Screw Technology | Grinder with Tramp Trap | Monitors & Authenticates Haulers

Operation



Septage trucks connect to the system's inlet via a quick-connect coupling. After the operator sets the control system to the ON position, an intake valve opens automatically, the spray wash valve opens and the TASKMASTER TT grinder (if supplied) is energized. As the septage flows by gravity into the system, the solids are captured on a perforated screen where they are washed. Once the flow rises to a preset level, the screw screen is energized automatically. The solids are conveyed, compacted and then discharged.

Construction

SPIRALIFT systems are constructed for strength and durability. The main housing, screw trough and screen are constructed of heavy stainless steel. The auger screws are shaftless and made of heavy alloy steel. An access port on top of the units allows for convenient inspection and maintenance of the interior. The units are provided with a built-in ultrasonic transducer type level sensor. A stainless steel spray wash manifold washes the screenings. The units are provided with heavy duty gear reducers rated for long life in continuous service.



Durable segmented brushes make replacement easy.

Left: The SPIRALIFT SR-2 adds grit separation. Grease separation is also available in the SR-3.



The TASKMASTER TT grinder features a unique tramp trap for separating and removing rocks and debris.

Receiving System Choices



Level 1

The Level 1 system includes everything required to operate, monitor, control and administer a septage station.

Includes:

- Pipe Manifold
- Valve
- Flow Meter
- Controller
- Optional HaulerLogic™ Software



Level 2

The Level 2 system includes everything in the Level 1 system plus a TASKMASTER® TT grinder with a unique tramp trap for heavy rocks and debris, which grinds and crushes solids in order to protect pumps and other plant equipment.

Includes:

- Pipe Manifold
- TASKMASTER TT Grinder with Rock Trap
- Valve
- Flow Meter
- Controller
- Optional HaulerLogic™ Software



Level 3

The Level 3 system includes everything in Level 2 plus a SPIRALIFT SR. The SPIRALIFT SR washes, compacts and conveys solids in one integrated system.

Includes:

- Pipe Manifold
- TASKMASTER TT Grinder with Rock Trap
- SPIRALIFT Screening System
- Valve
- Flow Meter
- Controller
- Optional HaulerLogic™ Software

SRH Hauler Station

The Hauler Station identifies haulers with a card swipe system, permits access, tracks loads, records transactions and prints



transaction receipts. Once the driver's ID is validated with a swipe of their card, the system's automated operation is initiated. The control's HMI interface displays transaction information and the system status, while also providing access for

system administration. When completed, the hauler is provided a receipt.

HaulerLogic™ Software

HaulerLogic™ software was specifically developed for administration of septage receiving. This powerful software interfaces with and extends the capabilities of Franklin Miller hauler station controllers.

With HaulerLogic™ software, you can monitor hauler transactions and add or modify users and trucks. This software can also create, view or print single or multiple invoices, grant or disable hauler rights, display or print account balances, view transaction and account reports, among many useful features.



SCREENMASTER® CS

Wastewater Bar Screen

The SCREENMASTER® CS provides efficient cleaning of a bar screen rack and removal of solids from rectangular channel installations. This versatile unit is simple in design but highly efficient in operation, requiring minimal power to operate. This unit employs a front clean/ front return principle. It's easy to install in new or existing channels. The unit installs at a 75° inclination so it has a very small footprint.

Operation

The design features a simple, continuous rotary motion. As the rake head passes through the bar slots collecting debris, it travels up the unit's dead plate until it reaches a special scraper supplied with a dash pot for smooth operation. The screenings then drop out the unit's discharge chute. The screenings can be processed by a SPIRALIFT® SC Screenings conditioner/washer or be deposited in a bin or auxiliary conveyor.



Simple Design | Automatic Control System | Requires Minimal Power
Simple Continuous Rotary Motion | Front Clean/Front Return



The SCREENMASTER rake heads are built with comb-like trapezoidal fingers which insert between the bar rack slots to positively clear them of debris. Each rake head is provided with a low friction plastic insert for low vibration even in dry operation.

