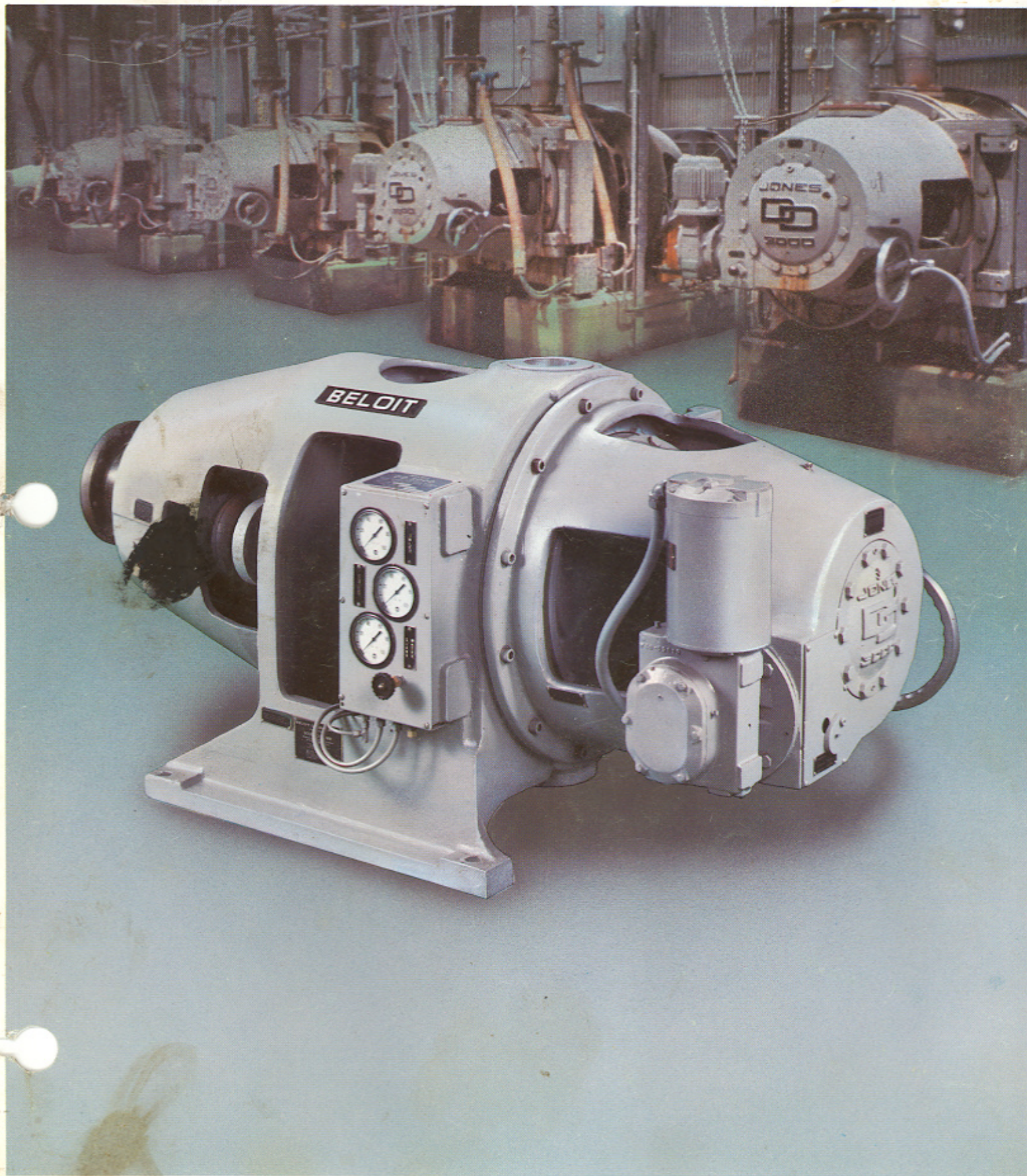


**Beloit Jones DD<sup>®</sup> 3000 Refiners**  
with optional Monoflo/Duoflo design



# Beloit Jones DD 3000 Refiners

Beloit Jones DD 3000 refiners are manufactured specifically for pulp or paper mill operation. They are equipped with an electromechanical positive-action plate positioning system which is an extremely accurate, dependable,

