

BUZZ CUTTER

INTRODUCTION:

Company Overview:

Commercial Manufacturing designs and manufactures a large variety of food and non-food processing equipment customized to individual needs. Our products support the canned, fresh, frozen, and dehydrated food markets performing such functions as bin dumping, trash removal, product cleaning, washing, sizing, dewatering, inspecting, cooling, metering, mixing, coating, transporting, and drying. Commercial designs single machines or complete processing lines and can build to USDA and MID sanitary standards. Customers depend on Commercial's 65-plus years of experience for the most reliable, innovative, efficient, and durable products available on the market today.

Customer Support:

Commercial Manufacturing is very sensitive to our customer's needs. Please feel free to contact our office between the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday (PST) at phone number (559) 237-1855. By Fax at (559) 266-5149 or by e-mail at info@commercialmfg.com.

When calling Commercial with a concern, please provide the following information, if possible:

- Name and location of your plant.
- Job and/or serial number of machine. (This information is located on a plate mounted on the frame near the drive area).
- Complete description of the problem.

- Driven speed of the unit (in RPM) and stroke. (If applicable)
- Contact name and call back phone number.
- If parts are needed, then please specify part number, description, and quantity.

LIMITED WARRANTY:

Commercial Manufacturing (Seller) will repair or replace, at its option and F.O.B. its factory, any part of the Goods that proves to be defective in material or workmanship within one year from date of invoice, provided the defective part is shipped, pursuant to Seller's Returned Goods Authorization form, transportation charges prepaid by Buyer, to Seller's factory within one year from the invoice date. The results of ordinary wear and tear, improper operation or maintenance, failure to prepare equipment for off-season storage, or use of corrosive or abrasive materials by others are excluded from Seller's warranty and covered only by the original manufacturer's warranties, if any. **Upon repair or replacement, Seller's warranty will continue for the repaired or replacement part for the remainder of one year from the invoice date.** Except as stated herein, Seller makes no warranties or representations, expressed or implied, including but not limited to matters concerning the merchantability of the goods or their fitness for any particular purpose. Buyer assumes all risk and liability resulting from its use of Goods. Seller's liability under no circumstances shall exceed the price of the goods. The Seller will not be liable for any special or consequential damages to persons or property, lost profits, and tort and strict liability.

VOIDING THE LIMITED WARRANTY

Failure to follow the installation and maintenance instructions being provided or making any alterations to the equipment without prior written authorization from Commercial Manufacturing will void this warranty.

WASHING YOUR EQUIPMENT

For longer life of moving parts, please keep high pressure water and detergent away from dust and grease seals. The same holds true for electrical components, avoid using high pressure cleaning systems on them as well.

OTHER MANUFACTURERS' EQUIPMENT

For components not manufactured by Commercial (e.g. electric motors, hydraulic systems, etc.), refer to the appropriate manufacturer's manual for operation and maintenance instructions at the end of this manual.

ENGINEERING DRAWINGS

Engineering drawings for each piece of equipment you ordered were sent to you for your approval prior to the production process. These drawings are for your reference.

If you have any questions concerning your equipment, please refer to the job number (located on the bottom right-hand corner of the drawing) when talking to Commercial engineers and technicians.

NOTE: These drawings contain information proprietary to Commercial Manufacturing. Any reproduction,

disclosure, or use of these drawings is expressly prohibited, except as Commercial Manufacturing may otherwise agree in writing.

PARTS SPECIFICATIONS

General Information

There is a separate parts specification sheet for each piece of equipment in your order in the equipment section of this manual. On each parts specification sheet you will find the equipment identification, Commercial job number, part number, part description, quantity, and unit of measurement. Please refer to the job number (an eight-digit number located at the top of the Parts Specification Sheet) when ordering parts from Commercial.

Parts Ordering Information

Commercial Manufacturing stocks some of the component and replacement parts for your equipment. When ordering parts for your Commercial equipment, simply furnish us or one of our distributors with the part number and description as well as the serial number and job number (located on the identification plate that is affixed to the frame of the machine near the motor/drives) of your equipment, and we will make sure you receive the proper parts.

Ordering your component and replacement parts from Commercial or its distributors is a sound business decision:

- We designed and built your equipment; we know what parts you need.
- We stock many key parts so you can minimize costly down time.

- We can arrange for next day delivery of parts.
- We can offer advice on installation of parts.

RECEIVING AND INSPECTING YOUR EQUIPMENT

It is important to carefully inspect each piece of equipment for possible damage that may have occurred during transport *before* it is removed from the transport carrier. Once the equipment has been loaded on the truck at Commercial Manufacturing's facility, the carrier assumes responsibility for the equipment. Any missing or damaged equipment should be reported immediately to the carrier. Claims must be filed with the carrier.

You should be careful while unloading the equipment to make sure that any parts shipped with the equipment are not discarded. Parts not installed at Commercial Manufacturing are sometimes packaged separately and put inside the equipment.

SAFETY CONSIDERATIONS:

Please read this manual prior to installation, operation, or maintenance of this equipment. All electrical work should be performed by a qualified electrician in accordance with the latest edition of the National Electrical Code, local codes, and regulations. Before beginning the installation of your equipment, everyone involved should be aware of the safety considerations listed below, as well as the safety rules and regulations established by your company.

DO NOT

- Install or operate any equipment before complying with the instructions in this manual.
- Operate equipment without guards and other protective devices in place.
- Walk, ride, sit, or climb on equipment at any time.
- Overload equipment; be aware of and comply with equipment design capacity limitation.
- Attempt maintenance of equipment without turning off all power supplies and locking out all equipment.
- Remove jammed product from equipment while in operation or with power turned on.
- **Operate Vibra-Glide outside of the range stenciled on the belt guard, + or - 1/32", or premature failure may result, voiding your warranty.**

DO

- Keep clothing, hair, fingers, and other body parts clear of equipment while the equipment is in operation.
- Know location and function of "Control Stops" on equipment.
- Service equipment with only authorized maintenance personnel.
- Keep area around equipment free of all obstructions.
- Report all unsafe practices or conditions to your supervisor.

