



ORCHESTRA

Creating and Processing
Production (Spirits)



Terms & Definitions

PdO (Production Order): A production order captures information such as which material is to be processed, at which location, at what time and how much work is required. It also defines which resources are to be used and how the order costs are to be settled.

Production orders are used to control production within a company and also to control cost accounting. They are spun off the BoM.

Worksheets: The worksheets in Orchestrated are centralized screens that provide information about what spirit is in what tank/warehouse, and which production orders have been created for that spirit. Using the various worksheets allows for a “one-stop” glance at where production is at, and the next steps that need to be completed.

Task: Plan out production by adding Production Orders and Process those utilizing Orchestrated worksheets. Learn to plan, express & capture variance.

Create Mash, Fermented Mash, Distillation & Bottle Aged Production Orders

1. Login to your OSpirits Training Database
2. Open up the PdO Creation Wizard (Production > Automation > PdO Creation Wizard)
3. In the PdO Creation Wizard table for Row 1, fill out the specifics to create Mash
 - a. Item Code: M1001 (Mash – American Whiskey)
 - b. Qty: 450 (this is based on your Bill of Materials - BoM)
 - c. ProdDate: Today
 - d. DueDate: Today
 - e. From Whs: A1 (where your raw materials are stored)
 - f. ToWhs: BH01
4. In the PdO Creation Wizard table for Row 2
 - a. Item Code: F1001
 - b. Qty: 450
 - c. ProdDate: Today
 - d. DueDate: 2 weeks from Today
 - e. FromWhs: BH01
 - f. ToWhs: Click on Magnifying glass to find Warehouses > Choose Fermenter 1 (FV01)
5. In the PdO Creation Wizard table for Row 3
 - a. Item Code: D1001



- b. Qty: 135 (Based on Distilled BoM which indicates .3 Gal of Distillate is received for every 1 Gal of
- c. Fermented Mash)
- d. ProdDate: 2 weeks from Today
- e. DueDate: Enter a due date that might be typical of your Distillation process
- f. FromWhs: Fermenter used as the 'ToWhs' in row above (FV01)
- g. ToWhs: Click on Magnifying glass to find Warehouses > Choose Holding Tank (HT01)
6. In the PdO Creation Wizard table for Row 4
 - a. Item Code: BA1001
 - b. Qty: 106 (we'll be filling 2 Barrels)
 - c. ProdDate: Enter a date for when Aging would begin after Distillation
 - d. DueDate: Enter 3 months from the ProdDate
 - e. FromWhs: Fermenter used as the 'ToWhs' in row above (HT01)
 - f. ToWhs: Click on Magnifying glass to find Warehouses > Choose Barrel Aging Warehouse (BA01)
7. Change the Set All Status To dropdown to 'Released'
8. Click Preview
9. Batch #: Enter the batch number you'd like assigned to this "run" and enter it for each Production Order
10. Click <Create> to add the Production Orders to OSpirits

Review Production Orders

1. Open the Production Order function (Production > Production Order)
2. Click the Previous Record green arrow in the top Toolbar to bring up the last PdO added
3. If you keep clicking the Previous Record green arrow, you can view the 4 PdOs you just created via the PdO Creation Wizard
 - a. These are carbon copies of the BoMs, just including specifics such as where will this be made, what date/time and how much is planned.
4. Close out of the Production Order function

Express Mash Production Orders

1. Open the Cooking Worksheet (Production > Production Forms > Cooking Worksheet)
2. Check that the Top of the sheet has the correct information
 - a. Mash tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'
 - d. Start Date & End Dates are set to capture the dates assigned to your Mash PdOs
3. Under the Production Orders table, click to highlight the Mash PdO you are ready to process (you can tell by the Batch # and/or date)



- a. Production Procedures from the BoM are listed in the right-hand column & Production Order Lines are located down in the bottom table (what is being consumed)
4. Click <Express>
5. The Upper section contains information on what you're making (receiving in to inventory)
6. The Lower section contains information on what you're using up (issuing out of inventory)
7. In the Upper section
 - a. Fill out Receive Qty: 450 (how much mash you're receiving)
 - b. Fill out Initials: enter yours
8. In the Lower Section:
 - a. Fill out ActQty (Right-hand Column): This is where you'll specify EXACTLY how much of each material was used up, and from which batch. This will auto-populate for you, but you can edit to make sure what was used in real-life is captured here.
 - b. Change the ActQty of Distiller's Malt to another batch
9. Click <Process>
10. Back on the Cooking Worksheet:
 - a. Notice there are now 2 checkmarks next to the Mash PdO you just processed. This indicates the Mash has been expressed.

