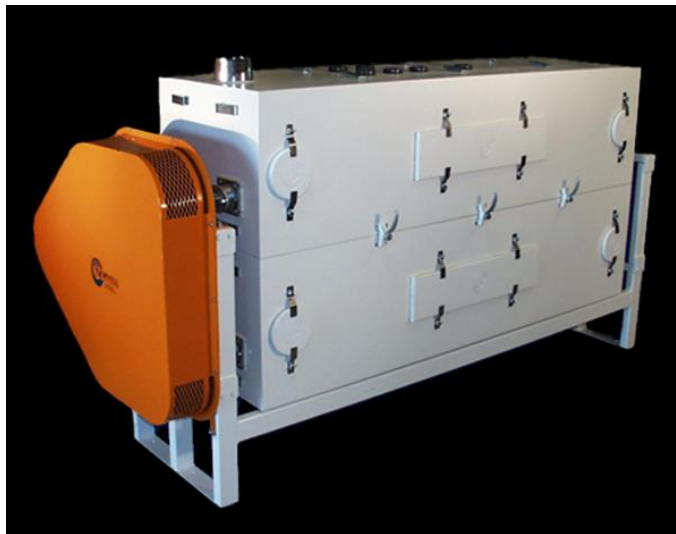




Flour Agitators



Instruction Manual /Parts List

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To assure optimum performance and reliability of your agitator, careful consideration should be given to all information presented herein.

Receiving/Uncrating the Shipment

Your **Norvell** Agitator will be shipped from our factory in such a manner so that it can be moved into position in your plant for immediate installation. The agitator will be shipped complete on one (1) skid. Before accepting, examine the entire unit for possible shipping damage. We balance all of the logs before the agitator is test run in our factory. Turn the logs by hand to see if the shafts have been hit during shipment. If any damage is noted, advise your transportation carrier immediately so they can send in an agent to inspect the damage. All shipments are made F.O.B. our factory and require the receiving customer to file a claim on any shipping damage found on machinery. Contact **Norvell** for any assistance in replacing damaged items

Your **Norvell** Agitator will be shipped in one crate. With a forklift unload the agitator from the truck and place it near the location in which it is to be installed. Agitators should be installed in a location that will provide adequate room for operation and service to the unit.

Remove the lag bolts from the bottom of the frame that secure the Agitator to its crate and carefully forklift it into position. Allow space for your operator to be able to easily remove the side panels from the agitator

Agitator Installation

Your agitator has been test run in our factory and has passed our internal quality control specifications before we shipped it to you. It should be ready for you to operate however we recommend that you do the following during installation.

Double check that the floor is level. If the bottom of the legs on one end are not parallel with the legs on the other end the agitator will be cramped. This may result in hot bearings and leaking gas seals.

Before operating the agitator, make certain that the logs turn freely.

Do not over tighten the adjustments on the gas seals. The seals should be just tight enough to prevent leaking. This will allow for further tightening as the seals set up during operation.

When installing the drive, the belts should be just tight enough to pull the full load. If the belts are too tight the bearings may be ruined. It is better to have the belts slip if a foreign object gets into the agitator than to strip all of the paddles from the log.

Check and tighten all doors, inspection ports, and box clamps.

Agitator Operation

Don't over lubricate the bearings. The bearings are lubricated at the factory.

When first put in operation, the bearings should be checked hourly during the first day. Check them daily for the balance of the first week and at least once a week thereafter.

Your agitator is designed to run at 500 to 550 rpm. It is capable of operation at higher speeds, however higher speeds will move the flour through the agitator too rapidly and prevent the proper exposure of the flour to the chlorine. This will cause poor bleaching results.

Norvell recommends the following capacities on our agitators:

<u>Size</u>	<u>Soft Wheat</u>	<u>Hard Wheat</u>
1-High Single-Log #2	40- 80 cwt.	60-120 cwt.
1-High Single-Log #3	60-100	80-150
1-High Double-Log #2	80-160	100-220
1-High Double-Log #3	120-200	150-275

The above capacities are based on up to one ounce of chlorine per cwt. For more than one ounce and up to two ounces of chlorine per cwt. use ½ of the above capacity or we recommend our two-high agitators. Should you require more than two ounces of chlorine per cwt. Norvell recommends our two-high agitators. Our agitators will handle more than this but the efficiency of the bleaching will be affected, particularly if large amounts of chlorine are used.

Therefore, for the above reasons we make no guarantee of the bleaching efficiency of the agitator.

