

ALLU

A UNIQUE PRO-ENVIRONMENTAL
RANGE OF PRODUCTS



The ALLU SM screener/crusher is a versatile, cost-saving processing device that lets you do the same jobs that previously could only be done by expensive, specialized machinery.

The **ALLU SM**

- **SCOOPS**
- **SCREENS**
- **BLENDS**
- **MIXES**
- **PULVERIZES**
- **LOADS A WIDE RANGE OF MATERIALS**

You easily attach the ALLU SM to backhoe loaders, tractors, excavators or wheel loaders. It's like having several machines in one!

FINNING
UNIVERSAL MACHINERY SERVICES



An ALLU SM3-23 (attached to a Cat IT38) busy processing compost material.



An ALLU SM4-17 (attached to a Cat 330) working with top soil.



ALLU models are available for skid steer loaders.



ALLU SM4-27 coupled with a Case wheel loader.

Take advantage now of the rapidly growing waste and material processing market. With the ALLU SM, you can expand your work opportunities and offer more services to your existing customers. And you can do all this and more with a small investment that will pay for itself in a short period of time.



How it works

The ALLU SM screener/crusher attaches to the base machinery by an adapter or a quick coupler.

The screener/crusher consists of a frame (bucket design) without a back plate that two to four screening and crushing drums with bearings have been mounted. All the drums rotate in the same direction.

The hydraulic power from the base machine transfers via hydraulic hoses to the hydraulic motor of the screener/crusher. The motor then sends the power to the drums via chains and chain wheels.

The screened and crushed material flows through the crushing and screening drums when the blades scoop the material through the drums. The processed material falls on the pile by gravity and the force of the rotating drums. Big fragments are left in the bucket and can be easily placed in their own pile.

The average size of the processed material is determined by the type of the drums, type of counter blade, rotation speed of the drums, and various accessories such as blades, screens and crushing bars. Worn out blades also have an effect on the particle size.

Use the ALLU SM for:

- **Mixing various materials, while screening and fragmentizing**
- **Screening waste soil from construction sites and road building**
- **Pulverizing peat and separating stumps**
- **Mixing and aerating compost**
- **Processing contaminated soil**
- **Fluffing and screening soil**
- **Screening and crushing coal**
- **Peeling top soil, screening and loading**
- **Crushing glass bottles and jars**
- **Crushing hardened lime**
- **Crushing coal ashes**
- **Bulk stabilization of clay**
- **Crushing ore concentrate**
- **Crushing bark**

It mixes a wide range of materials such as:

- | | |
|-----------------|-----------------------------|
| ◆ Soil | ◆ Compost |
| ◆ Peat | ◆ Glass |
| ◆ Sand | ◆ Hardened lime |
| ◆ Bricks | ◆ Granulated asphalt |
| ◆ Salt | ◆ Bark and twigs |
| ◆ Clay | ◆ Black top (milled) |
| ◆ Coal | |



ALLU buckets are excellent for processing materials like glass bottles. Above an ALLU SM2-23 attached to a Cat IT14



ALLU SM 3-23. The detachable adapter plate makes it quick to mount the SM units on to machines with different fastening mechanisms.



A Cat 322B excavator with an ALLU SM3-17. Screening drums can be changed quickly and easily.

The screener/crusher requires two-way hydraulics. The rotating direction is always the same, but the hydraulics have the possibility to reverse so that any material blocking the drums can be loosened. The operator controls the rotating direction and speed of the drums (300 rpm recommended for best results).

It's a more efficient way to process materials

One of the great advantages of the ALLU SM is that it does more to the material than conventional machines. The material flows smoothly through the screener/crusher due to the carefully designed frame and size of the screening and crushing area, which is large in proportion to the bucket volume. It not only screens soil, it also pulverizes lumps of hardened soil and clay in the material because it acts as a screener at the same time as a crusher. With traditional machinery, these lumps would only be screened out and the amount of waste material would be greater. The capacity of the screener/crusher is competitive with similar machines and with some materials, the screener/crusher has an even larger capacity.