Configuration

The SCREENMASTER CS is supplied complete with an S320 Program Controller which activates on a timed basis or when a high level is indicated by a supplied level sensor. This highly efficient unit is provided with between a 3/4 HP and 1-1/2 HP motor and drive, dependent on the unit size. This unit is custom built for any channel width up to 78" wide (2 m) and for a lift height of up to 38 ft. (11.6 m).



Construction

The SCREENMASTER consists of a stainless steel frame and a bar rack fabricated of parallel stainless bars. In addition, this unit includes a dead plate, stainless steel chain link drive, carriage unit, scraper and gear drive. The unit is fully enclosed above the channel. The bar rack can be supplied with 1/4" to 2" slot openings.

S320 Automatic Controller:

The S320 is a PLC-based control system supplied complete with a VFD, rotary disconnect switch, panel mounted E-Stop, level-controlled as well as a timer cycle, HMI for easy user adjustments, ultra-bright sunlight visible LED indicators, NEMA rated enclosure, U.L. 508A labeled panel and more.



SCREENMASTER CS installations

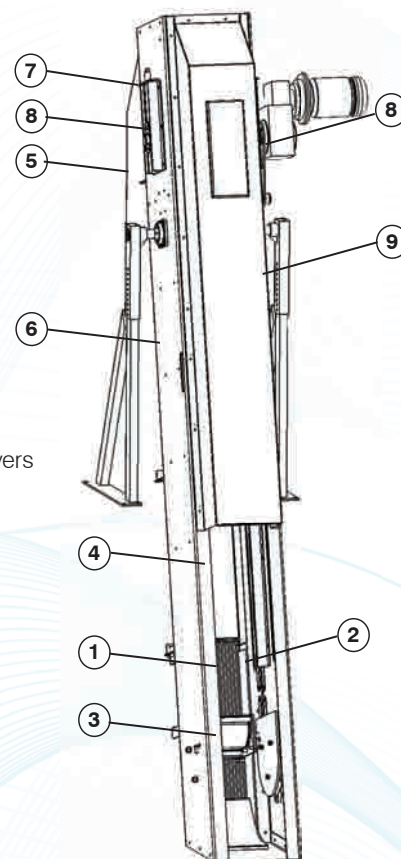


Below: Optional SPIRALIFT SC Washer/Compactor.



Dimensions

1. Bar Rack – available in AISI304 or AISI316 stainless steel
2. Extended pitch (150 mm – 6") chain with rollers dia. 70 mm
3. AISI304 solid rake with trapezoidal teeth and 10 mm thick (3/8") HDPE runners
4. Deadplate
5. AISI304 discharge cover – 3 mm (10 ga.) with hinged inspection covers
6. AISI304 main frame 6 mm (1/4")
7. AISI304 wiper
8. Drive: helical bevel gear drive
9. Adjustable pivoted support



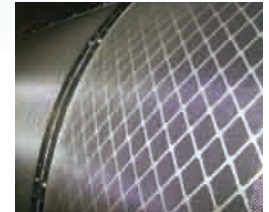
Call one of our customer service representatives to discuss your particular application.

SCREENMASTER® RT

Internally Fed Drum Screen

The SCREENMASTER® RT internally fed drum screen employs a rotating drum to provide effective fine screening of a variety of materials with a simple and reliable design. This unit employs a cylindrical screen constructed with perforated metal, wedge wire or filter cloth along with a weir system. As the material is fed into the unit's inlet, it is distributed along the internal screen surfaces.

At right, from left to right: Three media choices: perforated metal, wedge wire and filter cloth



TYPICAL APPLICATIONS: | Wastewater Treatment
Pulp & Paper | Slaughter Houses | Offal | Fat

As the drum rotates, the weir moves the solids along the screen length. The liquids are discharged out the unit's bottom. The solids are conveyed to the unit discharge flange. The RT is provided in a choice of models with up to 60" diameter drums up to 156" (4m) in length.

