



Single shaft model

Reduces lumps for improved material handling

The Tuffer[®] aerator/lump breaker effectively reduces moist, semi-moist, or dry solids down to near grain size. The fast moving breaker bars help to reduce lumps with ease and aerate the material. The result is a more consistent particle size and a fluffier bulk solid. Material will gravity feed and flow easier, improving overall handling efficiency.

Simple design eliminates high friction

The Tuffer aerator/lump breaker consists of an independently driven shaft powered by a v-belt drive system. The shaft has a number of heavy duty breaker bars mounted close together to control the particle size desired. This simple free-wheeling

design eliminates high friction forces, lowering horsepower requirements and the need for complex parts and synchronization.

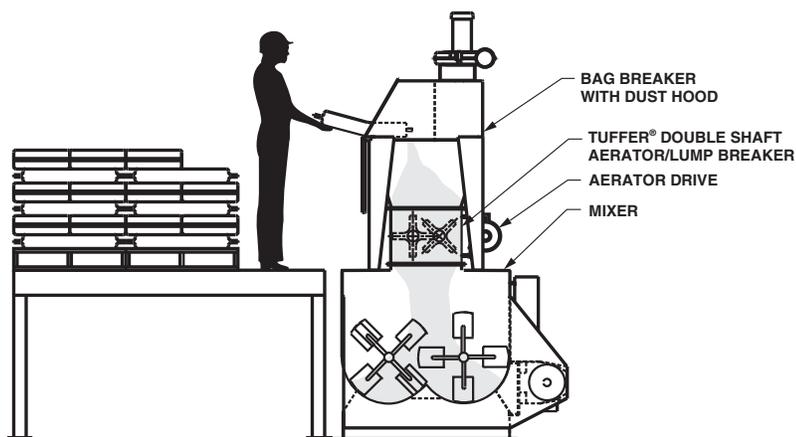
For even finer particle breakdown, a perforated screen deck can be added just below the rotating breaker bars to limit the particle size and to prevent any larger than desired lumps from passing through.

The Tuffer aerator/lump breaker is available in various sizes and capacities to suit most process requirements. The low profile design permits installation in new and existing systems.

Features

- Abrasion resistant breaker bars
- Rugged construction
- V-belt drive
- Low profile design
- Self cleaning
- Low cost
- Fixed shear bars
- Single or double shafts depending upon size.
- Adjustable packing gland seal for high temperature material

Typical application

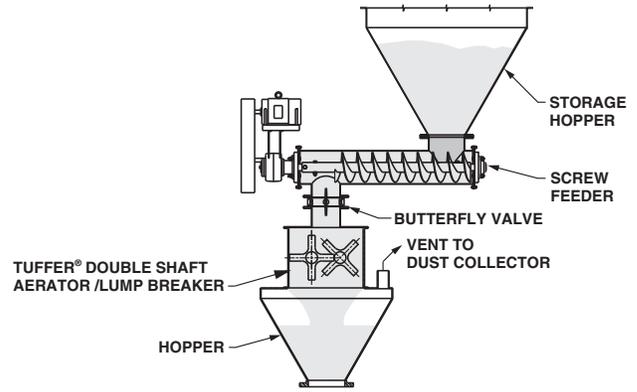


The Tuffer aerator/lump breaker will handle:

- | | |
|---------------------|------------------|
| ■ Alumina | ■ Gypsum |
| ■ Ball clay | ■ Iron oxide |
| ■ Barite | ■ Kaolin clay |
| ■ Bauxite | ■ Lime |
| ■ Bentonite | ■ Milk powder |
| ■ Borax | ■ Molding sand |
| ■ Calcium carbonate | ■ PVC resin |
| ■ Cement | ■ Quartz |
| ■ Feldspar | ■ Silica sand |
| ■ Fine coal | ■ Soda ash |
| ■ Flour | ■ Sodium sulfate |
| ■ Fluorspar | ■ Sugar |
| ■ Fly ash | ■ Talc |
| | ■ And more |

How the Tuffer aerator/lump breaker works

To control the inlet flow, material must be fed into the Tuffer aerator/lump breaker by a feeding device, such as a screw or vibratory feeder or manually fed evenly. When the material is fed into the Tuffer aerator/lump breaker, a double set of counter-rotating breaker bars drive the bulk solids through to break up the lumps of material on a double shaft model. On a single shaft model, the breaker bars rotate against fixed pins. The Tuffer aerator/lump breaker uses the centrifugal force generated by the closely spaced bars to reduce the bulk solids to a smoother, fluffier consistency.



