

Canning for Craft Brewers

Owen Lingley
Owner,
Craft Canning + Bottling

Presentation Outline

- Mission Statement
- Company Background
- 10,000 foot Canning Overview
 - Manufacturers, minimums, approx pricing, plant locations
- Craft Canning Process
 - Machinery, Process, QC, variables, loss rates

Craft Canning + Bottling Mission Statement

Don't f**k up beer

Company Background

- Idea in Summer of 2011
- Funded June of 2012
- Received Wild Goose canning line in Nov 2012
- Received Meheen in February 2013
- Currently packaging about 160 Bbls week.

Can Manufacturers

- Crown, Rexam, and Ball
- All are interested and chasing the growth of the Craft Beer Market

Minimums

- Minimums
 - All Mfg have dropped minimum in the last year
 - Crown, 8 pallets
 - Ball and Rexam, 12 pallets
 - Minimum order is one half percent of one days production

Quantities

- Per Pallet
 - 12 oz – 8169 cans
 - 16 oz – 6224 cans
- Both work out to be around 25 bbls per pallet
- Need to be able to dedicate 200 bbls of beer towards a single SKU to make canning viable

Costs

- 12 oz can and lid - 11-13 cents
- 16 oz can and lid - 13-15 cents
- Per Pallet - \$1060 for 12's, \$930 for 16's
- Artwork – \$2000-3000 per design
- No price difference between decorated and bright cans
- Pricing varies monthly based on aluminum costs

Freight

- 12 oz – Plants in Olympia and Kent
 - \$100 to seattle, \$200 pdx, \$800 bend
- 16 oz – No plants on west coast, most coming from Mississippi.
 - \$4500 truck, \$3500 rail
 - Possible ball plant coming online in CA

