



PHLAUER™ AJSP

Cost Effective Premium Mixers

SEVERE DUTY MACHINERY FOR THE CEMENT INDUSTRY

Color Development

1 Minute per Tonne up to 10 Tonnes in 10 Minutes

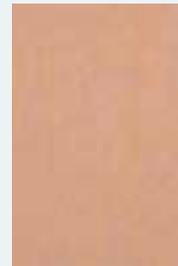


Single Rotor Mixer Dual Port Discharge
100 cubic feet batch capacity

Draw Tests



Red Mixed on a
Ribbon Blender



Red Mixed & Developed
on a PHLAUER™

High Volume Load Outs

200 Tonnes per Hour



Double Rotor Mixer
Drop Bottom Discharge
350 cubic feet batch capacity

Good People To Mix With!
A & J MIXING INTERNATIONAL INC.

Canada 1-800-668-3470 or 1-905-827-7288 USA 1-866-649-3762

www.ajmixing.com



A.B. (Bliss) Flower

PRESIDENT'S MESSAGE

A & J Mixing International Inc. is a small company offering innovative and high technology in mixing and related fields that are cost effective.

The cement industry has become an important part of our sales. The purpose of this brochure is to showcase the equipment we have customized for severe duty for the cement industry.

Our first development was a single rotor paddle mixer with Shearmakers designed specifically to develop red and salmon colors in masonry cement with a mixing rate of 3.5 tonnes in 3 minutes with only 160 HP (1 x 40 HP, 8 x 15 HP). The rotor will mix the pigment in one minute, and the aggressive Shearmakers will repeatedly develop the color in a predictable time, a major break through. We have never failed a color test, and some users have reduced pigments. In addition to performance, it is mechanically designed to give seal life of one year or better, which means more production and less down time. We can produce a tonne per minute and up to 10 tonne batches.

Investment and operating costs are lower.

The mixer is available with 450 min. Brinnell hardness abrasion resisting plate

for the housing sides and paddle faces, a popular option. Severe duty peripherals are also developed including discharges, bag dumps, weigh hoppers, discharge hoppers to feed baggers, as shown on the following pages. All levels of controls are available.

We want your business.

A.B. (Bliss) Flower
President

FAST, ACCURATE MIXING

The AJSP unique paddle rotor (patented and patents pending) is specifically designed to make modular mixers with single or double rotors that mix from 10 to 60 seconds to an accuracy of 0.5% standard deviation or less. Batch sizes are 2 to 400 ft³ (10 to 11300 liters). The time varies with the number of rotors and the natural forces of segregation contained in the ingredients. The importance of mixing fast is to overcome the segregation forces, the main one being particle size differential.

The rotor is a low intensity dynamic continuum that is mechanically creating voids and then directing particles to fill the voids randomly which creates the mixing. The speed of the mixing is from the volume of voids created, approximately one batch size per revolution at the median mixer size. The accuracy comes from the speed, that all particles are in motion with no dead spots, and controlling the size of the void such that large particles cannot occupy the space before the small ones get there.

MIXER LOADING

We offer various design options to add major and minor ingredients to the mixer. The fastest way to load the mixer is using a feed hopper. We can design a hopper to meet your space requirements.

A complete load cell package can be added to the feed hopper for weighing each ingredient in the batch. Another way to load the mixer is through the cover door(s). To make the door opening more functional we offer grating under the cover door which turns it into a bag dump.



Door grate bag dump



Stand-alone bag dump workstation non-filtered



If dust were a problem, a full bag dump workstation would be best. The bag dump is available in filtered and non-filtered as well as stand-alone or mixer mounted



Minor ingredients hopper

To add minor ingredients we offer a 1 cubic foot hopper that can be fitted on the cover of the mixer. The minor ingredients hopper can be designed to empty at a push of a button, or when you start the mixer.



Two Bagger discharge hopper

Complete feed hopper and discharge hopper design services are available to meet your specific requirements.

