

,HQG Pellet Mill Visit Date:	7/21/21
Primary Owner/Operator:	YCH
Physical Address of Facility:	204 Division St, Yakima, WA 98902
Pellet Mill Contact:	Blaze Ruud
Contact's Email Address:	Blaze.ruud@yakimachief.com
Contact's Email Phone:	



HQG Attendee & Brewery	
Alec Mull-Founders	Brad Benson-Stoup
Jeremy Moynier-Stone	Sam Pecoraro-Von Ebert
JT Albright-Stone	
Jamie Floyd-Ninkasi	
Van Havig-Gigantic	

Operations Description:

Two Division St lines: Junior (new) and Senior (old) lines. Similar process, but Jr runs about 1/3 as fast as Sr. Great signage everywhere. Digital scoreboard and displays for Work Orders, product info and process metrics. Production area is chained off for safety. Good PPE process. "Safety is the priority; Quality is the standard" – these signs are throughout the facility. dB monitor to alert people to wear ear protection if over 85dB. They are currently doing upgrades and maintenance and painting. Automatic Bale Breaker. Last year was first year they didn't find any glass in bales. 4 Magnets before Hammer Mill and 2 prior to Pellet mill! Magnet maintenance and SOPs (training every year). SOPS printed and available on floor and in computer (one true doc process). Robust SOP update and sign-off procedures. Bales are staged on floor – Bale cover is the barrier and that never touches the bale breaker. They have tested ink.

All YCH lines use liquid nitrogen to precool hops prior to pelletizing, as well as at the die. The HQG also believes this precool and purge process helps to reduce oxidation by purging ambient air from the product flow and helps to reduce off gassing of hop aromatics at the mill.

All the equipment and piping is well labelled. Amazing storage for Dies (individual and stainless with connectors for oil and cleaning). X-Ray machine testing here for Harvest. Has ability to take pictures! Nice quality station. Scales were being calibrated. Testing temp after every run. Good 5 S. Final magnet before packaging.

Jr line is smaller: Primarily for Organics, HBC, experimentals, and other small runs. Good access for cleaning. Good safety attention: scissor lift, tie-offs, etc. They showed us a pellet with metal on the magnet. Meltric plugs throughout facility.

Monthly best practice mtgs for Green Chief. Pre-Harvest Grower Mtg each year to review process with Growers. (All lab work = Sunnyside: Division is R&D and overflow). YCH has a portal system on-line for records (example spray records are entered into Portal). Lab data goes into portal within 24 hrs. Nice feedback system from Portal to Growers (selection feedback from internal and Brewers for example). No barcoding. Grower Lot # is used for tracking. *Opening a YCH lab at Jackson's in ID for ALL Growers (not just YCH Growers). Their ERP System won't allow a hop to proceed to a work order until it's passed all the requirements.

Recommendations:

It's standard industry practice and we understand that the bale wrap provides protection, and YCH maintains impeccable floor cleanliness for this area, but please think about alternatives to staging bales on ground prior to bale breaker. The HQG would love to see these bales never touch the ground in processing. We have seen roller conveyor work well for this at other mills.

Improvements since last HQG visit (if applicable):

Many improvements. Facility and equipment are continually being updated. X-Ray machine testing at Division and if it works well could go to other lines. The Senior Pellet mill die was the cleanest die I have ever seen, impeccable. YCH plan to replace Hammer mills with a Grinder style machines.

Additional Comments:

Quality test performed: see below in survey

Third Party Certification, if any? Green Chief is a comprehensive program and ISO, see below.

Additional Comments about the operation?

World-class facility! Great leadership and signage throughout, good safety, good processes, and very good traceability. Impeccable sanitation! We have never seen a cleaner die! Great work and thanks for the focus on food safety and quality!

Hop Quality Group

Hop Pellet Mill Survey

Facility Address - *204 Division St, Yakima, WA 98902*

Primary Owner/Operator- *Yakima Chief Hops*

Manufacturer of Hammer Mill- **Junior Line:** *CSE Bliss 11.5x38*
N/A
(1) 60HP Motor

Manufacturer of Pellet Mill- Senior Line: *California Pellet Mill 100C*

Date of manufacture or installation-*2019*

Motor size in KW or HP- *100 HP*

Blending capacity

Bale breaker bin capacity-

Powder tank capacity- *600 Lb*

Blender type (Ribbon or Conical)- *Ribbon*

Throughput capacity (per 24 hours)- *1,200lb/hr Capacity*

Magnet locations- *Pre-Hammer Mill, Pre-Pellet Mill, Pre-VFFS*

Pellet diameter & number of die sizes owned- *¼" Diameter | 5*

Target temperature of pellet & cooling method- *Not to Exceed 105F | Liquid Nitrogen*

Vacuum hard pack or soft pack & flush gas type- *Nitrogen Flushed | Viking VFFS*

Quality tests performed- *Particle Size, Temperature, Oxygen, Density, Seal Integrity*

Laminate foil integrity tests performed & frequency of tests- *Dunk Tank, 1 Bag per Pallet*

Standard label information-

Frozen storage capacity- *32F | 30MM Capacity Across All Campuses*

Any third-party certification- *ISO 9001 | ISO 14001*

Hop Quality Group

Hop Pellet Mill Survey

Facility Address - *204 Division St, Yakima, WA 98902*

Primary Owner/Operator- *Yakima Chief Hops*

Manufacturer of Hammer Mill- **Senior Line:** *CPM Champion 20x44*
N/A
(1) 150HP Motor

Manufacturer of Pellet Mill- Senior Line: *California Pellet Mill*

Date of manufacture or installation- *N/A*

Motor size in KW or HP- *150 HP*

Blending capacity

Bale breaker bin capacity-

Powder tank capacity- *1,600 Lb*

Blender type (Ribbon or Conical)- *Ribbon*

Throughput capacity (per 24 hours)- *6,000lb/hr Capacity*

Magnet locations- *Pre-Hammer Mill, Pre-Pellet, Mill-Pre-VFFS*

Pellet diameter & number of die sizes owned- *¼" Diameter | 10*

Target temperature of pellet & cooling method- *Not to Exceed 105F | Liquid Nitrogen*

Vacuum hard pack or soft pack & flush gas type- *Nitrogen Flushed | Viking VFFS*

Quality tests performed- *Particle Size, Temperature, Oxygen, Density, Seal Integrity*

Laminate foil integrity tests performed & frequency of tests- *Dunk Tank, 1 Bag per Pallet*

Standard label information-

Frozen storage capacity- *32F | 30MM Capacity Across All Campuses*

Any third-party certification- *ISO 9001 | ISO 14001*