The SCREENMASTER RT is ruggedly constructed for smooth operation and long life. It is fully constructed in corrosion resistant T304 or T316 Stainless Steel. The RT is provided with a choice of screen openings from 500 x 500 micron (filter cloth) up to 6 mm perforations. The perforated screen segments are removable from the outside of the unit by opening the access panels.

RT MODELS	DRUM DIAMETER	DRUM LENGTH	INLET	OUTLET	Capacity Wedge Wire 0.5 mm	Capacity Mesh 1 mm	Capacity 2 mm Perf.
RT600/6	24" (600 mm)	24" (600 mm)	4" (100 mm)	8" (200 mm)	0.34 MGD (15 L/S)	0.27 MGD (12 L/S)	0.43 MGD (19 L/S)
RT600/10	24" (600 mm)	39.5" (1000 mm)	4" (100 mm)	8" (200 mm)	0.5 MGD (22 L/S)	0.46 MGD (20 L/S)	0.64 MGD (28 L/S)
RT600/15	24" (600 mm)	59" (1500 mm)	4" (100 mm)	8" (200 mm)	0.64 MGD (28 L/S)	0.57 MGD (25 L/S)	0.84 MGD (37 L/S)
RT900/10	35.5" (900 mm)	39.5" (1000 mm)	6" (150 mm)	10" (250 mm)	0.8 MGD (36 L/S)	0.73 MGD (32 L/S)	1.1 MGD (47 L/S)
RT900/15	35.5" (900 mm)	59" (1500 mm)	6" (150 mm)	10" (250 mm)	1.3 MGD (58 L/S)	1.2 MGD (55 L/S)	1.8 MGD (80 L/S)
RT900/20	35.5" (900 mm)	79" (2000 mm)	6" (150 mm)	10" (250 mm)	1.7 MGD (75 L/S)	1.6 MGD (70 L/S)	2.2 MGD (98 L/S)
RT900/25	35.5" (900 mm)	99" (2500 mm)	6" (150 mm)	10" (250 mm)	2.4 MGD (105 L/S)	2.2 MGD (98 L/S)	3.4 MGD (150 L/S)
RT1200/15	47.5" (1200 mm)	59" (1500 mm)	8" (200 mm)	12" (300 mm)	2.2 MGD (95 L/S)	2 MGD (90 L/S)	3.1 MGD (135 L/S)
RT1200/20	47.5" (1200 mm)	79" (2000 mm)	8" (200 mm)	12" (300 mm)	2.5 MGD (110 L/S)	2.3 MGD (102 L/S)	3.6 MGD (160 L/S)
RT1200/25	47.5" (1200 mm)	99" (2500 mm)	8" (200 mm)	12" (300 mm)	3.4 MGD (150 L/S)	3.1 MGD (135 L/S)	4.8 MGD (210 L/S)
RT1500/15	59" (1500 mm)	59" (1500 mm)	10" (250 mm)	14" (350 mm)	3.2 MGD (140 L/S)	3 MGD (130 L/S)	4 MGD (175 L/S)
RT1500/20	59" (1500 mm)	79" (2000 mm)	10" (250 mm)	14" (350 mm)	4.7 MGD (205 L/S)	4.1 MGD (180 L/S)	6.4 MGD (280 L/S)
RT1500/25	59" (1500 mm)	99" (2500 mm)	10" (250 mm)	14" (350 mm)	6.8 MGD (300 L/S)	6.4 MGD (280 L/S)	8.9 MGD (390 L/S)
RT1500/30	59" (1500 mm)	118" (3000 mm)	10" (250 mm)	14" (350 mm)	7.6 MGD (335 L/S)	5.9 MGD (260 L/S)	9.9 MGD (435 L/S)
RT2000/25	79" (2000 mm)	118" (3000 mm)	12" (300 mm)	16" (400 mm)	11.9 MGD (520 L/S)	9.6 MGD (420 L/S)	14.8 MGD (650 L/S)



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