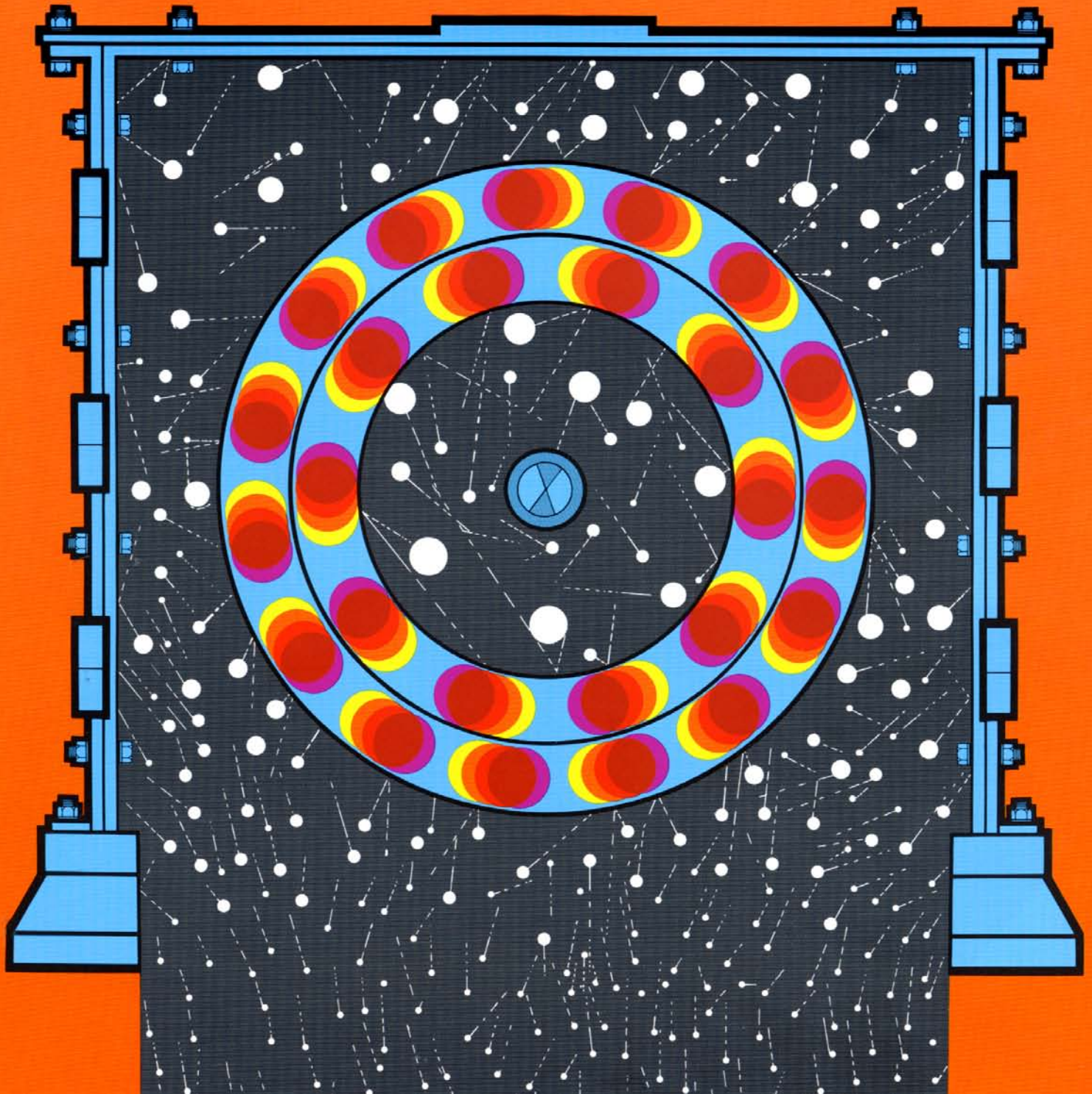


## King Series Multi-Row Cage Mills



# Stedman King Series Reversible Multi-Cage Mills

## How the Versatile Stedman King Series Multi-Cage Mills Operate

The versatility of the Stedman KING SERIES multi-cage mills is unsurpassed. No other crusher on the market will produce a more cubicle or high percentage yield. As internally-fed impact type crushers, Stedman KINGS can be arranged to reduce many types of materials-wet or dry-to the desired product with 2, 4 or 6 stage selective crushing. FINES CAN BE PRODUCED, OR VIRTUALLY ELIMINATED, in keeping with individual plant requirements.