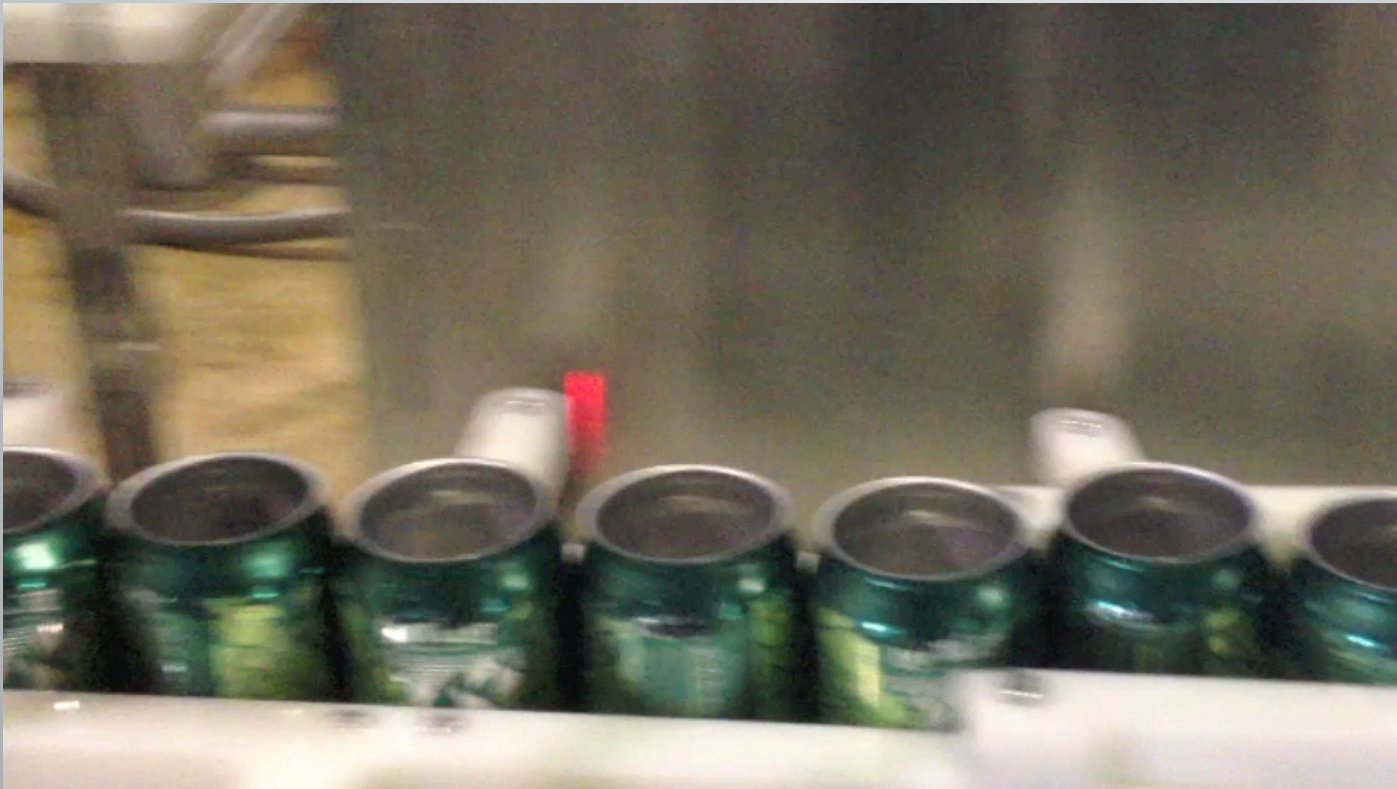
Totals

	12 oz	16 oz
● Cans	\$7500	\$6200
● Ends	\$1700	\$1400
● Artwork	\$2000	\$2000
● Trays and Paktech	\$4000	\$4000
● Freight	\$200	\$3500

\$15400 \$17100

vs \$20000 for 22's

What we do



Craft Canning Overview

- Wild Goose MC 250
- 4 head filler, single head seamer
- 37-40 12's / minute = 100 cases / hour
- 33-35 16's / minute = 85 cases / hour
- 200,000 cans to figure out line

Filling + Purging

- Control bounce back to atmospheric by fiction
- Control fill level by time
- Changes with each beer, temp, Co2 level



Lidding

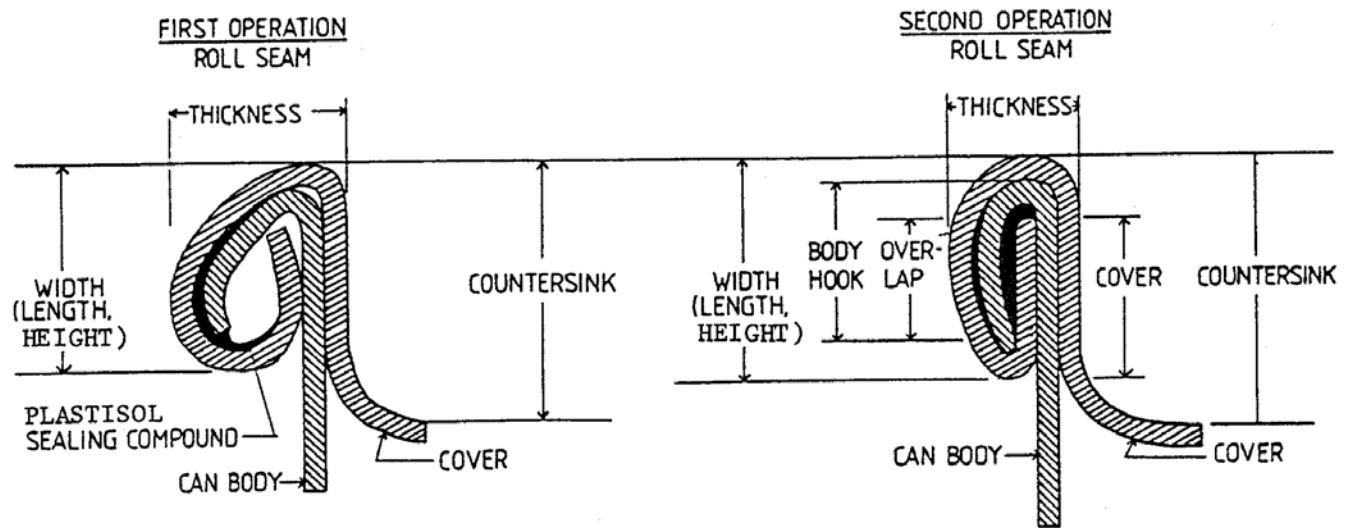
- Foam Scraper / decapitator
- Co2 brush
- Lid application
- Foam push under lid skate



