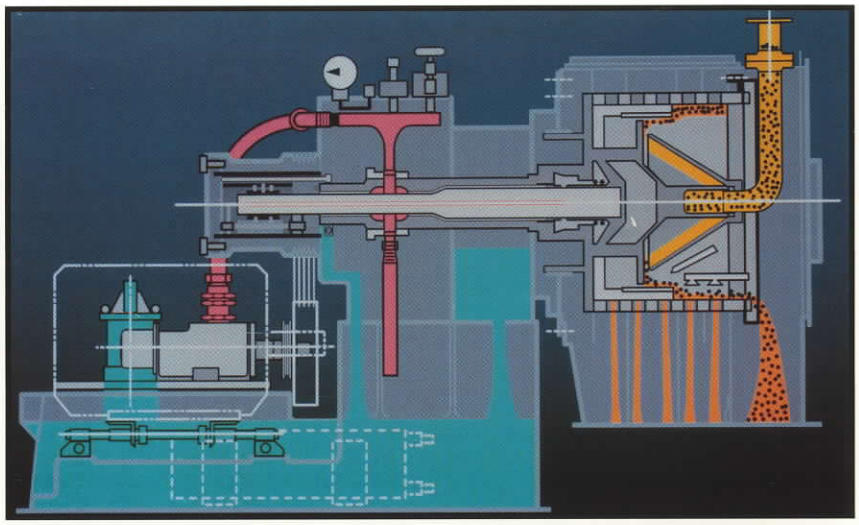
Bird Universal Pusher Centrifuge

How It Works

The operating principle is shown by this diagram of a two-stage pusher centrifuge. Feed enters through the inlet pipe and accelerator, and is introduced on the first-stage basket where the solids are retained. The first-stage basket, actuated by the hydraulic pushing mechanism, reciprocates under a static pusher plate to advance the cake from the first to the second-stage on the back stroke. The forward stroke of the first basket pushes the cakes on the second-stage towards the discharge.



Multiple washes can be employed and mother and wash liquors can be separately discharged, if desired, through a compartmented effluent chamber.

Operating Conditions

The Bird Universal Pusher Centrifuge is designed to operate under corrosive or other difficult conditions. Standard designs are readily adapted for fume confinement in a simple, low cost, maintenance-free manner. For cases where pressurized operation is required, special designs employing mechanical seals are available. Contact parts can be manufactured of almost any machinable alloy. Vibration isolation systems are available to permit installation in any desired location or elevation including out doors, without shelter.

Advancing Technology

Bird Universal Pusher Centrifuges with the extraordinary new patent pending, **XL·PLUS** technology have achieved process capabilities ***double*** and ***triple*** previous capacities.

Recent field tests on a fairly coarse salt application resulted in a 150% improvement in capacity along with an improvement in wash efficiency which reduced contaminant 30% in the product at the same time.

In a pilot laboratory test on a Bird Pusher dewatering polystyrene beads, the increase in capacity was even greater, approaching 300%, after adding the **XL·PLUS** technology. Some of the measured improvements in Bird Pusher performance using **XL·PLUS** technology are:

- Higher capacity
- Dryer cake
- Better product purity
- Better product recovery

Bird can demontrate the benefits of its Universal Pusher with **XL·PLUS** technology in *your* application too.

Typical Performance (*without* XL·PLUS technology)

Polymers (Polyethylene, ABS, Polystyrene, etc.)		
Throughput (35-50% Feed Solids) ...	0.5-10 TPH	M-300 to
Cake Moisture	15-35%	M-900
Sodium Chlorate		
Throughput (25% Feed Solids)	3-5 TPH	M-400
Cake Moisture	1-2%	
Salt		
Throughput (50% Feed Solids)	15-20 TPH	M-500
Cake Moisture	2%	
Soda Ash (Monohydrate)		
Throughput (35-50% Feed Solids) ...	20-25 TPH	M-700
Cake Moisture	2-3%	
Potash Crystals		
Throughput	40-50 TPH	M-900
Cake Moisture	3-5%	

Continuing Service

To insure maximum on line availability, Bird has established Service Centers to provide regional replacement parts delivery and machine rebuilding service. No matter how long you own a Bird Centrifuge or Filter, we never stop thinking of it as ours.