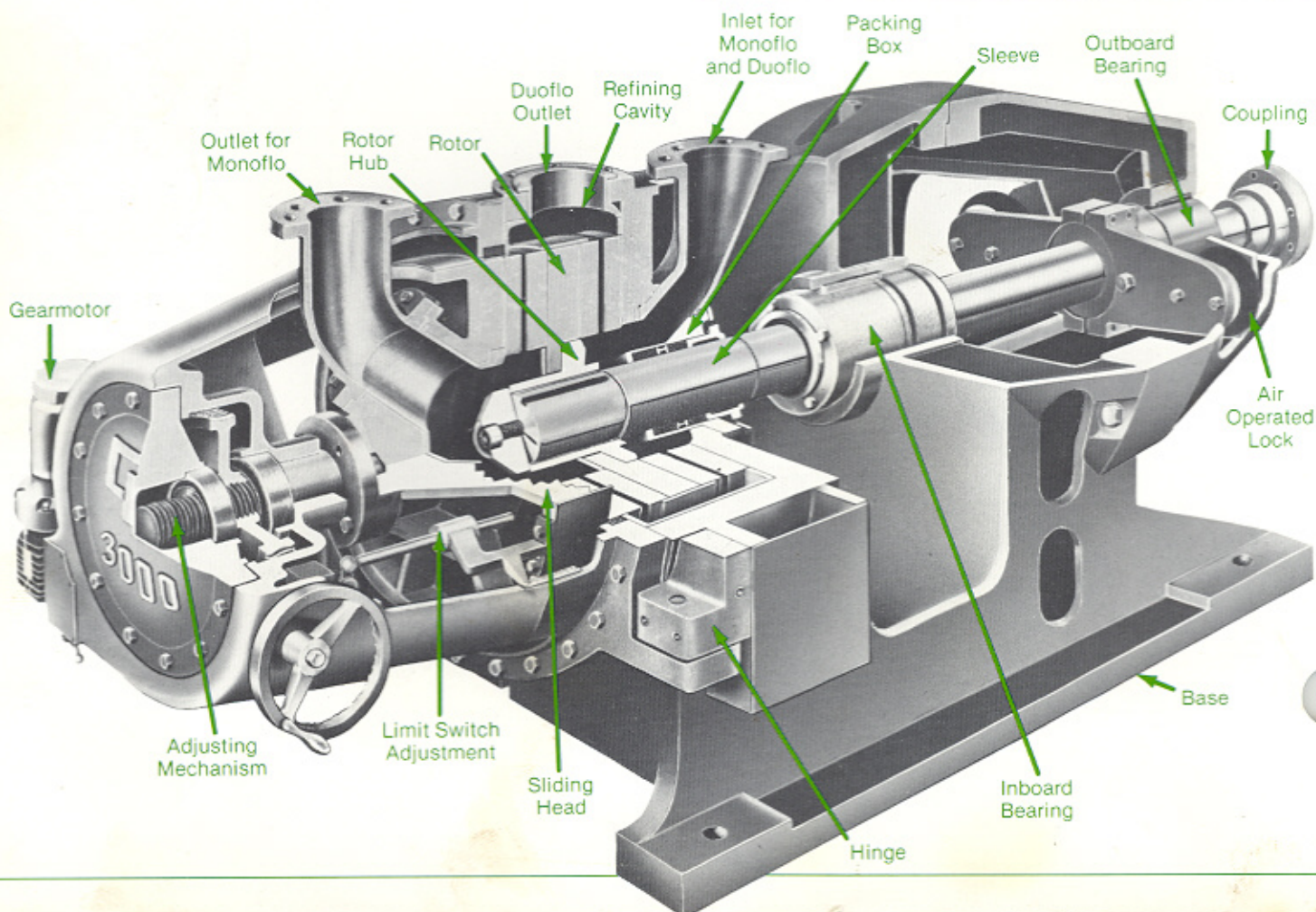
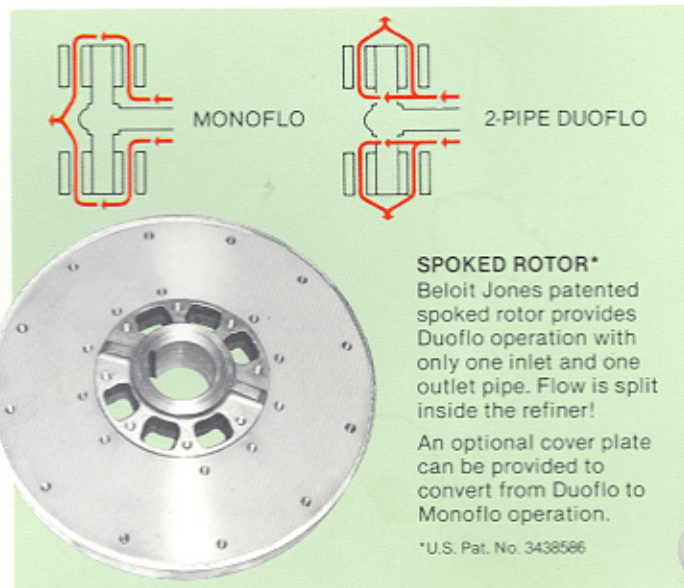
and stable system for uniform processing of stock. Beloit Jones DD 3000 refiners offer maximum versatility for present and future needs.

