RIBBON BLENDERS

Design, Capacities and Dimensions

PAUL O. ABBE®
Since 1911

Ribbon blenders are ideal for blending many free-flowing solids up to 70 lbs/ft³ (1.1 g/cc), depending on all particle characteristics including *particle size, size distribution, particle shape (morphology), angle of repose, cohesiveness and moisture.* Ribbon blenders are used in many industries including:

- animal feed
- bake mixes
- catalysts
- ceramics
- cosmetics
- fertilizers
- food
- instant drink mix
- nutraceuticals
- pharmaceuticals
- pigments
- plastic powders
- prill
- protein powders
- resins
- spices
- sugar blends

All stainless steel construction

Talk with the Experts

phone 630.350.3012 **fax 630.238.7584**
sales@pauloabbe.com **www.pauloabbe.com**

JH 2025

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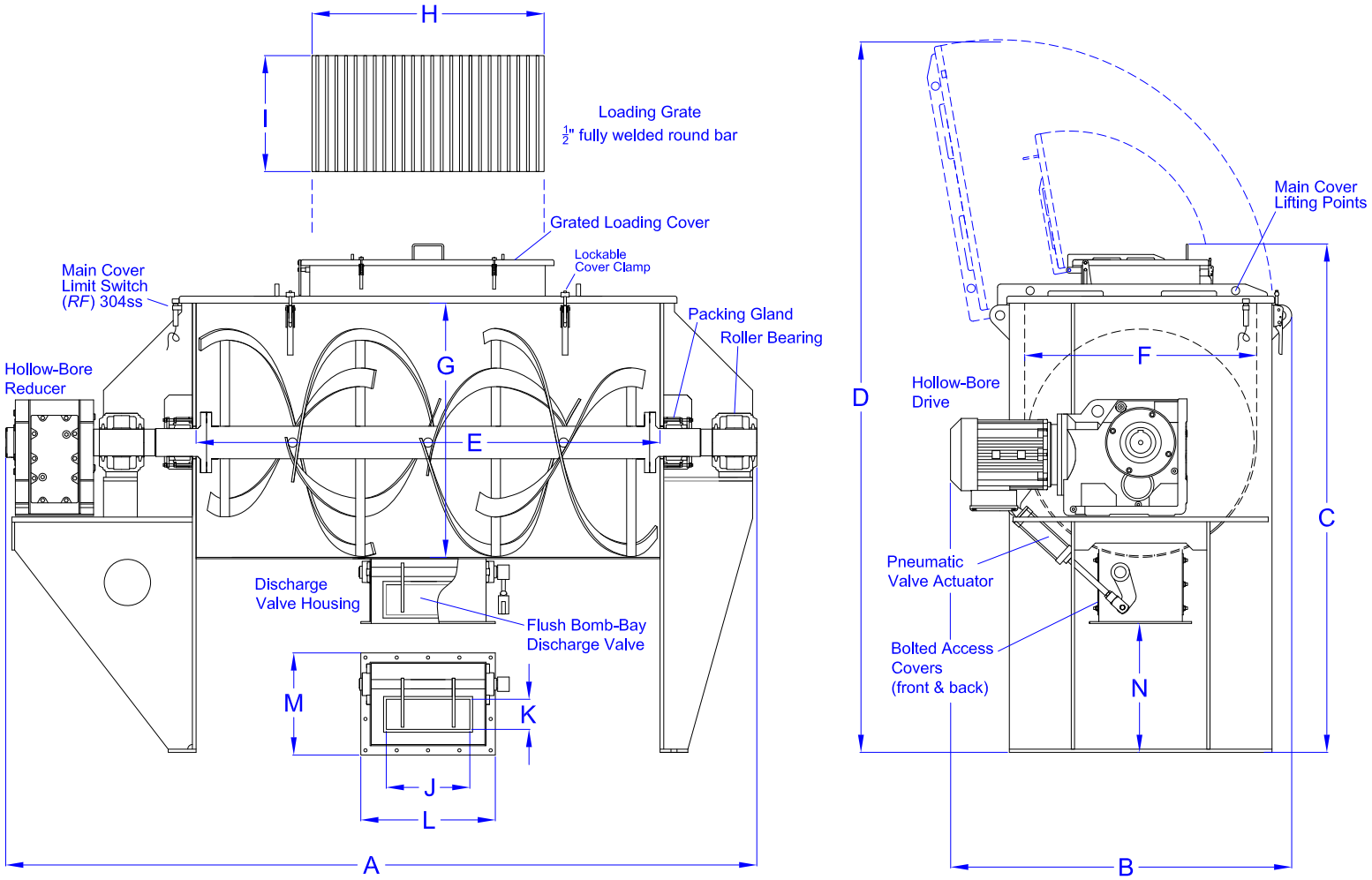