Easy to use. Easy to move. Easy to maintain

Available in a wide variety of sizes, the screener/crusher attaches to almost any type of loading machine. You just attach it to the loader's hydraulic system.

You can crush, load and mix in one step. It saves you time and increases your productivity.

Unlike some similar machines, the ALLU SM is very mobile for easy transport to different work sites. You can install the screener/crusher onto different machines in the field just by changing the adapter.

The ALLU SM was designed for easy maintenance. Routine inspections and maintenance such as bolt loosening and chain and bearing lubrication can be done without specialized personnel. You can change blades on the job site. Plus, you get a standard tool set with every bucket to assist with daily maintenance.

Models

The screener/crushers can be mounted onto almost any type, brand and size of machine such as tractors, skid steer loaders, and wheel loaders up to 23 tons and excavators up to 35 tons.

Light Series

Model	Typical Base Machine	Base Machine Weight Range (1,000lbs)	Bucket Weight 60mm Drums lbs.	Bucket Vol. Cu. Yd.	Hydr. Recomm. GPM
SML 2-12	Skid Steer	3.3 - 4.4	840	0.50	8-16
SML 2-17	Skid Steer	4.4 - 11.0	1100	0.75	8-16

Standard Series

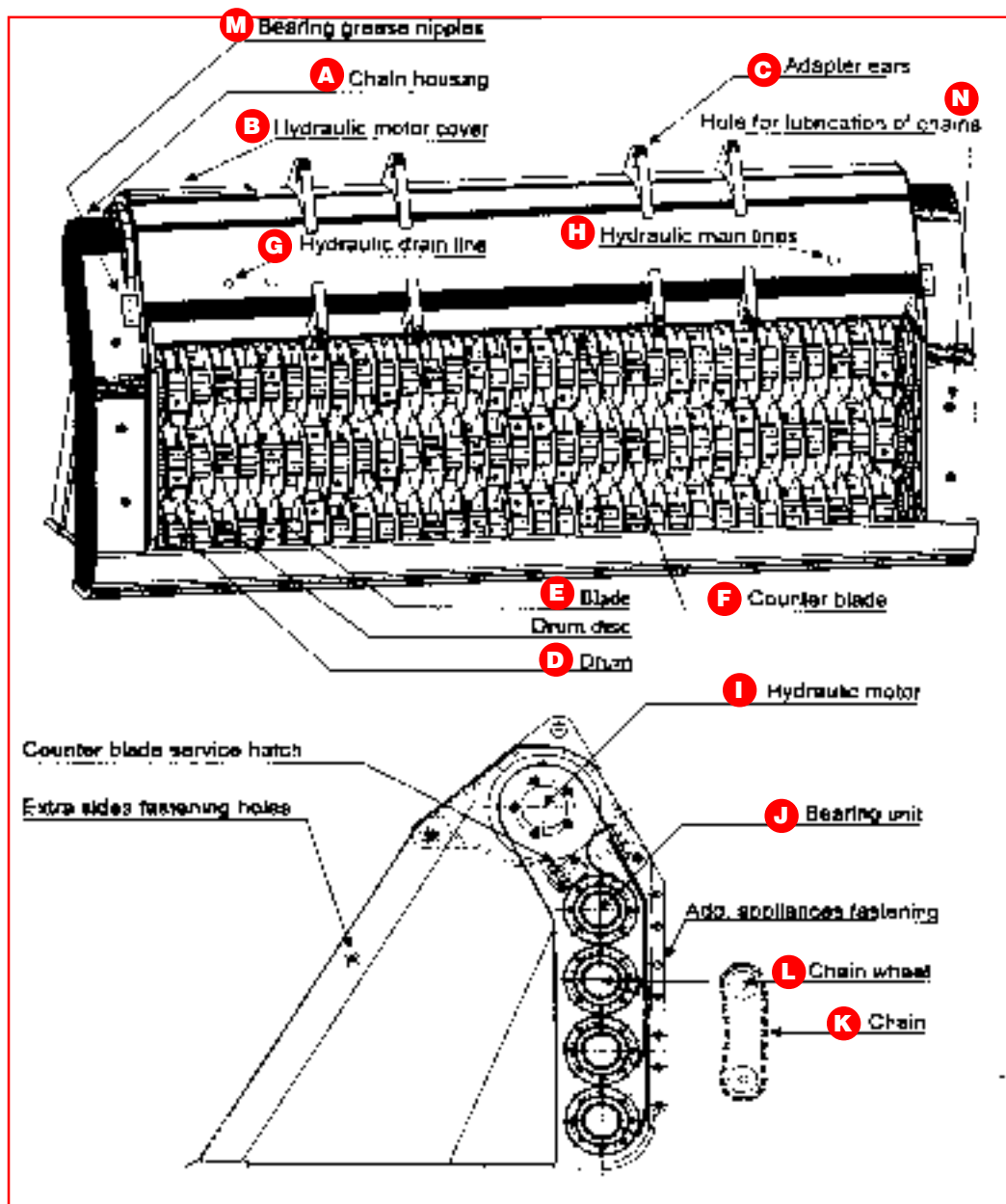
SM 2-12	Small Loader	13 - 20	2460	0.85	21 - 34
	Small Excavator	28 - 33	2460	0.85	21 - 34
SM 2-17	Small Loader	15 - 22	3040	1.20	21 - 34
	Small Excavator	35 - 46	3040	1.20	21 - 34
SM 2-23	Tractor Loader	20 - 26	3586	1.60	21 - 34
SM 3-12	Small Loader	29 - 44	2950	1.30	16 - 24
	Medium Excavator	35 - 46	2950	1.30	15 - 24
SM 3-17	Small Loader	20 - 26	3650	1.80	29 - 44
	Medium Excavator	46 - 55	3650	1.80	29 - 44
SM 3-23	Medium Loader	24 - 31	4500	2.50	37 - 56
SM 3-27	Medium Loader	28 - 35	5050	3.00	42 - 64
SM 4-12	Small Loader	20 - 26	3500	1.70	29 - 44
	Medium Excavator	46 - 55	3500	1.70	29 - 44
SM 4-17	Medium Loader	24 - 31	4290	2.50	29 - 44
	Large Excavator	55 - 66	4290	2.50	29 - 44
SM 4-23	Medium Loader	28 - 35	5070	3.20	37 - 56
SM 4-27	Medium Loader	33 - 44	6000	4.00	42 - 64