## Optional Monoflo/Duoflo Installation

In Monoflo, the machine is in two-pass operation with the stock being refined in series as it passes first over one set of plates, followed by a pass over the second set—a feature unique to Beloit Jones—offering you two units in one machine.

Duoflo applications employ a spoked rotor\* that permits half of the incoming stock to pass through to the eye of the second set of disks. Stock passes in parallel across both sets of disks, rejoins, and leaves the unit through a single outlet.

This innovation from Beloit Jones requires only two pipes—inlet and outlet—for Duoflo operation, with the additional advantage that pipe disconnects are unnecessary during plate inspection and plate changes.

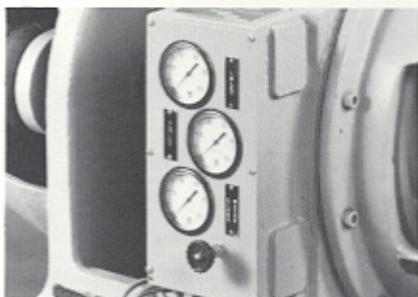


## Features

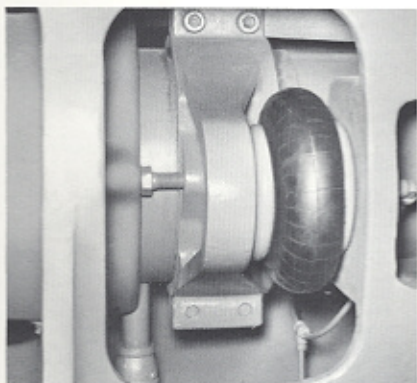
- Easy installation—only two pipes to connect.
- Simplicity of design for ease of operation and maintenance.
- Unique two-pipe Duoflo with single stock inlet—eliminates the need to disconnect piping for plate inspection or replacement.
- Cutting, fibrillation or brushing—by correct choice of plates, speed, and operating consistency.
- Hinged end-housing for easy access to plates.
- Full range of overlap\* design plates available in a variety of alloys suitable to the application.
- Single post adjustment insures plate parallelism.
- Centered outlet/inlet.
- Scientific plate designs provide unit responsibility.
- Plate sizes available from 13" to 54".
- All units may be run Monoflo (plates in series) or Duoflo (plates in parallel).
- A full range of automatic programmable refiner controls (PRC) are available.
- Integral motor models available in 34" and 42" refiners.
- Helicoil thread inserts are provided for plate fastening.