SHAFT SEALS

We offer three different types of shaft seals.

1. Packing Gland
2. Air Purged Lip
3. Controlled Orifice (Patent Pending)

Packing gland is a good seal option that we offer with shaft sleeves. Air purged lip seals are good all around seals suitable to numerous applications. The controlled orifice air purged seal gets the best of both seal designs. This seal is unique to A & J Mixing and was specifically developed for the cement industry to provide long life and easy maintenance. Available in split and solid designs.

DISCHARGES



Port discharge with cleaning door open

Discharges are air operated and are available in single port, port on each end or drop bottom. The port on each end gives the flexibility to feed a bagger at one end and a bulk bag on the other. Our discharge door is flush mounted to the inside of the mixer to eliminate any dead spots.

We offer a standard discharge door and for very heavy products (over 80 lbs/ft³) we have a heavy duty discharge. Both designs provide a leak free discharge that is self-adjusting.

PHLAUER™-TECH SHEARMAKERS

High speed cutters can be used to break up agglomerates and develop color pigments. The Shearmaker consists of a motor direct coupled to a shaft entering through the side of the mixer. There will be a cutter inside the mixer usually turning at a tip speed of 50 to 100 feet per second, depending on the level of shear required.



Shearmaker pedestal and motor with 8 tool steel blades and controlled orifice purged seal

Cutters are available in hardened tool steel for long life and abrasion resistance. Various shaft seal options are available.

CONTROL SYSTEMS

Our control systems are user friendly, reliable, proven and cost effective. We offer various types of systems from manual pushbuttons and timers to advanced PLC computer automation. All controls are set up and debugged in our shop before being shipped to ensure everything works according to an approved Functional Description.

TEST MIXERS

Mixers for demonstration on your products are available. Demonstrations may be conducted at your plant or our manufacturing facility. Our test fleet includes single and double rotor mixers with Shearmakers.



GUIDE TO MIXER SELECTION

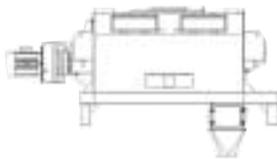
Please complete and return via fax with contact information on your letterhead

1. Choose a mixer configuration (check one): Single Rotor Double Rotor
2. Production per hour required? _____ Batch capacity required? _____
3. What are the ingredients being mixed and their bulk desities? _____
4. What type of material would you like the machine constructed from (check one): CARBON AR
5. Shearmakers required (check one): YES NO
6. What is the available power? _____Volts _____Phase _____Hertz _____Amps
7. Choose your loading method (check all that apply)

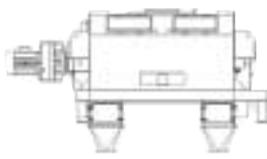
- Bag Dump Feed Hopper Cover door w/bar grates Openings for other connections

8. Choose your air handling system (check one): Filtered Bag Dump Dust Collector Vent Sock

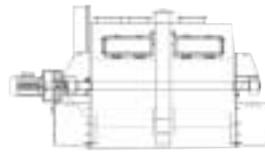
9. Choose the type of discharge (check one):



Single Port



Port on Each End

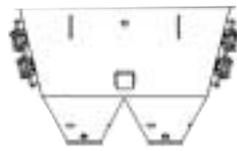


Drop Bottom

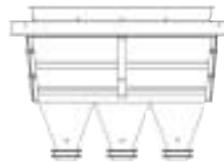
10. Select the type of discharge hopper (check one):



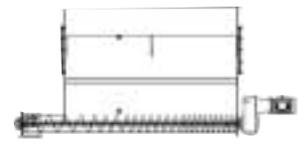
Single Bagger



Double Baggers



Triple Baggers



Screw Conveyor

11. What is the minimum wall angle and the angle of repose of the product? _____

12. What type of control system is required? (check one): Manual PLC PLC & PC None



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Call Can: **1-800-668-3470** or **1-905-827-7288**

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