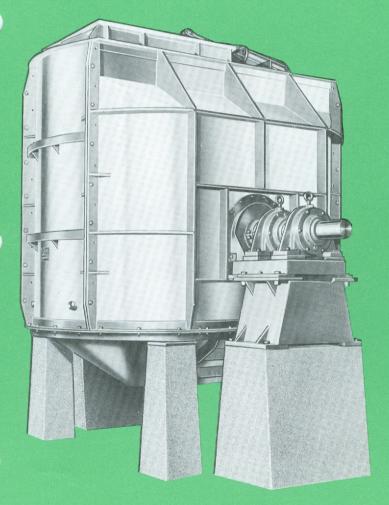
Facts and Figures on the Jones

HO PULPER



GENERAL CHARACTERISTICS

The Hi-Lo Pulper is a double-rotor pulper designed for simultaneous breaking up and complete defibering of pulp and paper. The two rotors--a large-vaned, low speed rotor for economical circulation and thorough breaking, and the small-vaned, high speed rotor for defibering -- are located at opposite ends of a specially designed tank and provide maximum performance and efficiency with minimum power and maintenance. Power savings of up to 25% have been achieved and pulping time has been reduced by 33%.

APPLICATION

The Hi-Lo Pulper completely defibers a wide range of furnish including Fourdrinier and Kamyr type pulps, wet strength broke, and is highly recommended for slushing rag half-stock. The versatile Hi-Lo has been employed as a mixing and blending unit using only the low speed rotor.

CAPACITY

Depending on the type of furnish and operational requirements, the Hi-Lo has a capacity of up to 8,000 pounds at a consistency of 6-1/2%.

E. D. JONES CORPORATION PITTSFIELD, MASSACHUSETTS

In Canada: The Alexander Fleck Limited, Ottawa Latin America and Overseas: Beloit International Corporation, C.A., 50 Talacker, Zurich, Switzerland





PULP MILL EQUIPMENT AND STOCK PREPARATION MACHINERY



for fast, complete
defibering

without cutting

Special low head design for restricted overhead space.

Ideal for defibering tough wet strength materials



The notched blades of the high speed rotor, turning at an average tip speed of 7600' per minute, project only $\frac{1}{4}$ " and use power most efficiently for defibering. The blades, held securely by duroid wedges, can be easily replaced.



The low speed rotor, with large curved blades, provides quick breaking and maximum circulation, forcing stock across the tank to the high speed rotor for defibering.

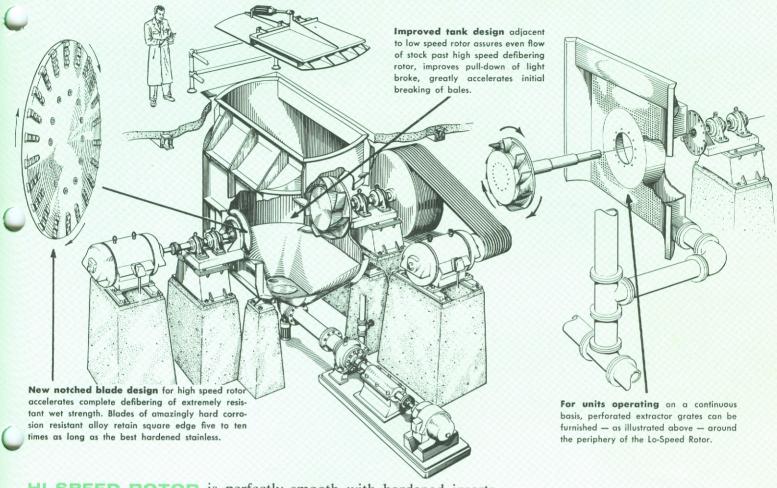
The function of a pulper is to break up pulp or paper, maintain it in a suspension of water and, while applying vigorous circulation, hit it, and hit it repeatedly, to completely defiber it.

