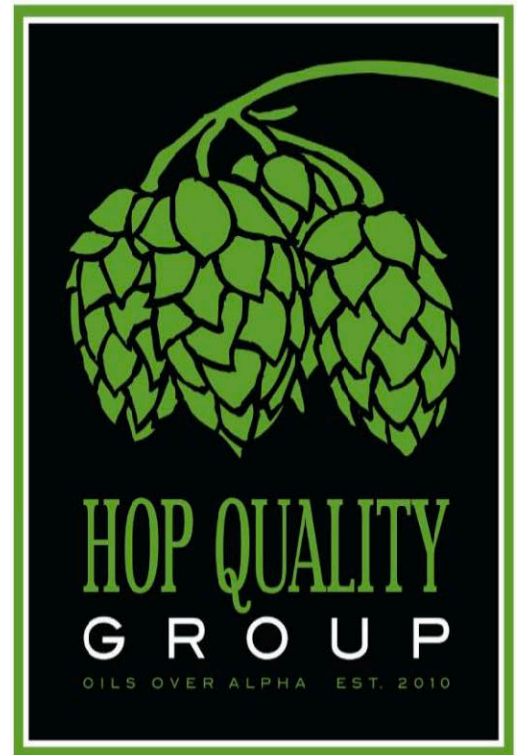


<b>HQG Pellet Mill Visit Date:</b>	June 11, 2020
<b>Primary Owner/Operator:</b>	BSG
<b>Physical Address of Facility:</b>	5150 Yakima Valley HWY, Wapato, WA 98951
<b>Pellet Mill Contact:</b>	Shane Dale
<b>Contact's Email Address:</b>	<a href="mailto:sdale@bsgcraft.com">sdale@bsgcraft.com</a>
<b>Contact's Phone:</b>	509-961-2452



HQG Attendee & Brewery	
Alec Mull - Founders	

**Operations Description:**

Full sized, completely traceable and highly automated pellet mill operation with cold storage built in 2014. The facility is incredibly clean, bright and organized with multiple third-party certifications and is audit ready 24/7/365. Quality checks begin at bale arrival which generates a barcode for each bale completely traceable through finished goods. Bales never touch the ground here and there is no forklifts in the mill area! Only food grade lubricants used. Two full lines from two hammer mills and blend tanks to single pellet mill to allow for redundancy and continuous flow. Full quality checks throughout the run with focus on maintaining a consistent pellet density. Automated filling line with continuous measurement and adjustment of bag atmosphere content. They fill bulk boxes, 2 x 22# or 4 x 11# bags with serialized, glued, tamper evident boxes. Full cleanout between varieties and use food grade flaked corn for pellet mill cleanout. 5S philosophy with separate break and restrooms with excellent signage. No chemicals used for cleaning this line at all. Employees wear full PPE (hats, no hairnets). Access to full lab services through BSG and participate in the Hop Lab Collaboration. All hops that are touched or sampled are destroyed. Full WH management system with license plates and WIFI. Planning to enclose weighing machine and add x ray to bag checks.

**Areas of Concern:**

NONE!

**Recommendations:**

Enclose weighing machine to eliminate possible human interaction with running machine (this is currently planned- and has a camera installed now to monitor without contact). Consider going to magnetic ear plugs.

## HQG Hop Pellet Mill Survey

Facility Address- **BSG Hops/Rahr Hop Co. 5150 Yakima Valley Hwy Wapato, WA 98951**

Primary Owner/Operator- **Rahr Corporation**

Manufacturer of Hammer Mill- **two-both CPM**

Date of manufacture or installation-**2014**

Motor size in KW or HP-**150**

Manufacturer of Pellet Mill-**CPM**

Date of manufacture or installation-**2014**

Motor size in KW or HP-**150**

Blending capacity – **2400 pounds each for two tanks-**

Bale breaker bin capacity-5 bales in breaker, 8 staged

Powder tank capacity-two at 2400# each

Blender type (Ribbon or Conical)- paddle blenders

Throughput capacity (per 24 hours)- **5,000# per hour typically, though can run faster.**

Magnet locations - **Hammer mills, pellet mill- cleaned every shift**

Pellet diameter and number of die sizes owned- **6 mm, 4 dies**

Target temperature of pellet and cooling method- 115-125 F. **Natural ambient cooling with LN2 backup**

Vacuum hard pack or soft pack and flush gas type - **N2 flushed soft pack**

Quality tests performed- **Temperature at mill, temperature at cooler, pellet density, package O2 residual, manual bag seal inspection, check weigh.**

Laminate foil integrity tests performed and frequency of tests- **Every bag tested 1-2 times for O2 residual, every bag inspected manually for seal integrity.**

Standard label information- **Bag: Variety/Batch/Harvest Alpha/Weight/QR code for COA link. Box: Type of pellets/Origin/Variety/Batch/Harvest Alpha/Weight/Sequential bag number/Supplier address/QR code for COA.**

Frozen storage capacity- about **100,000 square feet for about 10M# at 31F.**

Any third-party certification - **WSDA, FDA, FSSC-22000**

### **Additional Comments:**

**Quality test performed (explain): On site lab manager.**

**Full laboratory capabilities through BSG. HPLC, GC, full oils-participate in Hop Lab Collaboration. 3<sup>rd</sup> party audits for weigher and check weigher.**

**Additional Comments about the operation: BSG is open to tolling or cobranding for others. World Class and Top-Notch pellet mill facility! Very impressive.**





**Rahr Hop Co/BSG Hops – 5150 Yakima Valley Hwy, Wapato, WA 98951**



- Bldg #1 - Office – 3,275 sq ft (25 x 75 lower and 25 x 56 upper)
- Bldg #2 - Production room – 12,000 sq ft (80 x 150)
- Maintenance Shop/Storage – 3,000 sq ft (30 x 100)
- Warehouse #10 – 2,750 sq ft (50 x 55) – FG Storage - Overstock
- Warehouse #11 – 3,300 sq ft – (60 x 55) – FG Storage - Picking
- Warehouse #3 – 6,300 sq ft (63 x 100) – FG Storage - Picking
- Warehouse #4 – 13,206 sq ft (93 x 142) – FG Storage – Picking
- Warehouse #5 – 14,200 sq ft (100 x 142) – FG Storage – Overstock/Picking
- Warehouse #6 – 14,200 sq ft (100 x 142) – Bale Storage/FG Overstock
- Warehouse #7 – 15,000 sq ft (100 x 150) – Bale Storage/FG Overstock
- Warehouse #8 – 15,000 sq ft (100 x 150) – Bale Storage/FG Overstock
- Warehouse #9 – 15,000 sq ft (100 x 150) – Bale Storage/FG Overstock
- Total refrigerated space – 98,956 sq ft./Total Buildings – 117,231 sq ft.