The Stedman KING SERIES multi-cage mills operate by imparting high velocity impact to the material being reduced. Stedman multi-cage mills consist of either 2, 4 or 6 concentric "cages" — with adjacent cages spinning in opposite directions. Each cage consists of a row of massive bars or sleeves. Material is fed into the center of the revolving inner cage which distributes the feed 360°. The feed then passes outward via centrifugal force from row to row — cage to cage — finally striking

tough breaker plates that line the inside of the housing. After many rebounds, the material discharges through the bottom of the mill base. The cages can be operated at a peripheral speed up to 12,000 feet per minute, depending upon the application and end-product size desired.

Although the specific application dictates how it is employed in a system and the manner in which it is operated, the Stedman multi-cage mill is accepted as ideal for tertiary reduction. A multi-cage mill can efficiently reduce materials of any size up to 3" to meet most product fineness requirements. 85% passing 200-mesh is possible with most dry materials and 70% passing 100-mesh on wet materials.

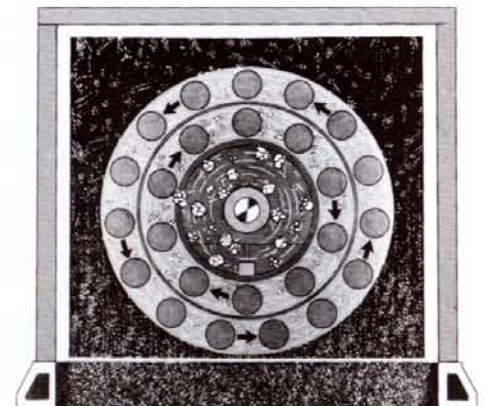
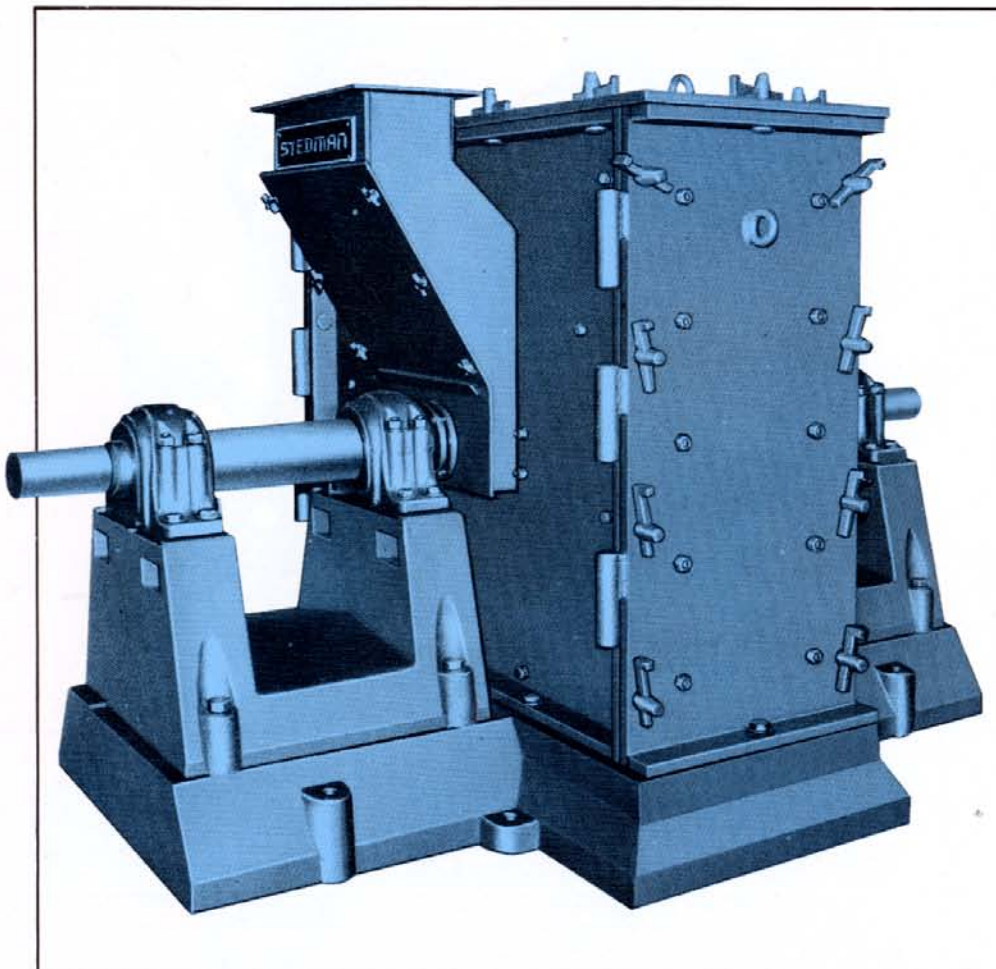
## Minimum Maintenance and Consistent Product

