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80 GRIT CARBORUNDUM POWDER FOR THE TOUCH UP OF ROLL AND BED PLATE

NOTE: These procedures are for Hydra Hollander beaters, David Reina beaters, and Howard Clark models only. They do not apply to Valley beaters or any beater with a floating bedplate. Contact us for separate instructions on sharpening Valley beaters.

Over time, the processing of fibers will wear the roll down and dull the blades. This will result in inconsistencies in processing and can lead to longer beating times. This will also decrease the rolls ability to cut the fibers. The roll can also get out of round. When this occurs the roll and bed plate will not match perfectly, resulting in an uneven beating. To restore the surfaces to their original sharpness it is necessary to touch up the roll with a load of pulp and 80 grit Carborundum powder.

PROCEDURES

Prior to sharpening the roll, you should do some basic maintenance on the beater. Tighten or replace belts, lubricate the bearings, and replace the bearings if necessary. If you remove the roll from the beater later, you will have to repeat the sharpening process after re-assembly.

First inspect the roll for any burrs on the bar edges. Use a file to remove the burrs before you start using the Carborundum powder.

Put a load of pulp in the beater, second cut cotton linters work well. Get the pulp to circulate like you would any load of pulp. Once it is moving smoothly, take approximately 3/4 cup of Carborundum powder and sprinkle it evenly into the pulp.

Once the Carborundum powder is dispersed, slowly lower the roll until you hear a grinding sound. It should be louder than the beater at rest, but quieter than the sound of full beating. Leave the roll at this point until the sound diminishes. At that point adjust the roll

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down until the sound increases again. Continue to grind the roll in increments, making adjustments when the sound changes.

The sound that the roll makes during grinding should be an even growl. If a ticking sound occurs, care must be exercised. This ticking sound means that the roll is out of round, and is hitting in only one spot. If this occurs, lower the roll in smaller increments and leave it at each point for a longer time.

It is best to go slowly, and do not rush the lowering of the roll. Let the beater run, and come back and check it about every fifteen minutes. Letting the roll stay at one place too long will not harm the beater, but lowering the roll too fast can be damaging.

You can set the roll location by the sound level that you hear. Stop lowering the roll when you hear a sound which is loud enough to distinguish it from the background noise. Leave the roll at that point until the sound becomes even and again is part of the background noise. At this point the roll can be lowered again. Continue to do this as often as necessary. When the roll is ground in properly, the sound will just increase without changing its quality by lowering the roll. Remember that the sound is very subjective. In general a beater can make sounds louder than is comfortable without hearing protection, even when it is not set for a full beating. The idea is not to be too gentle but not too aggressive either.

At this point, check to see if all the surfaces of the bars have been sharpened. The bars will have a different shine than what you saw when you started. Only lower the roll as much as necessary to get all of the bars sharp.

If you have any questions about the use of your Carborundum, or sharpening your roll and bed plate, please contact us.

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