

Demystifying Distillation

Distillation 101 for Dx5 users not on the operational floor, as well as an introduction to DISTILL x 5

SINCE MMXI
FIVE × 5TM
SOLUTIONS

Disclaimer

What is DISTILL x 5?

- DISTILL x 5 is an operations management software platform.
- DISTILL x 5 offers built-in tracking tools to keep tabs on inventory/product levels.
- DISTILL x 5 automatically populates Federal Reporting data based on actions entered.

Disclaimer

What ISN'T DISTILL x 5?

- DISTILL x 5 is not an accounting platform.
- DISTILL x 5 is not a POS (Point-of-Sale) system.
- DISTILL x 5 does not automatically remit Federal Reports for users.

Best Practices for Ensuring Accurate Reporting Data in Dx5

- Enter transactions into Dx5 the day they occur.
- Review Federal Report data in Dx5 early and often.
- Contact the Fx5 Support team as soon as a data discrepancy is noticed.

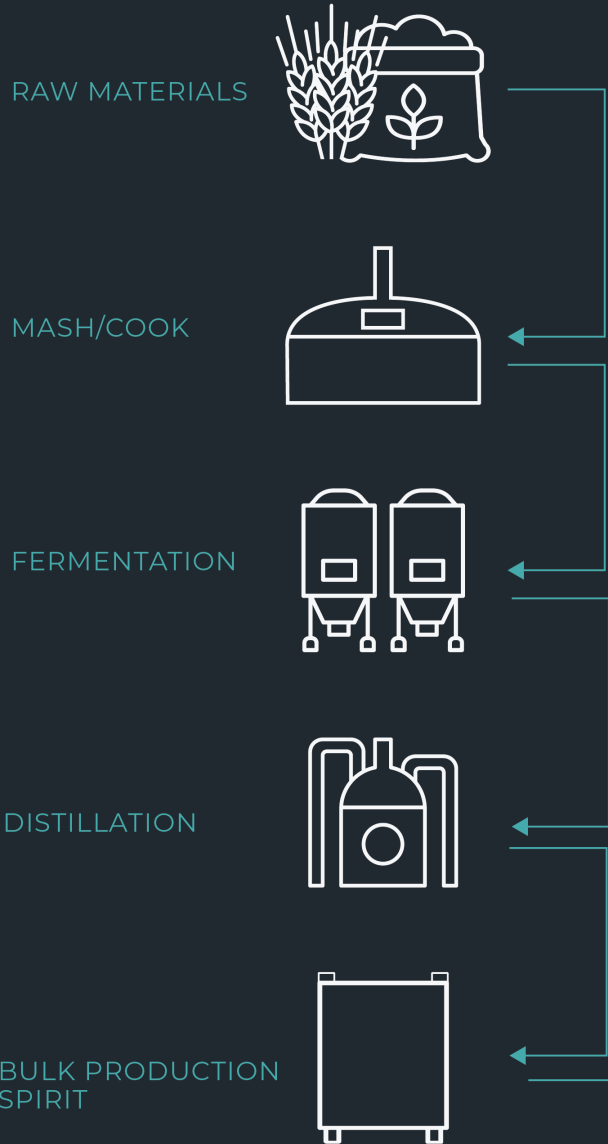
Basic Distillery Nomenclature

- **Raw Materials:** Wet or Dry ingredients added to liquid to produce product.
 - Examples: Botanicals, Flavorings, Enzymes
- **Fermentable Materials:** Wet or Dry ingredients used in the production of alcohol.
 - Examples: Grain, Beer/Cider/Wine, Yeast
 - Fermentable additions specifically tracked on Monthly Report of Production Operations (Part VI)