Operating purely by impact, the Stedman multi-cage mills utilize only round impact bars and therefore have no sharp cutting edges or clearances to maintain or which may allow severe

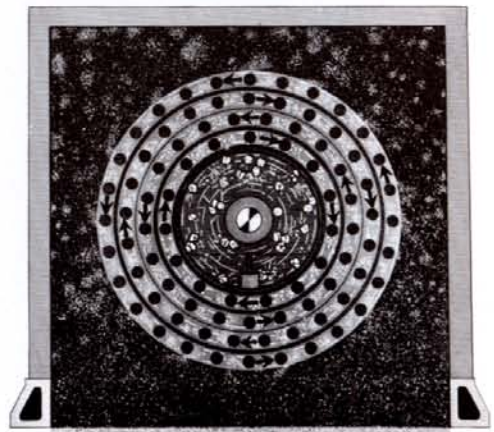
change in product sizing during the life of the crushing parts. Design of round bars, proven over a century, permit reversal of rotation of the cages. This along with maximum open clearances and unrestricted discharge (minimum attrition wear) result in Stedman multi-cage mills being more economical to operate. This KING SERIES advantage exists over competitive cage mills, hammer and impeller type impactors, roller or attrition mills—and they have a much lower initial cost than ball and rod mills or roll crushers. KING SERIES cage mills are available in both heavy duty and standard models.

## Completely Blends and Mixes

Multitude of directional changes imposed on material in its controlled flow path through a KING SERIES cage mill, as well as the fact that the material is held in "complete suspension" during processing. This mill is ideal for complete continuous blending and mixing of various materials.



Typical Two-Row Cage Mill showing flow of material during crushing.



Typical Four-Row Cage Mill showing flow of material during crushing.

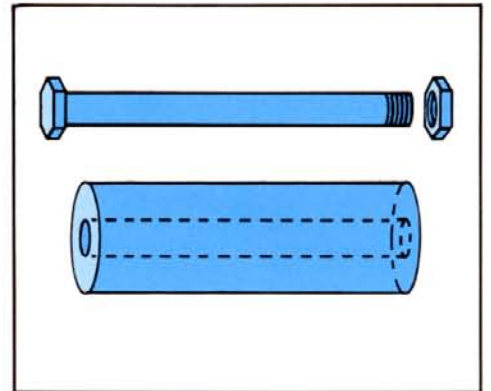
# Many Exclusive Features

The pedestal and base on which the mills are mounted are of very rugged construction designed to withstand bending as well as compressive loading. The housing enclosing the mill is of heavy plate steel construction.