Dimensions and specifications

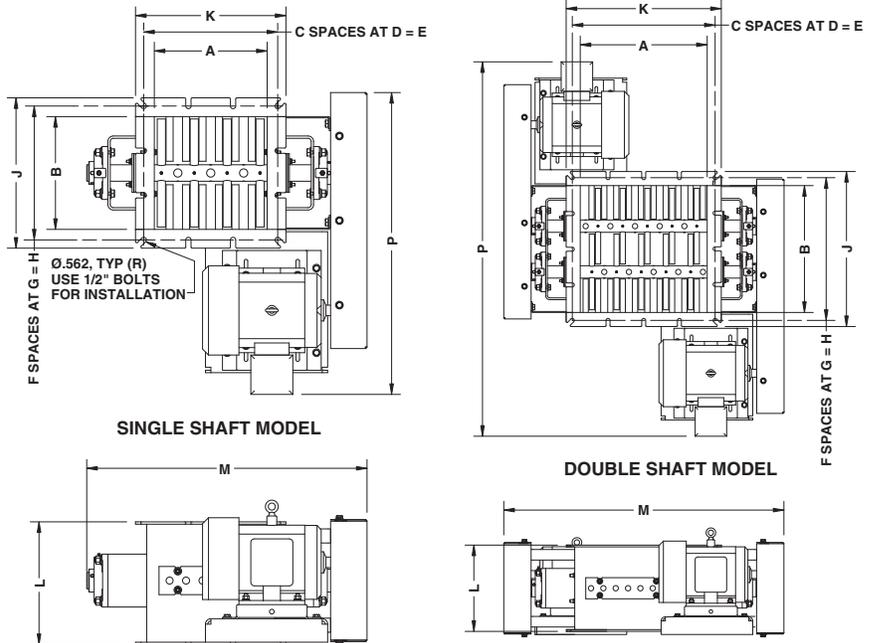
Options

- Stainless steel construction
- Special finishes
- Variable speed drive
- Timing belt drive
- Special voltages and frequencies
- Outboard bearings
- Air purged seals
- High temperature construction

Power requirements:

Standard Operating Voltage:
230/460 VAC 3 phase 60 Hz

Standard Operating Temperature:
150° Fahrenheit/65° Celsius



| TUFFER AERATOR/LUMP BREAKER SERIES 697 DIMENSIONS | | | | | | | | | | | | | | |
|---|-----|-----|---|-------|-------|---|-------|-------|-----|------|-------|-------|-------|----|
| □ inches ■ millimeters | | | | | | | | | | | | | | |
| SINGLE SHAFT MODEL | | | | | | | | | | | | | | |
| Model | A | B | C | D | E | F | G | H | J | K | L | M | P | R |
| 1212 | 12 | 12 | 3 | 4.750 | 14.25 | 3 | 4.750 | 14.25 | 16 | 16 | 13.06 | 29.81 | 32.12 | 12 |
| | 305 | 305 | | 121 | 362 | | 406 | 406 | 332 | 757 | 816 | | | |
| 1218 | 18 | 12 | 4 | 5.062 | 20.25 | 3 | 4.750 | 14.25 | 16 | 22 | 13.06 | 35.81 | 32.12 | 14 |
| | 457 | 305 | | 129 | 514 | | 406 | 559 | 332 | 910 | 816 | | | |
| 1224 | 24 | 12 | 6 | 4.375 | 26.25 | 3 | 4.750 | 14.25 | 16 | 28 | 13.06 | 41.81 | 32.12 | 18 |
| | 610 | 305 | | 111 | 667 | | 406 | 711 | 332 | 1062 | 816 | | | |
| 1236 | 36 | 12 | 9 | 4.250 | 38.25 | 3 | 4.750 | 14.25 | 16 | 40 | 13.06 | 53.81 | 32.12 | 24 |
| | 914 | 305 | | 108 | 972 | | 406 | 1016 | 332 | 1367 | 816 | | | |
| DOUBLE SHAFT MODEL | | | | | | | | | | | | | | |
| 1818 | 18 | 18 | 4 | 5.062 | 20.25 | 4 | 5.062 | 20.25 | 22 | 22 | 13.06 | 41.25 | 51.88 | 16 |
| | 457 | 457 | | 129 | 514 | | 559 | 559 | 332 | 1048 | 1318 | | | |
| 1824 | 24 | 18 | 6 | 4.375 | 26.25 | 4 | 5.062 | 20.25 | 22 | 28 | 13.06 | 45.75 | 51.88 | 20 |
| | 610 | 457 | | 111 | 667 | | 406 | 711 | 332 | 1162 | 1318 | | | |
| 1836 | 36 | 18 | 9 | 4.250 | 38.25 | 4 | 5.062 | 20.25 | 22 | 40 | 13.06 | 57.75 | 51.88 | 26 |
| | 914 | 457 | | 108 | 972 | | 406 | 1016 | 332 | 1467 | 1318 | | | |

Specifications subject to change without notice.

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