Basic Distillery Nomenclature

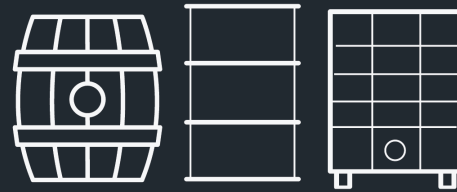
- **Supplies:** Inventory items used in packaging/bottling processes.
 - Examples: Bottles, Labels, Corks, Shrink Wrap, Boxes, etc.
- **Bulk Spirit:** Spirit held in totes/containers within a DSP account; considered bulk until barreled or bottled/packaged.
 - WIP (Work-In-Progress).
- **Barreled Spirit:** Spirit held in barrels/wooden cooperage.
 - Still considered WIP
- **Finished Product:** Spirit which has been bottled or packaged and will be sold.
 - Examples: 750mL bottle, 12 oz canned cocktail

PRODUCTION

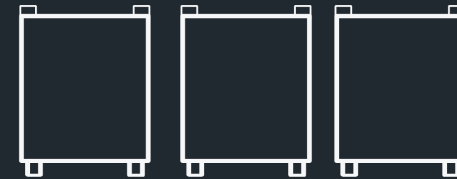


STORAGE

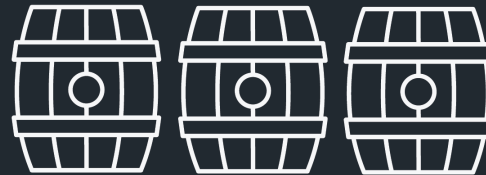
BULK SPIRIT:
TRANSFERS IN
BOND



BULK STORAGE
SPIRIT

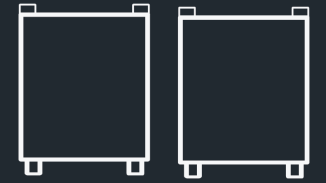


SPIRIT AGING

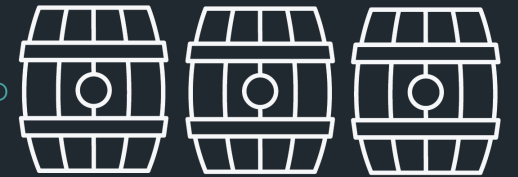


PROCESSING

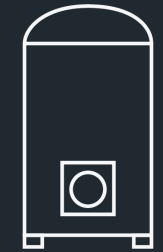
BULK
PROCESSING
SPIRIT



AUGMENTED
SPIRIT
AGING



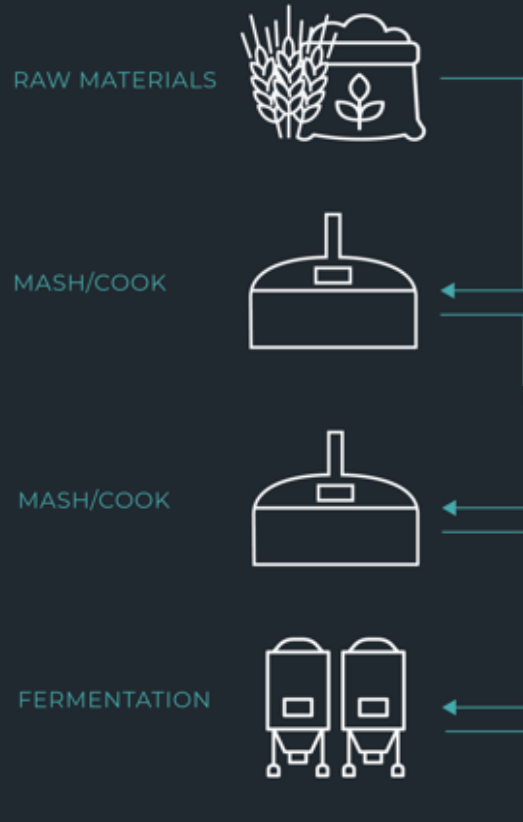
PROOFING,
BLENDING,
AND
BOTTLING



BOTTLED AND
PACKAGED
SPIRIT FOR
SALE

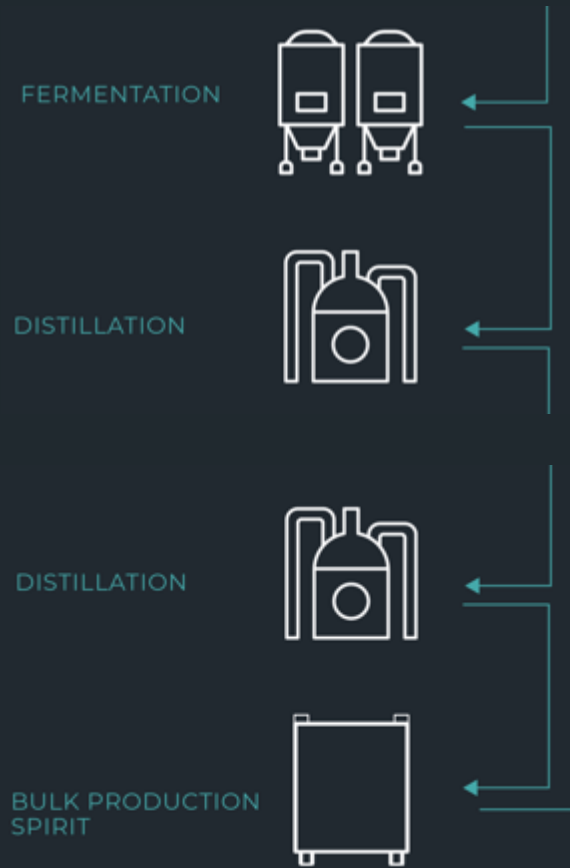


Production Account Operations