					Overall Dimensions				Trough Dimensions			Loading Cover		Discharge Valve		Discharge Housing				
					length	width	height	height with main cover open	length	width	height	length	width	length	width	length	width	outlet to floor clearance		
Model	**Working Capacity**	**Total Volume**	**HP**	**RPM**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**Main Cover Weight (lbs.)**	**weight (lbs.)**
RB - 10	9.7	11	7.5	66	76	36	81	103	38.6	22.1	25.0	19.7	11.8	9.9	3.2	19.3	15.4	35.5	140	1,320
RB - 15	15	18	10	63	87	41	87	111	48.9	24.4	28.8	19.7	11.8	14.2	4.7	24.0	18.5	35.5	170	1,870
RB - 35	34	39	25	41	108	53	84	118	59.1	33.4	37.4	31.5	19.7	14.2	4.7	24.0	18.5	24	260	2,860
RB - 65	63	72	30	33	131	61	90	130	78.8	39.4	44.1	50	30	14.2	4.7	24.0	18.5	23	420	5,060
RB - 100	98	108	30	29	146	63	81	126	93.8	44.9	49.3	50	30	14.2	4.7	24.0	18.5	8	490	7,260
RB - 135	134	146	40	29	158	65	85	134	105.5	49.6	53.6	50	30	19.7	4.7	28.4	20.5	8	550	7,920
RB - 165	164	180	50	29	167	74	86	139	110.3	53.6	58.3	50	30	19.7	4.7	28.4	20.5	4	640	10,164
RB - 195	197	220	60	26	183	76	94	151	118.2	56.7	62.6	50	30	19.7	4.7	28.4	20.5	4	860	11,660
RB - 265	267	289	75	26	207	81	95	158	130.0	63.0	67.8	50	30	27.6	4.7	36.2	20.5	4	970	14,960
RB - 315	313	356	75	19	218	88	100	166	141.8	65.4	73.3	50	30	27.6	5.5	36.2	20.5	4	1,290	19,580
RB - 375	373	441	75	19	237	92	105	172	157.5	67.7	78.8	50	30	27.6	5.5	36.2	20.5	4	1,050*	20,944
RB - 460	460	552	100	17	261	96	106	177	177.3	70.9	83.5	50	30	27.6	5.5	36.2	20.5	1	1,280*	21,890
RB - 620	622	724	100	16	267	101	118	200	183.1	81.1	93.0	50	30	27.6	5.5	36.2	20.5	1	1,430*	29,700
RB - 800	799	938	125	16	281	108	126	215	196.9	88.6	102.4	50	30	27.6	5.5	36.2	20.5	1	1,750*	38,500
RB - 1000	1007	1,116	150	11	333	113	130	229	200.9	98.5	108.0	50	30	27.6	5.5	36.2	20.5	1	2,320*	42,900

*2-piece cover

Dimensions are in inches. Dimensions and capacities are approximate and subject to change. Do not use for installation.

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Ribbon Blenders

Design Features & Options

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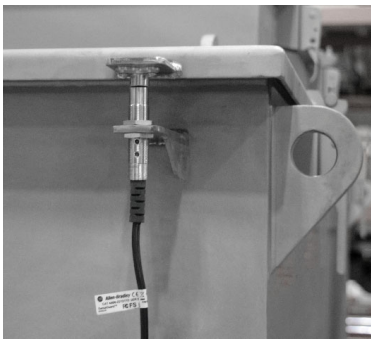
Since 1911

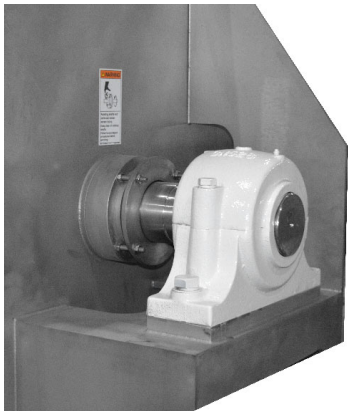
Center loading cover with welded round bar grate.

