# Bird Headbox Pressure Screen provides you with high quality stock for your headbox

The advanced-design Bird Headbox Pressure Screen continues to set the industry standard for paper machine screening worldwide.

The screening efficiency of this unit permits faster machine speeds and increased production rates. Its operating dependability provides low screening costs per ton. Because of its compact design, the Headbox Pressure Screen can be installed in most locations. It requires less space than comparable capacity units and its pump-through pressure operation permits installation at any level or location.

This economical screen operates at a very low horsepower per ton level. Its low pulse functional design permits high paper machine efficiencies resulting from extremely reliable operation.

## **Benefits**

High paper quality

Double screen plate design creates low dwell time for reject material and insures highest screening efficiencies. Improves sheet formation, eliminates lumps, and shives.

Uniform basis weight

Special, advanced hydrofoil assembly is designed for pulseless operation.

Highest production efficiency

High screening efficiency assures highest product quality, faster machine speeds and higher production. Repeatable screening results on difficult grades. Mill proven on almost every type of furnish. Low energy

Highly efficient foil design allows maximum plate cleaning with minimum power requirements resulting in low operating costs.

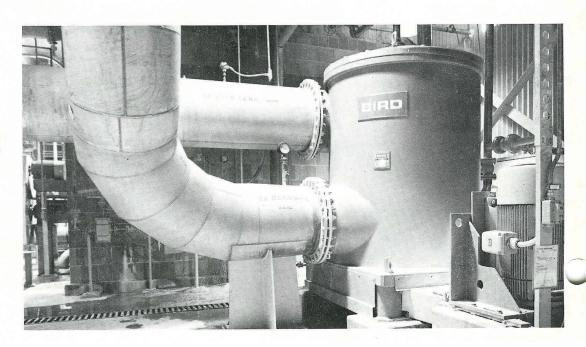
Very low maintenance

Models have been reliably operating for over 25 years throughout the world. Little maintenance attention is required.

Low installation and building cost

Can be installed at almost any level or location. Double plates provide large screening area in compact space; minimal piping required.

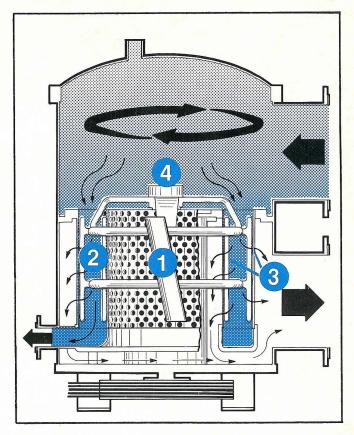
Typical installation of a Model 70 Bird Headbox Pressure Screen showing piping inlet (top) and accept (bottom).



#### How it works

Pumped stock enters tangentially through the inlet into an area above the annular screening chamber and then flows inward and downward into the annular screening chamber. The chamber is bounded on the sides by two concentric, screen cylinders and on the bottom by the reject gutter. A variety of screenplate perforations/slots are available depending on process application

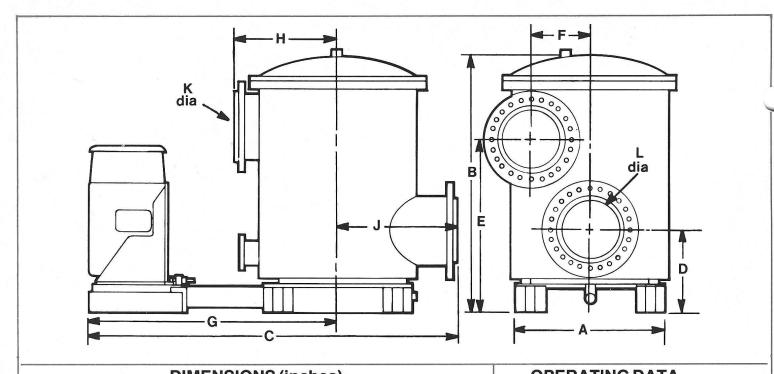
Acceptable fibers pass through the inner or the outer perforated slotted screenplate to the discharge outlet. The screen surfaces remain clean and open by the back flushing action caused by the rotating hydrofoils. Rejected material flows downward to the reject gutter and out of the Headbox Pressure Screen. This results in high efficiency and high capacity.



### **Features**

- Advanced hydrofoil assembly design
  - Low pulse
  - Low energy
  - Permits use of slots or holes
  - Large foil clearances
- Narrow annular screening compartment
  - Low dwell time for rejects
  - High velocity and smaller apparent hole size results in excellent screening efficiency
- 3 Double screenplates
  - Saves space low profile
  - Large screening area gives high capacity

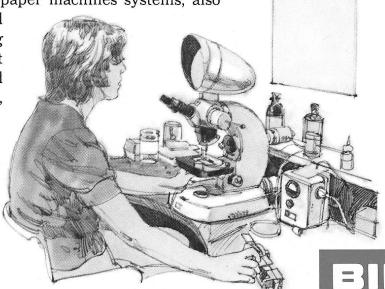
- 4 Proven mechanical reliability
  - The shaft, seal assembly, and bearing assembly are time proven, in use since 1958 with approximately 1400 units in operation
  - Time proven V-belt drive
- 5 Optional trap
  - Removes potentially damaging material prior to entering screening compartment
- 6 Many models and configurations
  - •Ten sizes from 300 to 73,000 gpm capacity
  - Lower installation cost due to ability to supply single screen installations



DIMENSIONS (inches)												OPERATING DATA			
Model	A	В	С	D	E	F	G	Н	J	K	L	Max. Capacity GPM	Installed HP	Wt.w/ Motor LBS	
8	241/2	411/8	52	191/8	321/2	63/8	35	17	17	8	8	2000	15	1570	
30	33	633/8	751/2	25	47	93/4	491/2	26	26	12	12	4500	20	4550	
30B	33	691/8	751/2	25	523/4	93/4	491/2	26	26	12	12	6000	30	5210	
40	48	77	1021/2	293/4	58	131/2	661/2	30	36	18	18	10,000	30	9760	
40B	48	821/2	1021/2	293/4	631/4	131/2	661/2	30	36	18	18	13,000	40	10,900	_
50	571/4	881/2	114	26	65¾	171/4	74	34	40	20	20	20,000	75	15,300	
60	571/4	1071/2	113	29	793/4	121/4	74	34	39	30	30	24,000/32,000	100/150	18,900	
70	79	- 117	151	38	861/2	21	104	42	47	30	30	38,000	150	36,000	
80	79	1281/2	158	41	98	21	104	42	54	30	36	51,000	200	40,000	
90	99	161	171	53	113	27	104	57	69	48	48	73,000	300	79,000	

Bird makes a complete line of pulp and paper equipment for stock preparation systems and paper machines systems; also

solid-liquid separating equipment for lime mud dewatering, waste treatment, and processing applications.



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