Important

Your agitator is not constructed to be a pressure vessel. If the sum of the chlorine blown into it and other pneumatic applications of the bleaching powder, enrichment, bromate, and etc. is greater than 10 pounds per square inch in the machine, it will be difficult to keep the agitator from leaking at the shaft seals and around the inspection doors.

Construction

Your agitator has been designed for easy disassembly and clean up. The box interior and logs are finished with FDA approved epoxy white enamel.

The life of your agitator will depend upon the amount of flour throughput, the amount of chlorine applied, and the level of maintenance it receives.

Agitator Parts List

<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>
Agitator Log, size #2 Right Hand	Log #2	varies
Agitator Log, size #2 Left Hand	Log #2	varies

A size #2 has a 102.00" long steel shaft with a 74.00" long log.

Agitator Log, size #3 Right Hand	Log #3	varies
Agitator Log, size #3 Left Hand	Log #3	varies

A size #3 has a 114.00" long steel shaft with an 86.00" long log.

Norvell recommends that one agitator log of each rotation needed be kept on hand for immediate replacement.

When looking at the log from the inlet end of the agitator: If the log is rotating clockwise – it is a right-hand. If the log is rotating counter-clockwise – it is a left-hand.

Agitator Paddles, old style	300-100-002	see below
Agitator Paddles, new style	300-200-002	see below

A size #2 log has 99 paddles and a size #3 log has 116 paddles. New style paddles fit all logs shipped after October 2000, however, old style paddles are recommended for all replacement paddles.

Teflon Packing	Agitator Log Seals	2 per log
Aluminum Casting (oval)	300-100-033	2 per log
Aluminum Casting (square)	300-100-034	2 per log
Casting Rubber Seal	300-100-032	2 per log
Chlorine Inlets	300-100-004	varies
Side Clean Out Doors, standard: 26"	300-100-005	one per side
Side Clean Out Doors, extra-long	300-100-006	one per side
Round Inspection Doors	300-100-007	two per side
Pillow Block Bearings 1-11/16"	300-100-008	2 per log
Motor Mount Pin with E-Clips	300-100-009	one

Metal Frame, 1-high double-log, size #2	300-112-210	one
Metal Frame, 2-high single-log, size #2	300-121-210	one
Metal Frame, 2-high double-log, size #2	300-122-210	one

Metal Frame, 1-high single-log, size #3	300-111-310	one
Metal Frame, 1-high double-log, size #3	300-112-310	one
Metal Frame, 2-high single-log, size #3	300-121-310	one
Metal Frame, 2-high double-log, size #3	300-122-310	one

Motor Mount, 1-high single-log	300-111-011	one
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Motor Mount, 1-high double-log	300-112-011	one
Motor Mount, 2-high single-log	300-121-011	one
Motor Mount, 2-high double-log	300-122-011	one
Motor, 1-high single-log	300-111-012	one
Motor, 1-high double-log	300-112-012	one
Motor, 2-high single-log	300-121-012	one
Motor, 2-high double-log	300-122-012	one
Guard, 1-high single-log	300-111-013	one
Guard, 1-high double-log	300-112-013	one
Guard, 2-high single-log	300-121-013	one
Guard, 2-high double-log	300-122-013	one
Belt, 1-high single-log	300-111-014	two
Belt, 1-high double-log	300-112-014	one
Belt, 2-high single-log	300-121-014	three
Belt, 2-high double-log	300-122-014	one
Motor Sheave, 1-high single-log	300-111-015	one
Motor Sheave, 1-high double-log	300-112-015	one
Motor Sheave, 2-high single-log	300-121-015	one
Motor Sheave, 2-high double-log	300-122-015	one
Motor Bushing, 1-high single-log	300-111-016	one
Motor Bushing, 1-high double-log	300-112-016	one
Motor Bushing, 2-high single-log	300-121-016	one
Motor Bushing, 2-high double-log	300-122-016	one
Drive Sheave, 1-high single-log	300-111-017	one
Drive Sheave, 1-high double-log	300-112-017	two
Drive Sheave, 2-high single-log	300-121-017	two
Drive Sheave, 2-high double-log	300-122-017	four
Drive Bushing	300-100-018	one per log
Black Clamping Knob, 3/8 - 16	300-120-021	varies
Inspection Cover Clamp, Stainless Steel		varies
Door Clamp Casting (Only for 2-High)	300-120-020	varies
Door Handle Rod, 2-high single-log	300-121-022	three
Door Handle Rod, 2-high double-log	300-122-022	three
Catch	300-100-023	varies
Strike	300-100-024	varies
Closed Cell White PSA Tape	300-100-025	varies