\*U.S. Patent No. 4005827

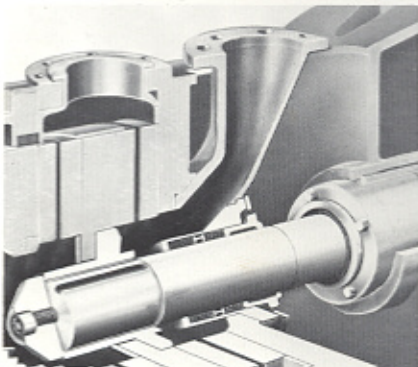
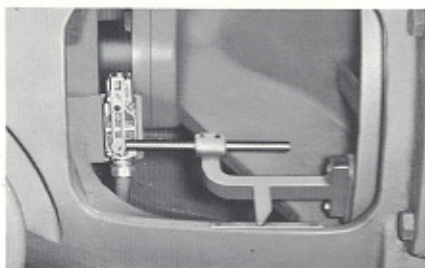
**Instrument panel**—Mounted on the side of the refiner. Includes inlet and outlet stock pressure gauges, a gland water gauge, and a gland water pressure control valve. All connections are terminated near the bottom of the panel and are tagged for easy mill connections.



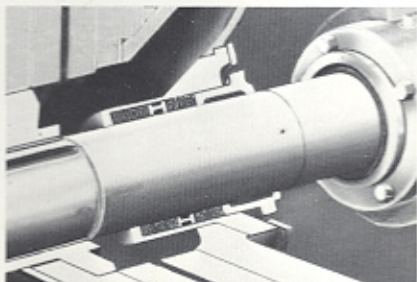
**Rotor lock**—A patented device which automatically prevents axial movement of the rotor during startup and shutdown.



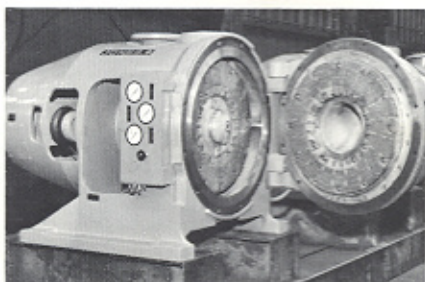
**Limit switch and position indicator**—Mounted in the end housing, limits the back off travel of the sliding head. An adjustable rod, mounted in a bracket on the sliding head, actuates the limit switch and can be adjusted to compensate for plate wear. A pointer indicates the position of the sliding head on a graduated scale.



**Inlet configuration**—Hydraulic design of the inlet eliminates sharp turns and provides a varying cross section to uniformly distribute stock to the eye of the rotor.

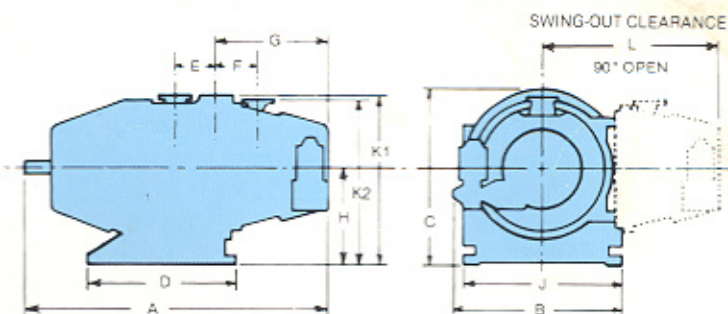


**Packing box features**—The packing box is stationary—requiring no flexible connections. The packing is lubricated by pressurized water through a lantern ring located between the packing rings. The standard sleeve is 316SS, coated with polished ceramic. Alternate sleeve materials are available.