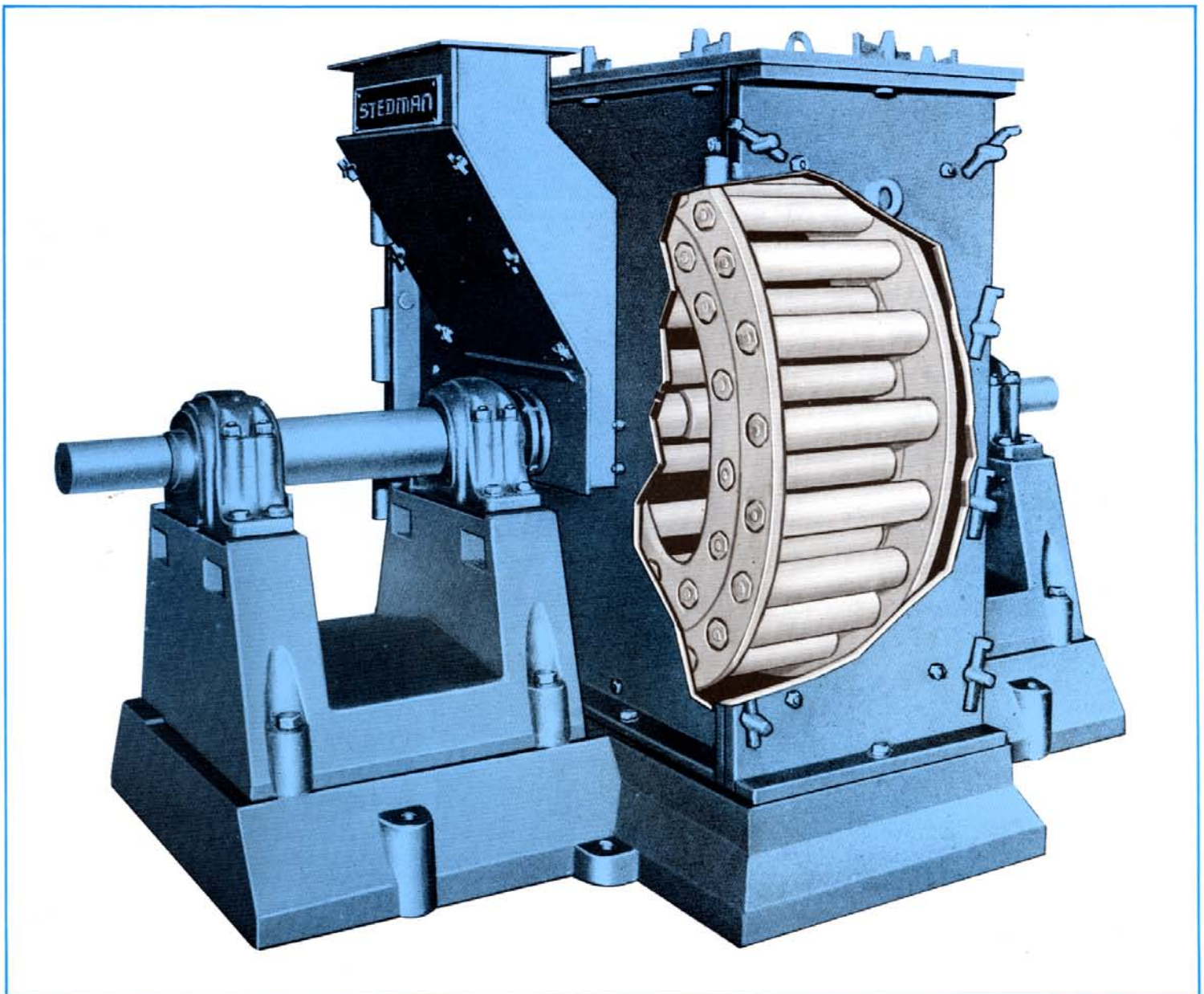
All parts subject to wear—particularly the impact bars on the cages and the breaker plates lining the housing—are cast in wear-resisting steel alloys chosen for the specific application. The Stedman cage mills have no close tolerances in the path of material flow. The mill is REVERSIBLE, to distribute wear evenly and effectively double its life. For abrasive applications, the cage bars consist of replaceable

