

Chip-Sizer[™]

HANDLING A WORLD OF MATERIALS

Cost-effective reduction of oversized wood chips for the pulp & paper industry

Features/Advantages

Unique, Patented Design

While the operating principal of the Jeffrey Rader Chip-Sizer is similar to a typical wood hog, our machine incorporates several special features and components.

The Chip-Sizer's hammers allow the unit to operate at speeds much slower than hammermills, reducing wear of hammers and screen grates. Hammers and screen grates typically last 3-5 years. With this "soft touch" to the chips, pins and fines are also minimized to less than 3%. This, along with other patented components, permits the Jeffrey Rader Chip-Sizer to reduce oversized chips at unheard of efficiencies and overall lower maintenance costs.

Technical Advances Minimize Downtime

- · Large feed opening eliminates infeed plugging.
- · Access door permits fast, easy servicing.
- Chipping hammers significantly reduce downtime when maintenance is required — there are no knives that require sharpening.
- Metal trap minimizes damage from tramp metal.
- Replaceable wear-resistant liners extend service
 life

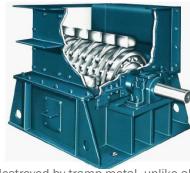
Cost-Effective Operation

- · Low capital cost provides a rapid ROI.
- High recovery rates typically 85-95%, leading to increased profits
- Efficient screen bar design produces a high percentage of accepts. Generally, the finished product goes directly to the accepts belt, thus eliminating a cyclone and increasing screen capacity.
- High-performance, double-row spherical bearings accommodate extra loads and produce smoother operation.
- Operational adaptability.

Tramp Metal

The inherent configuration and heavy-duty nature of hammermills means the Chip-Sizer has no knives





to be destroyed by tramp metal, unlike alternative equipment such as chip conditioners or chip crackers. And, the Chip-Sizer's feed and discharge openings are large enough to prevent plugging.

Easy Maintenance

Chip-Sizers have long cycles between maintenance, whereas slicers with knives have to be worked on multiple times a year.

Routine maintenance consists of greasing the bearings and checking drive belt tension per the guidelines in the maintenance manual. It is also recommended to check the wear on the chipping hammers and screen bars 2 to 3 times annually.

High-Value Results in Processing Hardwood and Softwood

Results from numerous installations processing hardwood and softwood show that the percentage of oversized chips processed to acceptable chips is typically in the range of 85-95%. This value is so high that many producers are eliminating screening after the Chip-Sizer and feeding directly to the "accepts" belt.

A system using the Chip-Sizer does not usually need a screen to recirculate overs. It also does not require an air handling system since oversize chips are dropped vertically off a belt into the machine and discharged onto another belt.

Experience has shown that surge loads of up to double the machine's rated capacity can be accommodated without plugging.



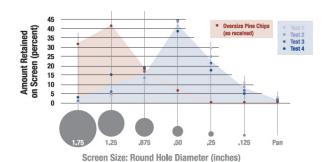
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Features/Advantages (continued from other side)

Fast Payback

High recovery rates and reduced maintenance costs have generated significant improvements in profits for companies operating Jeffrey Rader Chip-Sizers. Furthermore, the lower capital costs yield very attractive returns on investment.

ROI analyses have been done for many installations. Most payback periods have been less than one year with times as short as 3 to 6 months for new plants or those that do not have a conventional rechipper. Even in plants where existing rechippers were converted to Chip-Sizers, investment returns have typically been within the year.



Industry Acceptance

The Jeffrey Rader Chip-Sizer is the first of its kind in the chip market. With the number of Chip-Sizers in the field today approaching 200, this is the sizer that has proven it gives the highest recovery rates of "cookable" chips of any rechipper. Acceptance has been rapid and widespread, with

numerous chip producers and multi-national pulp & paper companies installing our Chip-Sizer machines.



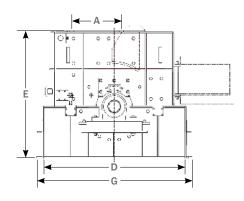
The Chip-Sizer tolerates knots, transitions, bark, bolts, pieces of machinery, rocks, and dirt.

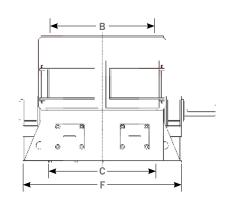
This chart shows customer-provided chips **in red** (oversized) and the resizing results in Tests 1-4 (each representing a different configuration of our Chip-Sizer).

The Jeffrey Rader Chip-Sizer brought oversize chips into specification while minimizing pins and fines.

You can request a Chip-Sizer lab test on your material. Fill out our online form or contact your sales representative. The Jeffrey Rader test lab offers a variety of set-up options along with a classifying screen so you know what you are purchasing before you buy!

Dimensions and Weights





Models 30CS & 34CS have removeable rear door.

Models 45CS & 56CS have hinged rear door.

APPROXIMATE LAYOUT DIMENSIONS' AND SHIPPING WEIGHTS IN. (MM)										
	NOMINAL		FEED		DISCHARGE		OVERALL	OVERALL	OVERALL	OVERALL
MODEL	CAPACITY		OPENING		OPENING		HEIGHT	WIDTH	LENGTH	WEIGHT
NO.	TPH	HP	Α	В	С	D	E	F	G	LBS (KG)
30CS	3 - 8	50	8" (203)	21" (533)	27" (686)	35" (889)	36" (914)	42" (1067)	40" (1016)	3,250 (1,472)
34CS	7 - 12	75	16" (406)	33" (838)	34" (864)	35" (889)	36" (914)	55" (1397)	40" (1016)	4,000 (1,814)
45CS	22 - 40	150	16" (406)	42" (1067)	44" (1118)	57" (1448)	52" (1320)	64" (1626)	63" (1600)	10,000 (4,536)
56CS	40 - 64	300	22" (559)	54" (1372)	56" (1422)	77" (1956)	64" (1626)	83" (2108)	83" (2108)	18,500 (8,392)

^{*}Certified drawings will be furnished for installation. Installation supervision is available.

Contact your local sales representative to learn more about the benefits of a long-term partnership with TerraSource Global.



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