Non-defeatable radio frequency safety switch on main cover. *Limit switch(es) must be wired into motor control circuit to disconnect power when the cover is opened.*



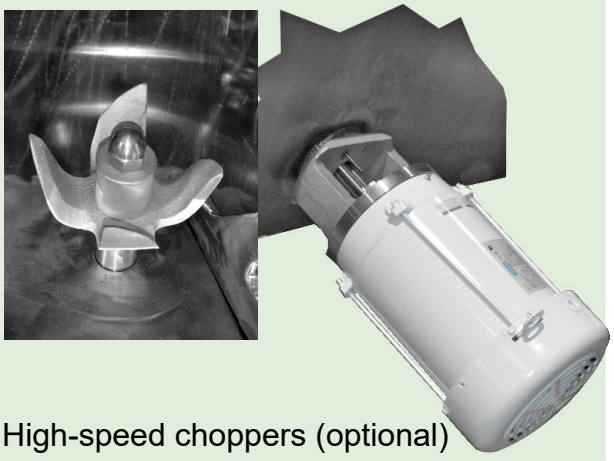
Lockable main cover clamps (locks not included)

Flush discharge valve



Heavy-duty pillow block roller bearings

Discharge housing, pneumatic actuator, access panels (on both side of housing



High-speed choppers (optional)

Design Options

- Leg Extensions
- Liquid spray bar
- 316L SS contact surfaces
- Choppers
- Heating/cooling jacket
- Electric Cover Lift
- Explosion Proof Motors
- Controls: NEMA-12, 4, 4X, 7&9
- Soft-start or VFD
- Load cells

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Design Features & Options

PAUL O. ABBE

Fully welded tubular stainless steel leg extensions.

Stainless steel electric lid lift.

Stainless steel counterbalance with pneumatic assist.

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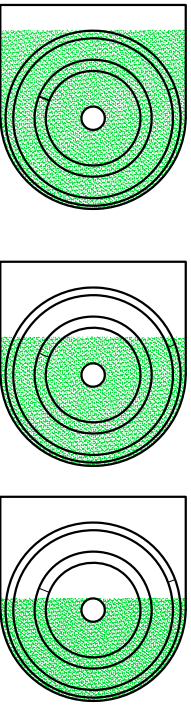
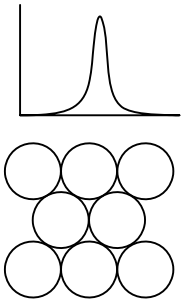
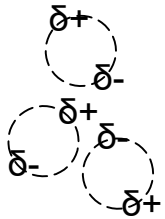
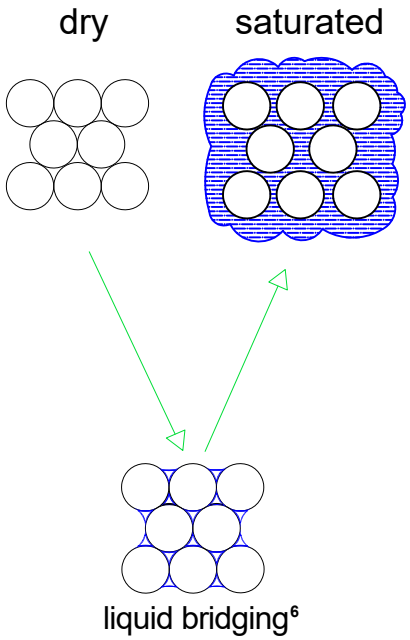
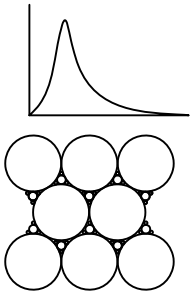
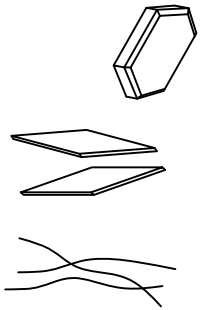
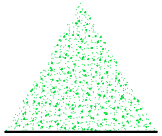
Blender Capacity Depends on *all* Solids Properties



reduced capacity

Bulk Density	Particle Size	Particle Size Distribution	Particle Shape (morphology)	Angle of Repose	Cohesive[4] Adhesive[5]	Moisture
low	small	narrow	smooth/spherical	low	low	low | high
<30 lbs/ft³ 0.48g/cc	<44µ 325mesh				 For particles <2µ primarily *van der Waals* forces. Otherwise electrostatic forces can play a role.	 dry saturated liquid bridging[6]
75 lbs/ft³ 1.2g/cc	0.125" 3mm					
high[1]	large[2]	broad[3]	rough, angular, platelets, fibrous	high	high	moderate

reduced capacity

[1]higher densities are possible with custom design and higher HP

[2]approaching 0.25" (6mm) particles can interfere with blade to bowl clearance, increasing resistance

[3]reduced free space between particles, restricts paticle movement and increases resistance

[4]bonds to self
[5]bonds to other solids

[6]enough liquid (esp. water) to cause particle binding due to surface tension & capillary action, but not enough liquid to improve particle mobility

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