- Raw Material/Fermentable additions are made to water
- Water and materials will cook to create our “mash” (sugar water)
- When Mash/Cook is complete, the spent materials are removed and the sugar water is transferred to Fermentation.
- Yeast is pitched into the liquid to ferment.
- Sugar + Yeast = Alcohol!

Production Account Operations



- After Fermentation, liquid containing alcohol will be transferred into Distillation.
- Distillation = heating liquid containing alcohol to increase alcohol content by cooling the resulting vapors and collecting the condensed liquid.
- Liquid is collected from the still into the Bulk Production stage.
- Heads = highly concentrated ethanol. Not safe for human consumption.
- Hearts = the good stuff. Product is made with hearts collections.
- Tails = less potent/less flavorful liquid. Often discarded.

Storage Account Operations

BULK SPIRIT:
TRANSFERS IN
BOND



- Transfers In-Bond (receipts or outbound) should occur in the Storage account.

BULK STORAGE
SPIRIT



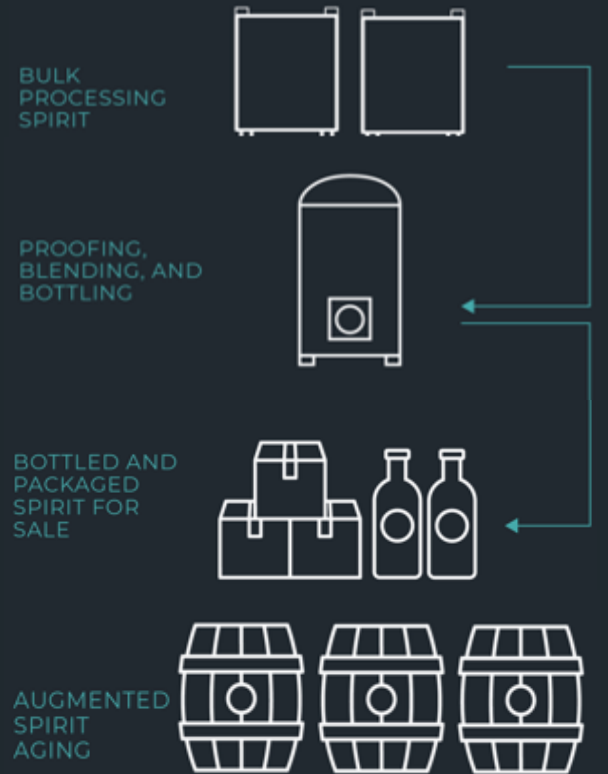
- Bulk Storage = long-term holding of unprocessed spirit in totes/containers.

