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HydraFiber[®] Processing Unit Technical Bulletin: Shredder Roller Inspection

Document Description: TSB- Shredder Roller Inspection

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Product: AgriNomix HydraFiber® Processing Unit

RE: Inspect shredder rollers for wear

Solution: N/A

Parts Required: None

As the shredder rollers employ sharp teeth to open and separate the fiber bales, usage will eventually wear/dull the teeth. Paying close attention to the performance of the machine can be helpful in making such a diagnosis.

Initial diagnosis of dull teeth can be made by recognizing a few key symptoms:

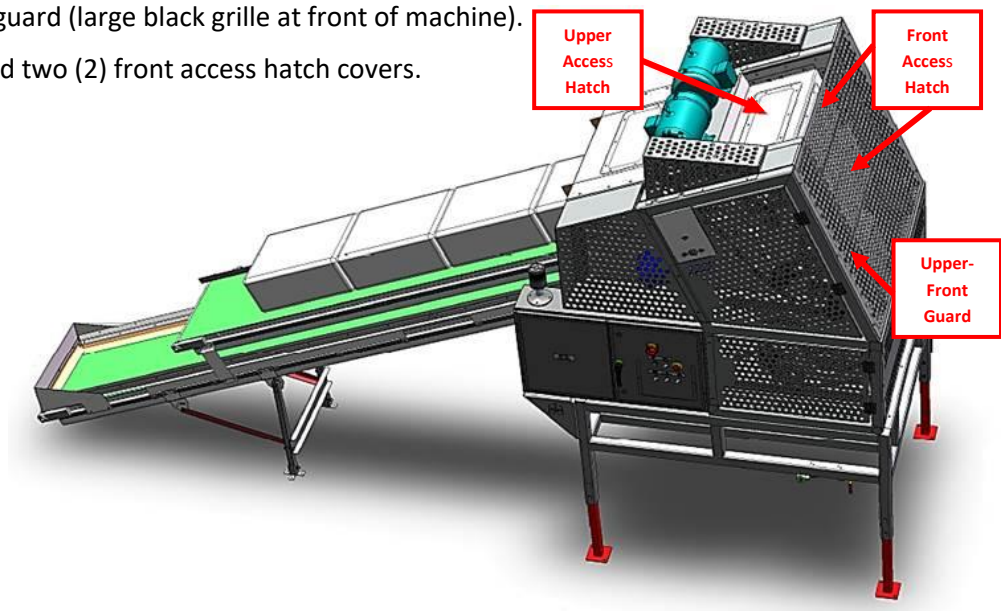
- conveyor belt slippage under bale (upper shredders)
- apparent malfunction of pinch roller (upper shredders)
- fiber backing-up and jamming in the shredder chambers
- slipping/burning shredder drive belts
- high current draw on shredder motors, sometimes leading to tripping the circuit breaker

Should the machine exhibit one or more of the symptoms above, further inspection of the shredder rollers is advised.

To inspect rollers, ensure power is off and proper electrical lockout/tagout procedures are observed.

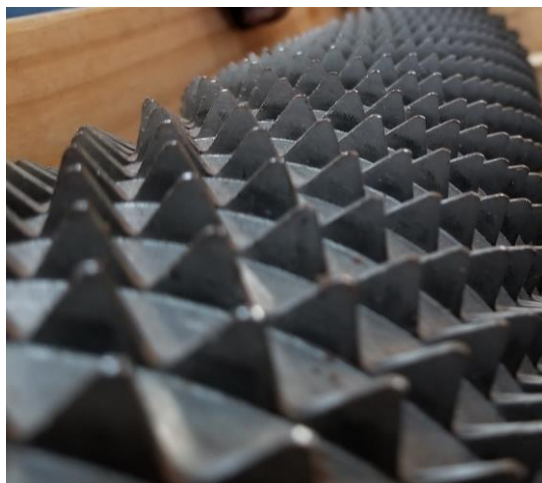
Remove upper-front guard (large black grille at front of machine).

Remove the upper and two (2) front access hatch covers.





A) New Roller



B) Moderate Wear



C) Excessive Wear

The preceding images represent a range of roller wear.

- Image "A" portrays a new roller, as installed when the machine is manufactured.
- Image "B" portrays moderate, yet acceptable, wear of the upper-most (coarse) roller.
- Image "C" portrays excessive wear of the lower (coarse) roller. Should wear resemble this image, roller replacement is necessary.

Inspect ALL rollers, as wear to rollers is not necessarily consistent (eg.- the upper-most (coarse) roller typically wears less than the coarse roller immediately below it).

Per Profile Products, it is recommended that the HydraFiber Processing Unit top two rollers (coarse rollers) be inspected frequently as approaching 100 tons of material processed. It is typical that the two upper (coarse) rollers be rewired or replaced after processing 100 to 150 tons of material. It is recommended that the four bottom (fine) rollers be rewired or replaced after processing 300 to 500 tons of material. Because new rollers typically require a lead-time of several weeks and used roller rewiring- a few weeks, it is recommend that a back-up set of rollers be ready at the facility. To make sure you have minimal down time associated with roller replacement, it is recommended that the proper preparation is made. If purchasing a set of back-up rollers is not practical, arrangements should be made with AgriNomix to get the rollers rewired during down time- in between seasons.

It is recommended to inspect/replace the shaft bearings when replacing rollers. Replace ALL set-screws associated with rollers which have been removed/replaced.

Description	Part Number	Qty. Per Machine
Roller, Coarse Wire, Upper	A53040-020-145-000	2
Roller, Fine Wire, Lower	A53040-020-146-000	4
2-Bolt Flange Bearing, 1 1/4" ID	UCFL207-20	20
1/4-20 Set Screw, Cup-Point, Knurl-Grip	90289A535	40