It is impossible to combine the two actions satisfactorily in a single rotating element. Either speed of defibering or maximum circulation must be sacrificed, or excessive power used; or bar-to-bar contact results in degrading and tear-loss . . . with resultant higher maintenance and operating costs.

Ordinary single-rotor pulpers offer at best a compromise. The HI-LO PULPER, developed by Jones engineering to achieve the ultimate in pulping, introduces a unique feature: *separate* rotors . . . Lospeed for economical circulation and initial breaking; Hi-speed for complete defibering of even the toughest wet strength materials.

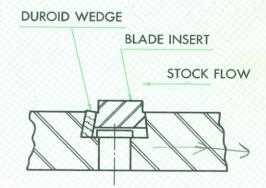
The result is maximum performance and efficiency, with minimum power, minimum maintenance, minimum wear and replacement.

COMPARE THESE DESIGN FEATURES



HI-SPEED ROTOR is perfectly smooth with hardened inserts projecting only 1/4" above rotor face. This rotor is driven at high speed, so that the blades rapidly hit and defiber stock being propelled across the tank by the Lo-Speed Rotor.

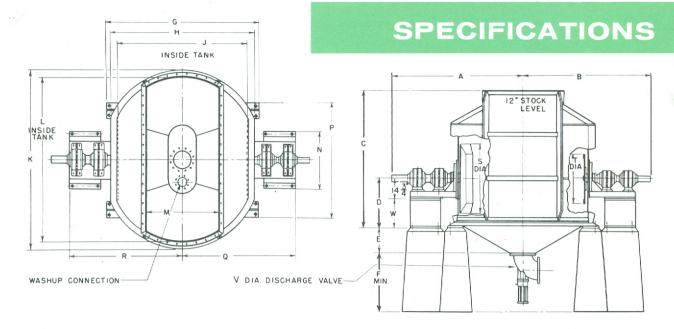
moved. Held in place by individual Duroid wedges, they can be readily reversed to equalize wear, or replaced. Because of their low height very little circulating power is used by this rotor — all the power is absorbed in defibering.



LO-SPEED ROTOR, equipped with large curved blades, provides quick breaking and maximum circulation, forces stock across tank to Hi-Speed Rotor for defibering.

TANK is completely smooth, with no possibility of strings or lumps lodging or becoming entwined with rotating elements. Alternate tile tank construction available.

SPECIAL DESIGNS available for installations where headroom is low. Also designs incorporating Lo-Speed Rotors only — for easy-breaking stock.