SPIRIT AGING



- Storage Barrels = aging in wooden barrels/cooperage/"packages".

Processing Account Operations



- Bulk Processing = area/operational stage where spirit manipulation can occur.
- Examples: cuts to proof, mingling, flavoring.
- Bottling/Packaging will also occur in the Bulk Processing stage.
- Spirit can be held in Bulk Processing long-term, but it should be processed spirit. This goes for barrels in Processing as well.

Bottling

BOTTLED AND
PACKAGED
SPIRIT FOR
SALE



- Bottles must be placed in cases of the same kind, size and proof after bottling and kept within Bonded Promises.
- Remnant Case: if fewer bottles remain after a run than can fill a full case, they must be placed in a Remnant Case or be left uncased until they can be used to fill another partial case or replace accidental breakage.
- Fill Tests: after bottling, bottles should be tested for accuracy in stated fill volume and proof.

Bottling Nomenclature

- **Finished Product:** Bottled Spirit.
- **Bottling Proof:** proof stated on label of Finished Product.
 - **Cut To Bottling Proof:** water addition to bring current spirit alcohol content down to labeled proof.
- **Bonded Spirit:** spirit which resides within Bonded Premises and has not had Excise calculated against it yet.
- **ABV:** Alcohol By Volume. The higher the ethanol content of liquid, the higher the proof/ABV. $ABV \times 2 = \text{Proof}$ (Ex: 50% ABV = 100 Proof)

Proof Gallons vs Wine Gallons

- **Wine Gallon (WG):** Purely volumetric measurement (1 gal at any proof)
- **Proof Gallon (PG):** 1 Gallon of spirit at 100° proof (60°F)

$$1PG = 1WG * Proof / 100$$

- **50 gallons of spirit at 150° proof equals:**
 - 50 Wine Gallons
 - 75 Proof Gallons (50 * 1.5 = 75)

What Is Bond? (Baby, don't hurt me)

- **Bond:** simply an insurance agreement pledging surety (responsibility for paying a debt) in the event of financial loss.
 - Bonds for DSPs are required by the TTB to ensure the operation follows all laws and regulations involved with production/removal of distilled spirits, including paying any and all penalties and taxes due.
- Bottled Spirit must be held within Bonded Premises (physical location within distillery) until it is removed tax-determined. Bonded Premises **ARE** covered by surety.

What Are Bonded Premises?

- May be referred to as “Licensed Warehouse” or “Bonded Warehouse”.
- Bonded Premises = physical area within your distillery which houses all Finished Product on which Excise has NOT been calculated.
- Every bottle removed from Bonded Premises must have Excise calculated immediately and paid on schedule. Product can not remain on Bonded Premises once tax has been determined on its removal.
- Should never have a question of whether Excise has been paid on a product. Storage of product in a physical location (Bonded Premises vs Tax Paid area) should always guarantee product’s status.

What Constitutes a Tax Paid Area?

- Any area beyond the physical line in your distillery that represents Bonded Premises is considered a Tax Paid area.
- Examples include your Tasting Room, shipments to a Customer, product donated for a community cause, etc.
- Excise is calculated on product upon removal from Bonded Premises and paid on schedule; Tax Paid product is **not covered by surety.**

Hungry for more Dx5 Training Opportunities?

- **Dx5 Tax and Reporting Workshop:** every other Monday from 11am-12:30pm MT.
- **Dx5 Open System Walkthrough:** every Tuesday (3:00-4:30pm MT) and Thursday (9:30-11am MT).
- **Custom Training/Data Audit Services:** email support@fx5solutions.com for more details!