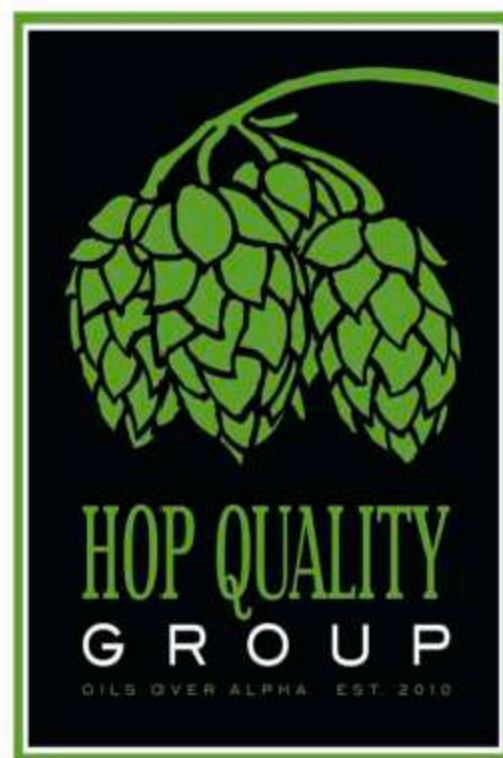


HQG Pellet Mill Visit Date:	08/13/2019
Primary Owner/Operator:	Jamie Scott
Physical Address of Facility:	Mill 95 25950 Howe Rd, Parma, ID 83660
Pellet Mill Contact:	DJ Tolmie, Thron Van Komen
Contact's Email Address:	tvankomen@mill95hops.com
Contact's Email Phone:	208.482.6373

HQG Attendee & Brewery	Tom Tweedy-Stone
Alec Mull-Founders	Chris Devan-Oskar Blues
Steven Pauwels-Boulevard	Sara Laurienti-Oskar Blues
Adam Conway-3 Floyds	Matt Gallagher-Half Acre
Tim Mathews-Oskar Blues	Patrick Chavanelle-Allagash



Operations Description:

Brand new, food safe, hop pelletizing facility with cold storage. Excellent focus on food safety and traceability. It is clean and bright due to the LED lights! Bales do not touch the floor here. All on pallets or conveyance. Excellent!

General

- All oils and lubricants are food grade, pest control in place.
- Shovels and floor tools are color coded to indicate food product (green) and waste product (black).
- Outside building bird control – “fire pucks” which they think are effective except for robins, whose nests get pulled down if seen.
- 18” white paint stripe along all walls inside the building to indicate “no storage” area.
- Employees must wear gloves. No hair & beard nets, no plans to start.
- Processed 6M lbs in 2018.
- Driving racking system for sorting. Driven by a robot. Extreme lot traceability. Able to track the most minute movements from receiving to finished pallet placement.
- No touch, instant heat hand washing station close to packaging area.

Bale Breaker

- Nine magnets, “rare earth” magnets. Most are the roller-style that sit in the hop stream. Easy to pull and clean.
- They have a baler for collecting and recycling the waste bale fabric after breaking.
- Gravity traps in the elevators for rocks, cell phones, etc.
- 16 bales fit into each of two mill hoppers.
- Two hammer mills used for continuous milling. Once one is blinded, they switch to the other. Cleaned manually by scraping. No cleaning product used at the moment. Approximately 30 minutes of cleaning.

Pellet Mill

- Three different pellet sizes, all nitrogen cooled, usually 105°F to 112°F temperature at die.
- Pure-up with ~100 lbs. of hops instead of oats.
- Pellets enter cooling section before going to screens/cyclone to separate small and large particles. Smalls are waste and large are sent back through the mill section.

- Magnets in stream before going to the mill.

Cold Box

- Not tracking humidity. Condensation pools on the floor.
- Using brine instead of glycol, glycol cooled floor.
- Taking moisture reading on every bale with three prods (get an average), taking a brewer's cut every 25 bales.
- Pellet cold box: racking system uses a little robot skid to pull pallets.

QA

- Pull one box (bag) of pellets per pallet.
- Pressurized water bath to check bag seal integrity, weight.
- QTA machine for total oil, alpha, beta.
- Oxybaby piercing instrument to check sealed bag oxygen content – spec is 2% max.

Areas of Concern:

Just a couple areas of some open conveyance that could be covered, and don't have hairnet requirements for returning the opened bags that were quality tested to the pellet line for repackage.

Improvements since last HQG visit (if applicable):

Lots more magnets, white painted interior perimeter to increase pest visibility (no pets were noticed). High density and SAP traced cold storage.

Recommendations:

- Add that last bit of coverage to open areas.
- Institute hat or hairnet policy for operators that will be dumping quality tested bag back into line.

Additional Comments about the operation?

Great job so far and thanks for the laser focus on food safety. HQG greatly appreciates your time and partnership!

Hop Pellet Mill Survey

Primary Owner/Operator: Jamie Scott

Manufacturer of Hammer Mill: Bliss Industries

Date of manufacture or installation: 9/15/17

Motor size in KW or HP: 150 hp controlled via vfd – 2 hammer mills total

Manufacturer of Pellet Mill: Bliss Industries

Date of manufacture or installation: 9/15/17

Motor size in KW or HP: 2 X 100 hp (200 hp total) controlled via soft start

Blending capacity:

Bale breaker bin capacity: Max throughout is about 6,500 lbs/hr. – line designed to run 4,000 lbs/hr.

Powder tank capacity: 3,200 lbs x 2 mix tanks

Blender type (Ribbon or Conical): Horizontal ribbon

Throughput capacity (per 24 hours): 96,000 lbs given no varietal changeover

Magnet locations: Air uptake plenums above heavy traps, continuous cup elevator feed from mix tanks and one above the pelleting machine feeder

Pellet diameter and number of die sizes owned: 6mm / 0.25" die extrusions and currently have 3 dies @ 3.5" 2.5" 1.5" thickness'

Target temperature of pellet and cooling method: 105 – 115°F confirmed with FLIR IR gun and also autonomous functionality to feed liquid nitrogen on die face via stroking valve with application nozzles to help precisely control die temps

Vacuum hard pack or soft pack and flush gas type: "Pillow" or soft pack style with nitrogen flush

Quality tests performed: Every 50th foil bag is pulled from line to be checked for: seal integrity by pulling a vacuum in dunk tank, oxygen analysis with oxybaby to hit 2% or less, open bag and check pellets for bulk density as well as checking fines to be 2% or less

Laminate foil integrity tests performed and frequency of tests: Check every new roll stock for any abnormalities – if not noticeable with the eye, will fail under a vacuum test by Q.A. once in finished form

Standard label information: Every case and every bag will have a label with the Certificate of Analysis

Frozen storage capacity: 1,185 pallet positions for finished goods that uses about 7,500 sq. ft for racks. We have 32,500 sq ft for bail storage or approximately 18,000 standard American bales

Any third-party certification: Undergoing the certification process for both ISO 90001 as well as FSMA Certification. Both audits to happen 3rd quarter this year.