

Circle Feeder™

A unique table feeder

LCI's patented Circle Feeder is a unique table feeder that prevents bridging in hoppers, bins, and silos. This is accomplished by properly sizing the round inlet of the feeder to exceed the critical arching diameter of the feed material.

Flat, slow-rotating vanes ❶ cause radial flow of material under the flow adjusting ring ❷. Rotary vanes ❸ convey this material toward one or more discharge ports ❹. The design allows for the widest range of applications including powders, fibers, flakes, wet cakes, etc.



Features	Benefits
Simple design of feeder uses gravity to facilitate discharge	Low energy consumption, 68 ft ³ /min with 10 hp motor
Round opening up to 12 ft. in diameter	Eliminates bridging and easily fits to existing silos
Slow rotating vanes, at .05 to 5.0 rpm	Low maintenance and gentle handling of the product
Multiple discharge ports	Feed multiple downstream processes or split the process stream
2-way capacity adjustment, flow adjusting ring height and shaft rpm	Allows up to 20:1 turndown
Patented design insures mass flow	No material holdup in hopper; first-in first-out
Motor and gearbox easily accessible	Minimizes downtime



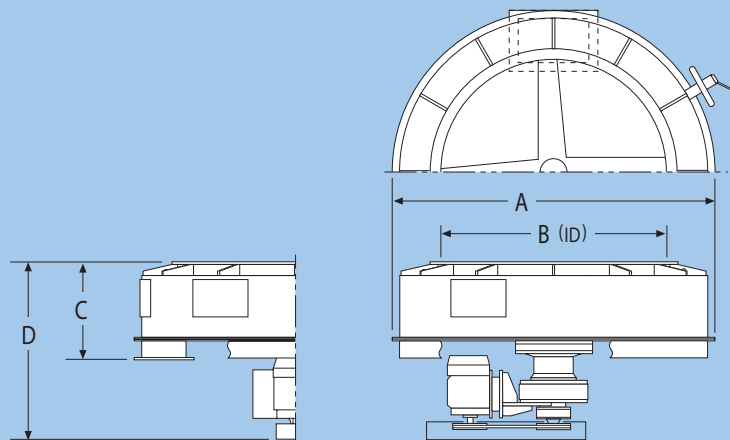
Additional Design Options

- High temperature, up to 500°C
- Load cells for high accuracy
- Clamshell design for easy cleaning
- Airtight design for feeding pneumatic conveying systems
- Explosion-proof electricals
- Sanitary and cGMP feeders available



Circle Feeder Specifications

Models
CF-500
through
CF-2400



Model	CF-500 ³		CF-700		CF-1000		CF-1200		CF-1400		CF-1600		CF-1800		CF-2000		CF-2400 ²	
Discharge Type ¹			A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Max. Capacity	1.7	3.7	9.4	7.1	16	10	22	15	29	17	32	21	38	24	47	34	68	
Min. Capacity ⁴	0.1	0.2	0.7	0.3	1	0.3	1.1	0.5	1.8	0.6	2	0.6	2	0.7	2.3	0.9	3.8	
Motor Capacity (hp)	1	1	2	2	3	3	5	3	5	5	7.5	5	7.5	7.5	10	10	10	
Max. Rotation Speed (rpm)	7.2	6.3	6.3	5.6	5.6	5	5	4.5	4.5	4.1	4	3.4	3.4	3.2	3.2	2.7	2.5	
Dimensions (mm)	A	826	1076	1176	1426	1526	1626	1776	1900	2050	2150	2300	2400	2550	2650	2800	3150	3350
	B	500	700	700	1000	1000	1200	1200	1400	1400	1600	1600	1800	1800	2000	2000	2400	2400
	C	325	370	450	430	500	490	550	575	620	580	625	625	690	625	730	700	815
	D	615	660	800	780	900	890	1000	1005	1100	1060	1105	1105	1200	1135	1280	1330	1475
Weight (lb)	595	838	904	1146	1455	1543	1918	2271	2756	2778	3461	3571	3968	4453	5137	6085	7275	

1. B-type discharge openings are used for light, fluffly materials
2. Models up to CF-4000 can be provided
3. Sizes down to 0.1 ft³/hr available
4. Minimum capacities represent use of variable speed drive and flow adjusting ring setting

Applications

Chemicals

Chemical intermediates
Inorganic salts
Polymer flakes and powders
Soap powders and ingredients
Pigments
Resin flakes
Fertilizer components
Ink

Food/Feed

Corn, rice, potato starches
Corn, soybean, wheat flours
Residual vegetable cuttings and pulp
Minced meat
Seed hulls and components
Fermented products
Seasonings

Other

Carbon black
Sewage sludge
Metallic powders
Recycled plastic/paper flakes and grind
Cellulose derivatives
Fibers
Paper pulp
Cement

