



**Bedding Materials
Commonly Used for
Shipping Animals**

A HARLAN PERSPECTIVE

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**HARLAN TEKLAB
DIAMOND STAR
PRODUCTS**

**Bedding Solutions to
Exceed Your Expectations**

DIAMOND STAR PRODUCTS

Located in Poynette, WI



DIAMOND STAR PRODUCTS

- **Bedding Products include:**
 - Shredded Aspen
 - Aspen Shavings
 - Lab Grade Pine Shavings
 - Pelleted Paper

Shredded Aspen



- As the logs enter from the log deck, they are cut to length to fit in the shave boxes
- This is done with a hydraulically actuated electric chain saw

Shredded Aspen



- Fresh shavings are collected beneath each of the shave boxes
- At this point of the process, the shavings contain quite a bit of moisture

Shredded Aspen



- The shavings go into a large drum-type dryer where most of the remaining moisture is removed, at ave. temperatures of 1200 degrees F, for 7 minutes.

Shredded Aspen



- Moisture of the shavings is constantly monitored between the hammer-mill and the Rotex
- This reading is taken every 2 seconds, and recorded every hour

Shredded Aspen

- The Rotex is a semi-aspirated screening system
- There is a 1 1/4" 'over' screen and an 18-mesh product screen



Shredded Aspen



- The shavings are then conveyed to the H.B.F. Screener
- This is a Rotary Aspirator that removes any dust and small particles that might still be in the desired shavings

Shredded Aspen

- Samples are taken for each lot and analyzed for moisture and particle size



Pelleted Paper

- From the dryer, the pellets are sent to the cooler
- This stage lowers the temperature and removes additional moisture



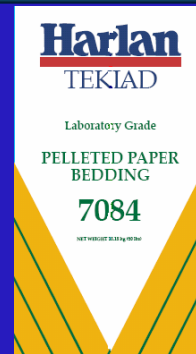
Pelleted Paper

- After cooling, the pellets go to the Sweeco screener where dust and small particles are removed before the product is packaged



Pelleted Paper

- The 'Code-Date', consisting of the product code and the date of pelleting, is printed on the sew-strip of each bag



7084 103003P

Climate Controlled Storage and Handling

- Temperature and humidity are monitored and controlled 24 hours a day in Harlan Teklad Distribution Centers



In-Process QC Testing

- Moisture levels are checked electronically every 2 seconds, recorded hourly
- Dust levels and particle size are continuously monitored



In-Process QC Testing

- Entire process is computer monitored and alarmed, to ensure proper production settings are maintained



Additional QC Procedures

- > Representative retention samples of each lot are taken, and held for 1 year
- > Quarterly contaminant screens are run by independent labs, and results are available upon request

**7084
Harlan Pelleted Paper**



**7088 Lab Grade
Pine Shavings**



**7082
Harlan Aspen Shavings**



**7083
Harlan Shredded Aspen**



Standard Rodent Shipping Container



Standard Shipping Container Features

- Filtered air vents
- Securely sealed
- May be compartmentalized
- Sturdy, & coated with moisture-proofing
- Accepts most any bedding material



7090 Harlan Sani Chips



7099 Harlan TEK-Fresh



**7099W Certified
White TEK-Fresh**



**7097
1/4" Corn Cob Bedding**



**6055 Certified
Omega-dri**



iso-PADS (cotton)



iso-PADS (after)



Don't Forget the Food & Water!!

- Containers
- Spill control
- Enough for duration of transit
- Alternatives: Gel Packs



THANK YOU