8	8000	2300	11 FT 6 1"	11 <u>FT</u> 1 <u>7</u> "	11 FT 1 B	48"	31 1	59 <u>7</u> *	15 ^{FT} 11"	15 FT 0 1	14FT0"	17 ^{FT} 0 1	16 ^{FT} 0*	9 ^{FT} 10*	48"	10 ^{FT} 11*	9 ^{FT} 10 ½	9 ^{FT} 10 ¹	60"	46"	20"	33 <u>1</u> *
6	6000	1730	10 ^{FT} 10 ¹	10 ^{FT} 5 ⁷ / ₈	10 ^{FT} 6"	48"	26 <u>7</u> "	59 7	14 FT 7 1	13 ^{FT} 6 ½	12 ^{FT} 8"	15 FT 9 1"	14 ^{FT} 9*	9 ^{FT} 0"	48"	10 FT 8 3"	9FT 2 1"	9FT 2 1	60"	46"	20*	32 <u>1</u> *
4	4000	1140	10 ^{FT} 0 1	9 ^{FT} 7 ⁷ 8	9 ^{FT} 2 ⁷	417	241	49°	12 ^{FT} 7*	11FT 10 1	11 ^{FT} 0"	13 ^{FT} 10 ³	13 ^{FT} 0"	90*	443	9 ^{FT} 6 ¹ / ₈	8FT 41	8 ^{FT} 4 1	51"	42"	16"	27 <u>1</u> "
3 1/2	3000	868	9 ^{FT} 51"	9 ^{FT} 0 ⁷	8 ^{FT} 57	36½	20 7 °	42 <u>1</u> "	11 FT 3"	10 ^{FT} 8 1	9 ^{FT} 10"	12 ^{FT} 8 ³ / ₈	11 <u>FT</u> 10"	76"	42"	8 ^{FT} 11½	93 <u>1</u> "	93 <u>1</u>	45"	36"	12"	213
3	2000	562	8 ^{FT} 61°	97 7 *	8 ^{FT} 4 ³ / ₈	36 ½	18"	421"	9 ^{FT} 4*	8 ^{FT} 10 1	96"	10 ^{FT} 10 1	10 FT 0 1	54"	42"	84"	82 <u>1</u>	82 1	45"	36"	12*	213
2	1000	314	87 13"	83 <u>13</u> *	88 <u>1</u>	32*	13 8	38 <u>1</u>	92"	843"	76"	8 ^{FT} 8 ³	96"	48"	39 <u>3</u> "	80"	72 <u>7</u>	72 <u>7</u> *	38"	28"	10"	17 1
1	500	142	79 3 "	75 3°	75 <u>1</u> "	26 <u>1</u> "	103	34"	72"	66 <u>1</u>	60"	821	76"	36"	37*	62 <u>1</u> *	64 <u>3</u>	64 <u>3</u> *	32"	20"	8"	113"
N٥	STOCK CAPACITY LBS6½%	TOTAL TUB CAPACITY CU. FT.	<u>A</u>	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	<u>н</u>	J	<u>K</u>	<u>L</u> -	<u>M</u>	N	<u>P</u>	Q	R	S LOW SP.	HL SP	<u>v</u>	<u>w</u>

PATENTED AND PATENTS APPLIED FOR

HI-SPEED ROTOR... Solid 304 stainless steel disc (approximately 1" thick), attached to shaft with stainless socket head cap screws, and fitted with replaceable hardened inserts for stock clearing action.

LO-SPEED ROTOR... Fabricated 304 stainless heavy box-shaped disc, attached to shaft with stainless cap screws, and fitted with specially designed and shaped fins for stock propulsion and circulation within the tank. Heavy foreign material drops to bottom of tank where it cannot damage rotors.

SHAFTS... Heavy steel shafts, fully machined, and fitted with replaceable stainless sleeves through the packing boxes.

BEARINGS . . . Each shaft is supported by two spherical roller type, self-aligning bearing assemblies, with cast-meehanite housings and labyrinth seals to retain the lubricant and exclude water. Both bearings are located outside the tank and away from paper stock.

BEARING STANDS... The shafts and bearings are supported outside the tank by heavy fabricated mild steel stands, adequately reinforced and arranged for mounting on customer's concrete foundation.

TANK . . . Fabricated of 304 stainless steel, shop aligned and pre-assembled, shipped in sections for bolting together

at assembly in mill. External reinforcing members of mild steel.

CONTINUOUS EXTRACTION... When furnished for continuous operation, perforated stainless extractor grates and chambers surround the periphery of the Lo-Speed Rotor, connecting to customer's standpipe or piping for pumping to desired location. Perforated plates are kept clean by rapid flow of stock across them from the rotor action.

VALVES... 45° or 90° stainless steel discharge valves are furnished for batch dumping or for complete emptying of the tank on continuous units, operated with cylinders for air or water, 35 lbs. minimum pressure, with 4 way hand valve for remote control. Available in 8", 10", 12", 16", or 20" pipe sizes.

DRIVES ... Low cost, squirrel cage, standard torque, induction motors are entirely adequate for Hi-Lo Pulper operation. The Hi-Speed Rotor will often be direct connected, while the Lo-Speed Rotor will be V-belt, chain or gear reducer driven, using higher RPM motors.

CONTROLS... Hi-Lo Pulpers may be furnished with controls for either batch or continuous operation with your selection of temperature, liquid level and consistency controls as required.

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