# CRAFT BREWERS CONFERENCE

& BrewExpo America®

## Draught System Maintenance



#CraftBrewersCon



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## **Discussion Topics**

- Key Components of a Draught System
- Maintenance techniques and frequency for each component
- Daily pass along
- Q&A
- Handout



## **Major Components**

- Walk-in Cooler
- Glycol Unit
- Direct draw draught Box
- Beer Lines
- Faucets
- FOB
- Kegs & Keg Couplers
- CO2 Lines Regulators
- Drip trays/Glass Rinsers
- Glass Washers
- Growler/Crowler equipment
- Pass Downs









#### Walk-In Cooler - Exterior and Door Gaskets

Frequency: Inspect Monthly and cleaned as needed

Avoid the use of abrasive cleaning solutions including those with chlorine. Instead, use a washcloth or a soft brush and a combination of warm water and vinegar.

The door gaskets are very important to your unit. Dirty gaskets can lead to damage that can cause cool air to leave your walk-in cooler, costing you money. Inspect all seals and wipe away any debris or build up with a damp soapy cloth. Replace any damaged gaskets immediately.







## **The Condenser Coil**

Frequency: Monthly

One of the most important components to your commercial walk-in cooler, your condenser coil, should be cleaned at least once per month. Your condenser coil releases heat. If dirty, grime or an obstruction covers the coil, it can't do its job and will eventually damage other parts of your unit.

Try using a wet-dry vac to clean the surface of your evaporator coil. You can clean the surface while also giving you the opportunity to blow out any dirt that may be stuck deep into the coils. Use a damp rag with soap to clean the exterior of the condenser coil.







# Simple Tools for maintenance Shop vacuum and appropriate brushes

DIY Coil Cleaner Recipe
Empty spray bottle
1 tsp vinegar
1 tsp rubbing alcohol
Warm water
Soft brush
A clean, dry cloth
Baking soda







#### Walk-in Cooler - The Drain Lines and Evaporator



Frequency: Monthly

For a commercial walk-in cooler, it's easy for excess dirt and grime to build up in your drainage pans and tubes. Cleaning them is as simple as wiping down the pan and pouring bleach water down the drain. If this is not done on a regular basis you could have plugged and smelly drains. The key here is to check for sludge build up regularly to prevent blockage. You should also have a "P" trap on that drain.



## Walk-in Cooler - The Drain Lines and Evaporator

If you are in and out of the cooler check for ice build up. Especially in humid regions. If you need to clear ice from the evaporator coils, turn of cooler and fans. Allowing coils to thaw. Do not use tools, this could cause catastrophic damage to the coils.





#### Anatomy of a walk-in cooler





#### **Glycol Systems**

Frequency: 1-3 months

Power packs are also refrigeration systems That need to be on a PM. There evaporators are submerged in the glycol.







#### **Glycol Systems**

Frequency – 3 months

Check the glycol levels, if needed top off the reservoir with food grade glycol.

The concentration of glycol should be checked with a hydrometer or refractometer



Hydrometer







#### **Directdraw /Reach in Box**

As with all refrigeration there are compressors and evaporator coils

These need to be on a preventative maintenance schedule (PM)

Many newer compressors pull out from the front of the unit and are easily cleaned







#### **Draught Beer Lines**



#### Frequency: Every Two Weeks

Beer Lines are the veins of any draught system. They must be cleaned! If cleaned every 2 week, per BA Draught Quality Guidelines, will provide your customers an optimal experience. Outside of beer lines in cold box should be wiped down as well

Trunk lines are difficult and expensive to replace so make sure you clean the lines routinely.



#### Faucets

During the routine two-week cleaning cycle, all rubber parts should be inspected when faucets are taken apart and cleaned. Replacement of questionable rubber pieces can save in beer and headaches.

As a nightly routine, it is suggested that the inside of faucets are rinsed. After being rinsed let the faucet air dry and don't use brushes or caps.







#### **FOB's - Foam on Beer Detectors**



FOB's are part of the beer delivery system and will be internally cleaned during the routine line cleaning procedures.

Bleed valves should be opened during the two week cleaning cycle. This helps to keep the valves clean and also lets cleaning fluid run thru the drain lines to keep them clean.

The external portion of FOBs need to be cleaned with a damp towel.

FOB's should be taken apart and detailed (cleaned) semi annually

#### **Kegs & Keg Couplers**



Frequency: As each keg is connected to the system

Inspect the gaskets on the sphere of the keg. Cracked or deeply worn gaskets may cause O2 ingress and CO2 leakage. Any suspect kegs should be returned to the manufacturer or keg repair facility for refurbishment.

#### DO NOT attempt to replace keg gaskets. Serious Injury and or DEATH can occur

Couplers should be inspected as each keg is connected. Worn gaskets should be replaced. It is not a bad idea to have spare couplers to change out if necessary. Collect all worn couplers and rebuild at one time.

### **CO2 lines and Regulators**

CO2 supply lines should be inspected to make sure that beer has not been put into the lines. Current practices use opaque/clear lines. This makes a visual inspection of the lines easier. When beer lines are cleaned there should not be any cleaner going into the CO2 lines, meaning they will not be cleaned during routine cleaning cycles.

If beer or cleaner are getting into the CO2 lines make sure that a (Thomas valve is in place on the coupler. Soiled gas line should be replaced







#### **Drip trays/Glass Rinsers**

Drip trays typically have small diameter drain lines. Very important to run hot water or a bleach solution down the drain nightly. If the grates are the right size they can be run through a dishwasher. Glass rinsers should be disassembled and cleaned underneath.







#### **Glass Washers**

No matter how you are cleaning glasses it is important to keep the equipment clean. Beer glasses should not be washed with food plates.

Triple dunk sinks should have the brushes cleaned nightly. Dump tubes and funnels need to be kept clean also.

If an automatic washer is being used there a spray arms and strainers that need to be cleaned nightly.

Chemicals need to be changed on routine bases. Test strips can aid in maintaining proper chemical levels.







#### **Growler/Crowler equipment**



As with all beer handling equipment growler/crowler equipment needs to be keep clean.

A proper way to store growler/crowler that is dust free. A way to rinse them before filling.

Tubes should have a way to be sanitized rinsed and stored.

Seamers should be wiped down nightly and lubricated. Seam checks should be done weekly.

Any automatic fillers should be maintained according to manufacturer specifications



#### **Pass Downs**

#### Daily

Pass down logs. Information shared can include incidents and any equipment problems. Should be reviewed at the beginning of each shift. Many POS systems have a function for such use. A simple logbook can be used also.







#### **Be Aware of Your Enviroment**

Daily

This is an example of improper placement. Nitrogen generator next to a grease trap





# THANK YOU!

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