General instructions for crusher/destemmer

Crusher-destemmers are used for bulk processing of grapes during harvest in preparation for pressing or primary fermentation. The crushers utilize a set of aluminum rollers that crush & break the skins to release the juice & allow the breakdown of the remaining pulp. A screw feeder moves the grapes to the rollers to begin crushing, dropping the skins & pulp onto a perforated grid, while a shaft with paddles causes the stems to be separated from the grape clusters which are then expelled to the side of the crusher. The rollers should be adjusted to properly crush & break the skins while avoiding bruising or abrading the skins which would release phenols & excess tannin, thus adding astringency to the must & the final product. White grapes are crushed before pressing, while red grapes are crushed for immediate fermentation to maximize yield of tannins & flavors, then pressed after the skins & pulp are broken down by the fermentation process.
SETUP & USE

1. Before using the crusher-destemmer, thoroughly familiarize yourself with the operation of the unit. *With the power disconnected*, wash & sanitize the unit including all metal components that will come into contact with the grapes or must. Inspect the unit for loose bolts, debris or items which may hinder the crushing operation. Lubricate all moving parts with petroleum jelly or food grade lubricant & replace all guards & panels before use.

2. The unit is provided with handles for two persons to move the unit. For safety, it should be only moved by two persons. Place firmly on stand if provided, or use a stable base.

3. Place a sanitized vessel (bucket or bin) below the drain to collect the skins & juice.

4. Adjust the rollers to allow the grape skins to be broken & gently squeeze the fruit to release the juice. The adjusting bolts for the rollers should be adjusted uniformly to maintain parallel alignment of the rollers, that is, each turn of the bolt on the right side should be matched with a turn of the bolt on the left side.

5. Connect the unit to an adequate power source & start the machine. Remove all vine leaves before crushing. Feed the grapes into the hopper at a uniform rate. Do not over fill the hopper, as the stems may be forced through the rollers into the must.

6. Work in a steady & continuous pace to allow the stems to be expelled from the hopper & to minimize the risk of oxidization to the final processed juice. Sulfite as recommended for the correct volume of must.

7. Do not put hands or other objects into the hopper while the machine is running or connected to a power source, as severe injury may result. If clogging occurs in the stem discharge chute, remove power & carefully remove debris from the chute.

8. The unit should be washed after the end of each day’s run. After final processing, thoroughly wash the unit in clean water. Allow to thoroughly air dry prior to storage.

9. Lubricate all moving parts with petroleum jelly or food grade lubricant.

10. Cover & store in a dry environment.

11. Retain these instructions for future reference.