Seaming

- Single head seamer, cam driven, has been very consistent
- Can is pushed on lift plate
- Lifted into Chuck
- Chuck spins the can
- First operation creates the overlap
- Second operation flattens the seam

Seaming



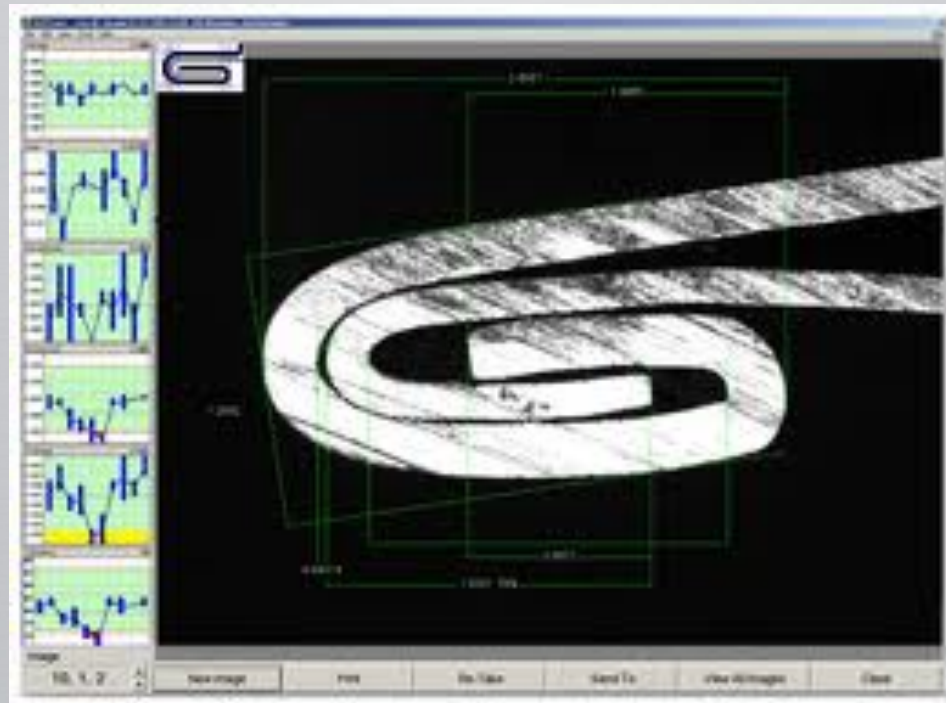
QC

- 3M luminometer
 - Has allowed us to dial in CIP, temp, times and amount of chemicals
 - Test ATP levels



QC

- CMC Kuhnke Seam inspection equipment
 - Identify problems
 - Keeps seamer in spec over time



QC

- Anton Paar OxyQC and Piercer
 - Real time measurements
 - Allows us to read the beer



Variables

- Machine limits – 36 degrees, 2.7 volumes of Co₂
- Cant push both variables at once
- The colder the product, the faster it runs and less loss.
- Machine wants to run between 2.35-2.6 volumes of Co₂

Loss Rates

- 5-8 gallons flushing line and dialing in machine
- 4-5 gallons per hour in foam push
- 95% of loss happens during first 20 minutes
- Unsellable rates for August/Sept
 - Canning – 1.56%
 - Bottling - .8%

Thank you

Jess Caudill and Greg Doss

Hopworks

Patrick, Bank of the Cascades

Grant Smith and Andrew Halladay

Questions

- Owen Lingley
- 503.505.4285
- owen@craftcanning.com