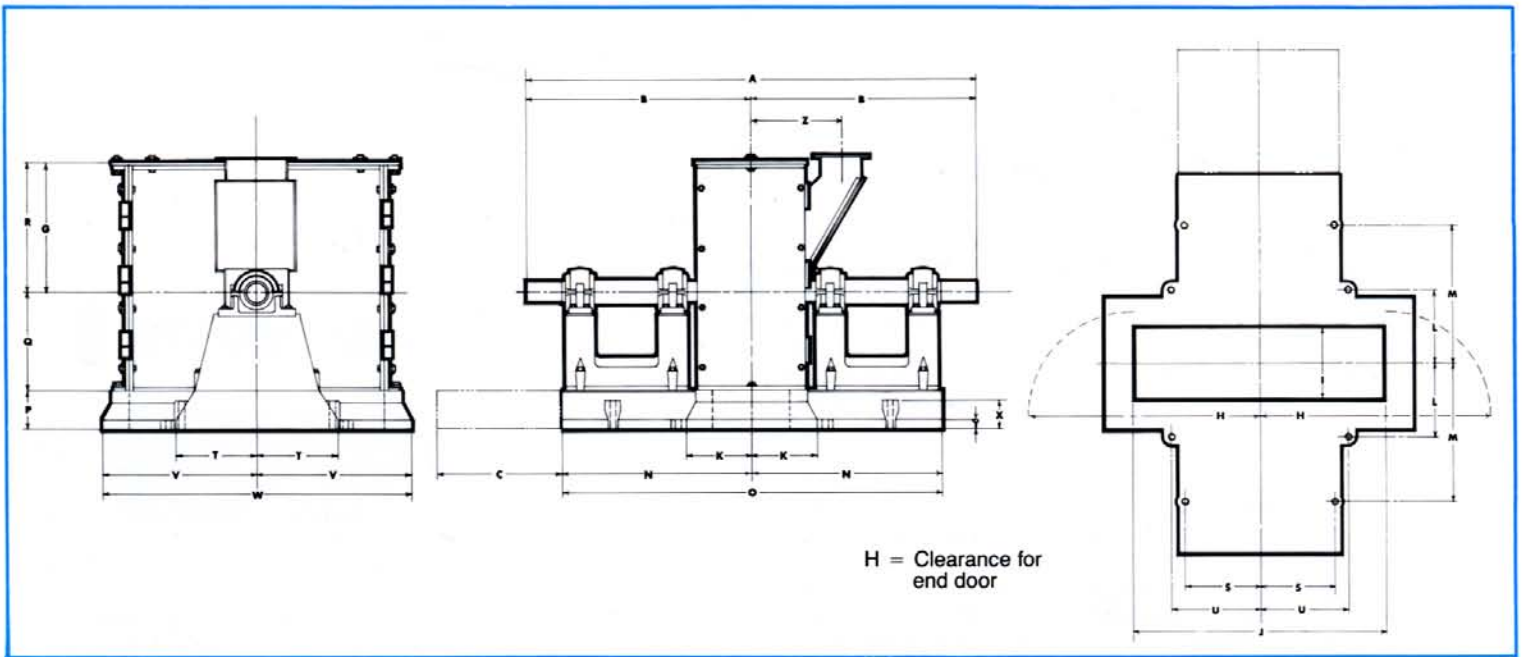
sleeves mounted on heavy steel bolts. This exclusive sleeve design permits turning the sleeves periodically when maximum wear has been achieved in any one position—and also facilitates quick replacement when necessary.

For non-abrasive materials, the bars are held in place by cap screws. A PATENTED DESIGN FEATURE of the Stedman KING SERIES of multi-cage mills is a ring inside each cage which confines the wear to the bars. This insures that the material being processed will pass freely from row to row, and also contributes to uniform product gradation.



Bars shown here are designed and built to allow for maximum wall thickness and wearing surface.





Model	Weights in Lbs.																								
	2 Row	4 Row	A	B	C	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A30	5000	5500	80%	40%	26	24	40	14	40	11	12	27	33	66	5	16	22	12½	13	14½	24	48	3½	1½	15%
A36	7000	7500	89	44½	28	24	47	16	48	12½	14	29	37	74	6	19	26½	14	14½	16	28½	57	4½	1½	17%
A44	12000	13000	106%	53%	30	32	55½	18	58	15	17	34	44	88	8	23	31½	17	18	20	35	70	6	2	20%
A50	16500	17500	116%	58%	32	36	62½	20	66	17	19	36	49½	98½	10	25½	36	19½	21	23	40	80	7½	2½	22%
A60	26000	28860	168	84	42	40	77	21	75½	21½	19½	60½	70½	141	12	32%	40½	19	20%	39	45%	91½	%	%	27%

Dimensions are in inches. CAUTION: Do not use these dimensions for construction purposes.

### Support

The bottom of the Cage Mill base is machined to assure a uniform surface between the base and the supporting structure. The base support may be either steel or concrete and must be of sufficient size and strength to be free of vibration. The foundation print furnished with the mill will give location, size, and projection of anchor bolts. The Cage Mill must be level after bolting to the supporting structure. There should also be provisions made for slicing the pedestal back for repair or replacement of cages. A certified dimension print for installation purposes will be supplied on request.

### Maximum Capacities

Machine Model	Approx. # Per Cu. Ft.				Maximum Feed Size	Approximate Max. H.P.		Approx. Weight Lbs.
	90# 2-Row	90# 4-Row	45# 2-Row	45# 4-Row		Small Cage	Large Cage	
A30	12	6	6	3	¾"	30	50	5,500
A36	30	15	15	7	1"	50	75	7,500
A44	60	30	30	15	2"	100	150	13,000
A50	100	60	50	30	3"	200	250	17,500
A60	200	100	100	50	3½"	300	400	28,860

For moisture content over 8% deduct 15% from above capacity. For moisture content over 12% deduct 30% from above capacity. NOTE: Capacities vary widely, dependent upon feed size, desired product size, weight per cu. ft. of material being reduced.



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Visit Our Web Site:

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Originator of the Cage Mill

SINCE 1834

# STEDMAN

# 1-800-262-5401

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