

## **100 CU FT HD RIBBON BLENDER**

304 Stainless Sanitary Blender – We are pleased to offer, 100 cubic foot working capacity, heavy duty, double ribbon blenders with a blending chamber that measures 96" long x 46" wide x 51" deep. The trough thickness is approximately 6mm thick. It has a total capacity of 115 cubic foot. The complete blender is "Certified Sanitary" and made out of solid 304 stainless steel, including the chain guard. The legs, cross braces, and motor frame are all stainless steel construction.

Covers: There are two stainless steel lids which overlap each other and the sides of the blender in order to form a good dust seal to keep outside contaminants from entering the blending chamber. This lid is furnished complete with a solid stainless steel handle, back rests, and hinges. The backrests allow the lid to rest in an open position at about 15 degrees past vertical in order to allow ease of loading the machine. Inside each lid is a lift out stainless steel grate. Every intersection of the cross bars in the grate is individually welded, ground, and polished so as to prevent contamination from harboring in the grate. Every grate location has an electrical safety sensor to insure that the grate is installed, or the lid closed, prior to operating the blender.

Main Shaft And Ribbons: This machine has a 5-1/4" solid stainless steel main shaft which turns at 26 RPM's. The spokes which hold the ribbons in place are designed in such a way as to wrap around and fasten onto the exterior of the main shaft. No holes are drilled into the main shaft for

"support posts" which would weaken the shaft. Each spoke also runs past the outer ribbon (50mm X 12mm thick) and gives it full support from the back side which gives the ribbon increased strength and durability over the design of many manufacturers. All welds are fully ground, buffed, then polished to a mirror finish. The inner ribbon is 65mm X 10mm thick.

Center Bottom Discharge: This blender is equipped with an 8" diameter center bottom discharge. Below the discharge opening is a "knife style" slide gate powered by an air cylinder which automatically opens and closes the slide gate upon command. (The air cylinder is powered by plant air.) The slide gate is mounted and runs on special UHMW tracks which are FDA and USDA approved. Below this discharge gate is a chute to keep all of the product contained and directed toward its discharge opening. The discharge height from the floor to the bottom of the chute is 23-1/2". This chute is easily removable and contains a built-in sanitary safety grate and safety monitoring switches to insure safe operation on the blender by operators.

Split Packing Glands: These blenders have solid stainless steel seals or packing glands located on each end of the blender. They are "split seals" for ease of cleaning and repairing. The seals consist of a solid stainless steel inner ring for compressing the packing. There are two outer pieces, each a half circle, which are mounted onto the side of the blender. There

is a special cut out in the bearing mounting plate to make maintenance of these packing glands fast, easy, sanitary, and efficient. Also, the glands have a built in "wheel puller" system to make their removal easier. Each gland is mounted with an air purge injection hole, pre-drilled then capped off with a sanitary plug should you wish to convert the machine to have air purged packing glands.

**Surface Finishes:** All interior surfaces, including the walls of the blending chamber, lid, main shaft, spokes, ribbons, discharge gate, and discharge chute are polished to a "mirror finish" (over a 200 grit finish). This finish is two grades better than the standard "USDA Dairy" grade finish which is a standard in select industries. This is neither a glass bead nor electroplated finish which is not allowed in many USDA and pharmaceutical applications. This finish is applied by special grinding and buffing wheels to the bare stainless steel. All welded joints are equally well ground, buffed, and polished. This is the highest grade finish offered by any blender manufacturer known to us. Exterior finish on stainless steel surfaces is ground and buffed smooth to an attractive, professional finish. **Drive Motor:** This machine comes standard with a 40 HP washdown gear motor mounted on the machine which is on a stainless steel base. The motor is directly attached to the gearbox to insure a positive drive. The motor is rated for 40 HP, 220/440 volt, 1750 RPM, 3-phase, 60 cycle and runs through a 25:1 ratio gearbox. This assembly is very clean and sanitary as well as lower in maintenance costs as compared to a belt drive gearbox. The gearbox is then linked to the main blender shaft by way of a drive sprocket and chain. This direct drive system assures that virtually all of the horsepower from the motor is delivered to the mixing ribbon.

#### **BASIC OPTIONS AVAILABLE FOR 100 CUBIC FOOT**

\*USDA APPROVED machine. Our standard machines are "Certified Sanitary".

\* "Double split packing gland" both the inner and outer rings are "split" or made as two half circle glands for total removal from the shaft.

\* Air purged packing gland with either of the packing glands which we offer. Each gland comes standard with a removable plug which allows you to connect a nipple and air line to bring the air into the air purging chamber of the gland. (All those parts i.e., nipple, plastic, hose, pressure regulator, etc. supplied by others.) A pair of "lental rings" (one for each gland) is required.

\*316 Stainless Steel Model You can have the entire blender made of 316 stainless steel (except motor, air cylinder, and electrical components) ignore option five. The legs, braces, and motor frame will be made of 304 stainless steel.

\* Holes in Lid Option Many blenders need a hole in the lid for connection to overhead hoppers or chutes. Each hole has a 2" lip pointing to the exterior of the machine for connection with and external sock or chute type attachment.