**Hinged end housing**—Disk access is a hinged end-housing containing the adjusting mechanism and sliding head assembly. Electrical conduit to the gearmotor has sufficient slack to permit the head to swing without disconnecting terminals. Plates shown are the segmental type—although one-piece plates are available.

# Beloit Jones DD 3000 Refiners



## General Dimensions

(Inches. Not to be used for construction.)

SIZE	INLET	OUTLET	A	B	C	D	E	F (nom)	G	H	J	K1	K2	L
13	3	3	56.9	23.8	21	25	6.6	9.1	22.8	14.2	22	23.9	26	31.5
20	4	4	70.6	38	34.5	33	10	13	28.1	19.5	32.5	34.5	33.2	38
26	6	6	89.5	42.9	41.3	38	12.8	17.4	35.9	23	41	41.3	39.4	50
34	6	6	109	54	56.5	48	12.8	16.5	38.8	31	51	54.5	49.5	54.8
42	8	8	124.5	60.5	66	56	16	21	47.4	35	59	62.5	57.9	67
54	10	10	147	74	69.5	64	18.5	21	48.3	37	65	71.3	60.5	77.4

## Specifications

SIZE		13	20	26	34	42	54
Nominal Capacity - Monoflo	T/D	5-25	25-75	35-100	65-200	100-300	150-600
Range - Duoflo	T/D	10-40	25-100	35-150	65-400	100-500	150-900
Connected Power Range	HP	75-150	150-300	250-450	350-800	700-1750	1500-2500
Speed Range	RPM	1200-1800	900-1200	720-900	514-720	450-600	360-450
Floor Space Required (Ax B)	IN	57 x 24	71 x 38	90 x 43	109 x 54	125 x 61	147 x 74
Shipping Weight	LB	2,000	5,000	7,500	13,500	21,000	37,000
Floor Load	PSF	250	670	600	800	1,100	1,500
Maximum Stock Pressure	PSIG	100	100	100	100	100	100

Each model includes the complete machine as specified below less motor and plates.

Note: Gearmotor optional on 13" size.

MODEL	3100 STANDARD	3200 CORROSION RESISTANT	3300 SPECIAL CORROSION RESISTANT
Sliding Head	304 S/S Lined	304 S/S Lined	316 S/S Lined
Inlet Connection	Ductile Iron	304 S/S	316 S/S
Packing Box Water Lubricated	Ductile Iron	304 S/S With replaceable sleeves on the shaft	316 S/S
Outlet Connection	Cast Iron	304 S/S	316 S/S
Internal Construction Where exposed to turbulent stock	304 S/S	304 S/S	316 S/S
Main Shaft Bearings	Tapered & spherical roller		
Coupling	Gear Tooth Slide		
Adjustment	2-speed gearmotor complete with drive and limit switch		
Main Bearing Lubrication	Oil Bath (Circulating Oil System Available)		
Integral Panel	3 pressure gauges for inlet and outlet stock and packing box water. Includes seal water control valve and pressure switch.		
Grease Fittings	Pressure Type		
Control Wiring & Gauge Connections	Brought to a single terminal area on the unit		
Operator Controls	Remote manual operation cabinet, suitable for pipestand mount, complete with indicator, pushbuttons and lights. Switchgear, relays and control components in separate cabinet for mounting in main motor control center.		

**BELOIT**  
A Subsidiary of Harnischfeger Corporation

JONES DIVISION, BELOIT CORPORATION, DALTON, MASSACHUSETTS, U. S. A. 01226  
IN CANADA: JONES DIVISION, BELOIT CANADA LTEE/LTD., POINTE-CLAIRE, QUEBEC H9R 1G6