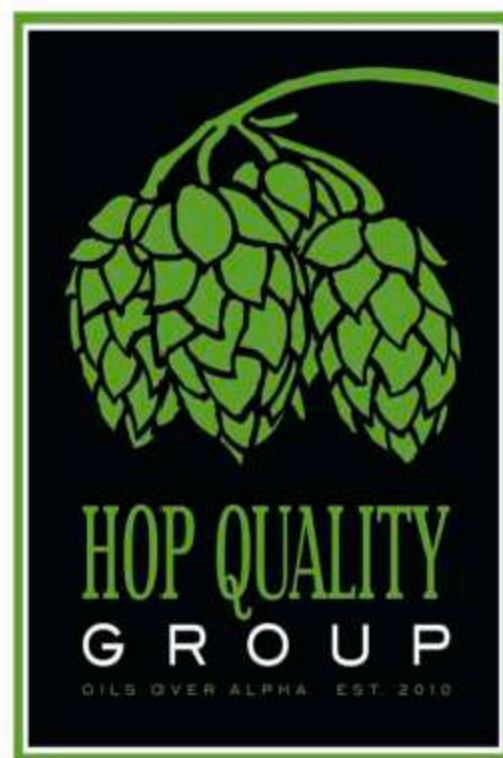


HQG Pellet Mill Visit Date:	6/19/19
Primary Owner/Operator:	Blake Crosby
Physical Address of Facility:	8648 Crosby Rd. NE, Woodburn, OR 97071
Pellet Mill Contact:	Blake Crosby
Contact's Email Address:	Blake.crosby@crosbyhops.com
Contact's Email Phone:	(503) 982-5166

HQG Attendee & Brewery	Ben Edmunds-Breakside
Alec Mull-Founders	Matt Sandoval-Modern Times
Chris Boggess-3 Floyds	Steve Luke-Cloudburst
Janie Floyd-Ninkasi	John Gaugler-Fieldwork
Daniel Sharp-Ninkasi	Van Havig-Gigantic



Operations Description:

Crosby is outstanding and is on its way to becoming a world class operation. Full size pellet mill with excellent capacities for blending homogenous lots. Highly organized with excellent documentation. Everything was very well labelled with documentation for clean outs and sign offs, with what appears to be a completely traceable program. 5S type of operating protocol with food and worker safety at top of mind. They have a dedicated staff with a Food Safety Coordinator for the Mill and their own quality lab that is certified regularly. They even made us wear booties during the visit! All suppliers are pre-qualified prior to delivery. They have a digital tracking system integrated with spray records to determine global MRL compliance. Crosby is an innovative organization with obvious intentions to become the best they can be. Our members should feel highly confident that all pellets produced at Crosby will be done in a high quality, food safe manner.

Areas of Concern:

One noted improvement, they currently need and have planned is to fully cover and enclose their brand-new weighing device.

Improvements since last HQG visit (if applicable):

1st visit for the HQG to the Crosby Pelleting facility.

Recommendations:

Enclose weighing device and keep up the spectacular focus on food and worker safety.

Thanks for letting the HQG visit your facility! We greatly appreciate your partnership and focus on food safety!

Hop Pellet Mill Survey

Primary Owner/Operator: Blake Crosby Owner, Tim Tomlinson Director of Operations

Manufacturer of Hammer Mill: Champion / CPM

Date of manufacture or installation: MFG. 2008, Installed 2012

Motor size in HP: 100HP

Manufacturer of Pellet Mill:

Date of manufacture or installation: CPM, MFG, 1964, Installed 2012

Motor size in HP: 100HP

Blending capacity:

Bale breaker bin capacity: 10 bales

Powder tank capacity: Same

Blender type: Paddle

Throughput capacity (per 24 hours): It depends.

Magnet locations: Bale breaker, hammer-mill and pre pellet mill

Pellet diameter and number of die sizes owned: 1/4 inch (6MM), 10 dies

Target temperature of pellet and cooling method: 105-115F, naturally cooled

Vacuum hard pack or soft pack and flush gas type: Soft pack, N2 flushed

Quality tests performed: Residual O2%, seal test, alpha homogeneity measured for each mixing tank, temp recorded at various points in process, visual inspection and sensory.

Laminate foil integrity tests performed and frequency of tests: Hourly

Standard label information: Variety, Alpha, beta, HSI, total oil, crop year, pack size/qty

Frozen storage capacity: Several million pounds, depends on the season.

Any third-party certification: Global Gap, ABI qualified pellet processor, Oregon Tilth, Salmon Safe