Heavy Duty Series

SMH 3-12	Medium Excavator	47 - 56	3800	1.30	43 - 64
SMH 3-17	Medium Loader	25 - 31	4600	1.80	43 - 64
	Large Excavator	56 - 66	4600	1.80	43 - 64
SMH 3-23	Medium Loader	29 - 35	5530	2.50	43 - 64
SMH 3-27	Medium Loader	33 - 44	6300	3.00	58 - 88
SMH 4-12	Large Excavator	56 - 66	4400	1.70	43 - 64
SMH 4-17	Medium Loader	29 - 35	5400	2.50	43 - 64
	Large Excavator	62 - 75	5400	2.50	43 - 64
SMH 4-23	Large Loader	33 - 44	6500	3.20	58 - 88
SMH 4-27	Large Loader	40 - 51	7420	4.00	60 - 110

The base machine weight ranges are guidelines only. Specifications may change without notice.

Durable Design



A Chain Housing
Chain box with removable cover for speedy access to hydraulic motor for inspection and maintenance.

B Hydraulic Motor Cover
An easily removable cover for quick access to hydraulic motor for inspection and maintenance of motor, hydraulic hoses and fittings.

C Adapter Ears
Let's you fit the bucket onto either a loader (all buckets) or an excavator (SM-12 and SM-17 wide buckets).

D Drum
Made of special wear-resistant steel to ensure a long lifetime.

E Blade
Made of special hardened steel. Quickly interchanged by removing the spring pin that holds the blade in place. Different types of blades available.