INSTALLATION:

Please read all information provided with your equipment prior to installation. Some important information may be included in the drawing specific to your

machine. Due to the nature of the equipment, your machine may not be balanced or stable upon lifting. Please take care moving the equipment and always lift the machine by the frame, not the conveyor pan.

The information contained in this section is applicable to all Commercial equipment. Information pertaining to the installation of specific equipment is provided in the following sections.

When installing Commercial equipment close to adjoining machinery, care must be taken to avoid the transfer of any motion or contact to or from the Commercial equipment.

General Equipment Inspection:

Before installing your machine, please inspect it to insure no damage occurred during shipping. Please note it is the responsibility of the *customer* to notify the freight company of damage that occurred during shipping. Also it is possible that bolts and other items have become loose while in transit.

- Make sure all shipping blocks, bands, and braces have been removed. The location for each unit should be clean and clear of obstacles.
- Again, check all bolts and fasteners to make sure they are tight - it is

possible that bolts and other items worked loose while in transit.

- Make sure that all proper safety equipment is in place.
- Connect all motors in accordance with applicable codes.
- Check the oil level in the gearboxes.

Leveling Equipment

Leveling each piece of machinery is essential to the safety, efficiency, and durability of your equipment. See the appropriate section of this manual for any specific procedures to be followed for each type of equipment.

Anchoring Floor-Standing Equipment

Unless other mounting arrangements were made and coordinated with Commercial during the engineering and approval stage, each machine must be securely anchored to the floor or other surface to operate properly. Use anchor bolts or some other appropriate anchoring system to fasten the foot pads to all the anchor points provided to secure the machine to the floor. Anchor bolts should be checked and if necessary tightened, after the first eight hours of operation and every two months thereafter.

Crown Removal System (Buzz Cutter)

The crown removal system is designed to cleanly remove the crowns from fresh pineapple with a minimum of product loss and debris buildup. The system consists of an incline feed belt, recycle belt, orienting chain belt, single blade saw and crown removal belt.

After initial sorting, the pineapples are placed onto the incline feed belt. They are then deposited onto the recycle belt. At this point operators hand place the pineapple onto the orienting belt with the crown over the guide rail. Should more pineapple be deposited onto the recycle belt than the orienting belt can handle the operators can elect to let them pass through. They will recycle on a "loop" and then return for loading onto the orienting belt at a later time. After the pineapples are placed on the orienting belt they will proceed to the cutting area. Just prior to cutting, the pineapples are held in place by spring-loaded fingers. A single blade, designed to create a minimum of debris buildup, accomplishes the cutting. The crown is then deposited onto the crown removal belt and the pineapple is discharged onto a take-away belt (by others).

Safety interlocks on the guards prevent inadvertent starting of the system or blade when guards have been opened for servicing.

Changing The Cutting Blade On The Crown Removal System

To change the cutting blade on the crown removal saw, three pockets on the orienting belt must first be removed. Before removing pockets or performing any type of maintenance work, be sure the electrical supply is locked out. Remove any three pockets that are wrapped around the sprockets on the drive end of the belt. This position opens the space between the pockets and allows access to the bolts and nuts. With the guards in the closed position and all removed pockets cleared of moving parts, restore power. Using the speed control located on the front of the electrical panel, slowly run the belt until the opening created by the pocket removal is directly under the blade. Disconnect and lock out electrical power again. Remove drive guard to gain access to drive shaft assembly. The drive shaft assembly consists of a 1-7/16" shaft, one fixed and one removable bronze spacer, cutting blade and two right-hand nuts. On the outer most nut a nylon tipped setscrew has been installed. Loosen but do not remove setscrew. **Note:** should setscrew ever get lost or need replacing be sure to use a nylon tipped setscrew to prevent damage to the threads of the 1-7/16" shaft. Place one wrench on the flats of the 1-7/16" shaft and a 2-1/4" wrench on the outer nut. On the nut side of the shaft, facing the motor, the nuts will loosen by turning them counter-clockwise. Remove the second nut in the same manner. Remove the bronze spacer. **Extreme caution should be used when removing the blade.** A pair of stainless steel butchers gloves is recommended for this operation. Install in reverse order. Install bronze spacer and nut. Tighten first nut to the blade while holding flats on the shaft. Then, tighten the second nut to the first nut, also holding the flats. Snug but do not over tighten setscrew. Over tightening will damage the nylon tip. Check for blade clearance to guide rail and pockets. Replace pockets. Re-install all guards. Restore power and test run.

Crown Removal System

General Maintenance

Initial Start-up

Upon initial start-up or after long-term storage, several items should be checked.

1. Check for proper belt tension on drive sheaves for cutting blade.
2. Check cutting blade for any nicks or damage and that locking nuts are tight.
3. Make sure blade is sharp.
4. Make sure all guards are in place and safety interlocks are working properly.
5. Test hold-down fingers for free movement.
6. Check recycle belt for proper tracking.
7. Check all fasteners for tightness.

General Operation

The cutting blade must be kept sharp at all times. Check daily before a shift change. A dull blade will tear the crown rather than shear it. It will also cause the motor to run hotter and pull more amperage.

Debris build-up must be cleaned out on a regular basis from the crown discharge area. Excessive debris can cause the crowns to back-up into the cutting area and damage the cutting blade.