

DUPERON®

WASHER COMPACTOR

DUAL AUGER UNIT

Washer compactors automate the solids handling process efficiently and provide a bottom-line impact to meet hauler requirements and reduce landfill volume. The Duperon Washer Compactor is a patented, dual auger unit, specifically designed to handle the debris variations that a FlexRake® could potentially discharge. It combines mechanical simplicity and strength to achieve reliable performance and lower disposal costs.



THE DUPERON DIFFERENCE

WHAT GOES IN, COMES OUT

 Positive displacement from patented dual augers processes debris forward, prevents slipping, wrapping, clinging, and bridging

CONSISTENT COMPACTION

 The self-regulating compaction zone delivers consistent dry solids, regardless of debris or volume

FLEXIBLE DISCHARGE

• The Discharge Extension Option transports compacted screenings up to 40 ft in any direction without additional mechanized conveyance

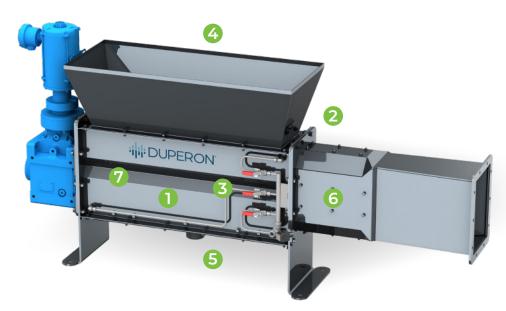
HIGH PERFORMANCE TO IMPACT BOTTOM-LINE

 Reliably provides up to 84% volume reduction and 60% dry solids to minimize odor, meet hauler standards, and reduce landfill costs





WASHER COMPACTOR FEATURES





POSITIVE DISPLACEMENT

Counter-rotating patented dual augers process debris forward, preventing slipping, wrapping, clinging and bridging

HOUSING GEOMETRY

Controls potential for "slip flow" when processing grease, septage and other similar debris

2 NON-BATCHING Continuous flow

3 SELF-CLEANING STRAINER Eliminating brushes and relieves clogging

DESIGNED FOR DUTY

Designed to process debris variations that a FlexRake® could occasionally discharge, like rocks, grease, clothing, concrete and metal up to 4 inches

5 NON-CLOGGING FLOOD WASH PORT

Ideal for non-potable water

6 NO FIXED REDUCTION COMPACTION

A proprietary self-regulating compaction zone controls pressure, regardless of volume for consistent dry solids

HOW IT WORKS

The Duperon® Washer Compactor is a powerful system that uses self-cleaning dual augers in a counter rotation to prevent wrapping and to help separate organic and inorganic materials. The dual augers use positive displacement, to continuously move debris forward for cleaning, compaction, and discharge. Flood washing ports clean screenings and return organics back to the channel. A proprietary self-regulating compaction zone provides consistent pressure, regardless of volume and debris composition.

Unlike other technologies, the Duperon Washer Compactor typically compresses debris before it enters the discharge chute, so it does not rely on fixed reduction compaction (using the friction of screenings in the chute to compact). The internally controlled compaction allows Duperon equipment to push a plug column with little to no resistance to extended locations. The captured solids are delivered in an enclosed chute to the desired discharge point, with minimal odor and vector-free.

THE DISCHARGE EXTENSION OPTION

The patent-pending Discharge Extension Option (DEO) can transport debris up to 40 feet in any direction, even vertically, eliminating the need for additional motor-driven conveyance systems. The dual augers, combined with the geometry of the chute layout, produce backpressure. This backpressure allows the weight of the plug column (not friction from the chute) to dewater and compact debris. This allows the DEO to easily transport compacted screenings long distances, without resistance and without requiring the augers to extend to the discharge point.

THE DEO PROVIDES SIGNIFICANT COST SAVINGS BY:

- Reducing the length of the bar screen extending multiple levels
- Eliminating additional conveyance, motors and associated maintenance
- Eliminating manual labor and debris handling of captured screenings

WASHER COMPACTOR DISCHARGE CHUTE ACCESSORIES



HEAT BLANKET:

The Washer Compactor hopper, compaction zone and discharge chute can be thermally protected from cold temperatures with the addition of the Heat Blanket with integral heat trace.



BAGGER:

The Bagger System attaches to the discharge chute for applications where bag dispensing and odor control are required. Included is a 90 meter length of continuous feed bags.



DROP SLEEVE:

This flexible Drop Sleeve is an economical way to direct and contain downward debris discharge. Also used where waste container hauling may cause damage to metal discharge chutes.



CASTER ASSEMBLY:

Optional casters allow for flexible placement of the Washer Compactor and simple movement of the unit.



HOPPER LEVEL SENSOR:

Used in applications where a sluice discharges into the washer compactor. If the float trips, sluice water will turn off to avoid the hopper overflowing.



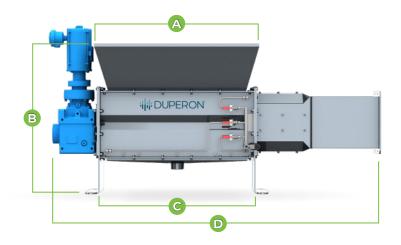
HOPPER BYPASS:

A 6 inch bypass plumbed with Fernco stye fittings to avoid hopper overflowing, drains excess debris back into the channel in front of the bar screen to be re-captured.





	BODY SIZE 1	BODY SIZE 2	BODY SIZE 3
▲ Typical hopper height (in)	38	38	38
B Hopper length (in)	27	43	67
C Distance between washer compactor legs (in)	24	40	64
Overall length (in)	69	85	109



PRODUCT DATA

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TROBUCT BATA	
SIZING	3 sizes to accomadate site flow and capacities
WATER	 Utilizes filtered effluent or municipal water Washer consumes 3-10 GPM Requires 40 psi-60 psi Drain connection 3 in NPT Supply connection 1/2 in NPT
UTILITY	120/240 volt, 1 PH 240/480 volt, 3 PH (0.6 kW/2.3 kW/3.8kW)
DRIVE	1 hp, 3 hp, 5 hp inverter duty motors available
MATERIAL OF CONSTRUCTION	304 SSTL or 316 SSTL, SSTL spur gears (17 - 4 PH) Self-lubricating main auger bearings
BAR SCREEN FLOWS	Flows up to 100 MGD* *flow values are based on MOP8 values through a ¼ inch bar screen
PEAK CAPACITY	Available from: 30 cu ft/hr - 150 cu ft/hr
TYPICAL PERFORMANCE	Up to: 30% - 60% dry solids 60% - 70% weight reduction Significantly decreases odor and fecal content
STANDARD CONTROLS	Packages range from simple start/stop to sophisticated automation Motor overload protection provided
OPERATION OPTIONS	Continuous while screen is running with off-delay capability to clear hopper

Municipal wastewater

Industrial wastewater

Pump stations Lift stations

Combined sewer overflow

Other non-standard applications where debris is variable or difficult



APPLICATIONS