F Counter Blade
Made of special steel. Quickly interchanged through the special counter blade, service hatch inside the chain housing.

G Hydraulic Drain Line
½" case drain hose recommended.

H Hydraulic Main Line
Minimum 1" pressure hose recommended.

I Hydraulic Motor
A precisely designed radial-piston hydraulic motor to ensure maximum torque right from the start.

J Bearing Unit
Sealed bearing units for trouble-free operation.

K Chain
A durable 1 ½" chain for heavy-duty reliability. Chains do not require any tightening.

L Chain Wheel
Secured fit.

M Bearing Grease Nipples
Conveniently placed on the outside of the bucket for simple daily maintenance.

N Chain Lubrication Hole
Easy outside access.



Wet and sticky materials? No problem

With traditional trommel and vibrating screens, it's difficult to process wet and sticky materials because the material tends to block the machines. The ALLU SM screener/crusher bucket handles wet, tough materials such as sludge and clay without difficulty. This excellent performance is possible due to the patented construction of its screening drums and their position. (For best results with wet materials, you should use a bucket equipped with three or four drums.)

Options make the ALLU SM even more versatile. A number of various screening drums, additional attachments and blades are available for different tasks and sizing. These additional attachments increase the number of uses for the screener/crusher buckets while improving the quality of the final material.

The screener/crusher can be easily adapted to suit different applications. Three different drum types, a number of different blades and additional accessories, such as extra screen and crushing bars, can broaden the bucket's use. All of these options can be quickly changed on the work site.

We'll be here to help

All ALLU SM screener/crushers come with warranty. You'll receive an owner's manual and quick guide for information on operation and maintenance. If you have further technical questions, you can contact Finning UMS at our toll free number (*see below*).

Take the next step

Find out how ALLU SM can help expand your business. We'll be glad to answer your questions or give you advice on using this innovative product. Contact one of our sales representatives now.

North America Toll Free: 1-800-663-5989
Direct Phone: (604) 881-6100



ALLU SM 4-23. Material flows smoothly through the ALLU SM due to carefully designed frame and size of screening area, which is large in proportion to bucket volume.

**See the back page for how
ALLU SM screener/crushers
stack up to the competition**



Expand the ALLU SM with optional attachments

- **Extra sides to increase the bucket volume**
- **Screen for fine fragment material**
- **Mounting plates & different drum configurations to process an even wider range of materials**

ALLU SM Advantages

Feature	ALLU SM	Competitors
Investment Cost	Investment cost of ALLU SM screen/crusher is one of the lowest in the market today	Usually high priced, specialized machinery requiring complex financing
Material	With ALLU SM you can process a wide range of materials from different soils to glass and bark	Range of materials usually limited due to specialized nature of machines
Material Processing	Does more to material than conventional machinery because it functions as a screen as well as crusher, mixer and carrier	Usually limited to one particular field
Wet Materials	Able to easily process wet materials	Difficult because material blocks machine
Mobility	One of the most mobile machines on the market. Easy to transport to job sites	Often requires special transporting arrangements because of the size and weight
Variability	Versatile due to quickly interchangeable drums	Frequently large, specialized machinery designed for a particular field of operation
Maintenance	Easy daily maintenance and access points	Often complex machines requiring specialized personnel to maintain
Single Process	Material scooped and processed in a single pass. This is more cost efficient.	Other screeners need to be loaded and unloaded



ALLU is the easy way to make different soil mixtures



Crush lightweight concrete



Smoothly process bark and more!

Finning Universal Machinery Services

Headquartered in British Columbia, Canada, Finning UMS is a division of Finning International Inc., one of the world's largest Caterpillar dealers. With a used parts inventory worth over \$4 million, Finning UMS sells and ships items all over the world and stocks thousands of used parts and attachments for both Caterpillar and non-Caterpillar equipment. We also have 500 types of hydraulic cylinders and 50 engine configurations. Plus, over 800 quality used attachments, including Finning manufactured attachments. Ask us how we can help you with all your used parts needs.

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