Express Fermented Mash Production Orders

1. Open the Stillhouse Worksheet (Production > Production Forms > Stillhouse Worksheet)
2. Check that the Top of the sheet has the correct information
 - a. Fermented Mash tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'
 - d. Start Date & End Dates are set to capture the dates assigned to your Fermented Mash PdOs
3. Review the Current Tank Status Table
 - a. Shows your Fermentation vessels and if liquid is currently being held there
4. Under the Current Production Orders table, click to highlight the Fermented Mash PdO you are ready to process (you can tell by the Batch # and/or date)
- b. Production Order Lines are located down in the bottom table (what is being consumed)
5. Click <Express>
6. The Upper section contains information on what you're making (receiving into inventory)
7. The Lower section contains information on what you're using up (issuing out of inventory)
8. In the Upper section
 - a. Fill out Receive Qty: 450 (how much fermented mash you're receiving)
 - b. Fill out Initials: enter yours
9. In the Lower Section:
 - a. Check the ActQty (Right-hand Column): If you emptied the tank, leave the ActQty as is – using up the full in-stock amount.
10. Click <Process>
11. Back on the Stillhouse Worksheet:



- a. Notice there are now 2 checkmarks next to the Fermented Mash PdO you just processed. This indicates the Fermented Mash has been expressed.
- b. Check the Current Tank Status table to verify your Fermented Mash is now in FV01

Express Distillation Production Orders

1. Open the Stillhouse Worksheet (Production > Production Forms > Stillhouse Worksheet)
2. Check that the Top of the sheet has the correct information
 - a. Stillhouse tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'
 - d. Start Date & End Dates are set to capture the dates assigned to your Distilled PdOs
3. Review the Current Tank Status Table
 - a. Shows your vessels and if liquid is currently being held there
4. Under the Current Production Orders table, click to highlight the Distilled PdO you are ready to process (you can tell by the Batch # and/or date)
 - a. Production Order Lines are located down in the bottom table (what is being consumed)
5. Click <Express>
6. The Upper section contains information on what you're making (receiving in to inventory)
7. The Lower section contains information on what you're using up (issuing out of inventory)
8. In the Upper section
 - a. Fill out Receive Qty: 135 (how much distillate you're receiving)
 - b. Fill out Proof: Enter 140
 - c. Fill out Initials: Enter yours
9. In the Lower Section:
 - a. Check the ActQty (Right-hand Column): If you emptied the tank, leave the ActQty as is – using up the full in-stock amount.
10. Click <Process>
11. Back on the Stillhouse Worksheet:
 - a. Notice there are now 2 checkmarks next to the Distilled PdO you just processed. This indicates the Distillate has been expressed.
12. Check the Current Tank Status table to verify your Distillate is now in HT01

Express Barrel Aging Production Orders

1. Open the Barrel Management Console (Production > Production Forms > Barrel Management Console)
2. Check that the Top of the sheet has the correct information
 - a. Home tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'



- d. Start Date & End Dates are set to capture the dates assigned to your Barrel Aged PdOs
3. Under the Production Orders table, click to highlight the Barrel Aged PdO you are ready to process (you can tell by the Batch # and/or date)
4. Click <Fill Barrels>
5. The Upper section contains information on what you're making (receiving into inventory)
6. The Lower section contains information on what you're using up (issuing out of inventory)
7. In the Upper section
 - a. Fill out Receive Qty: 106 (how much Barrel Aged liquid you're receiving)
 - b. Fill out Proof: Enter 140
 - c. Fill out Initials: Enter yours
8. In the Lower Section:
9. Activate the Barrel Selection tab
 - a. Choose the Barrels you will be filling
 - b. Click <Search> opens a list of available barrels to fill
 - c. Hold Ctrl on your keyboard and highlight the rows for ORC-8 & ORC-9
 - d. These Barrels are Non-Honeycomb, used barrels that are currently empty
 - e. Click <Select>
 - f. Ensure the total 'Fill Volume' matches the 'Receive Qty' from the upper section. (i.e.. if a barrel is only partially filled, update the Fill Volume column to reflect that)
10. Activate the Barrel Matching tab
 - a. Choose the barrel item that will be created once the PdO has been processed (we will be taking 2 empty barrels and filling them)
 - b. Click the Created Barrel dropdown
 - c. Choose 'Filled – Barrels 53-Gal #3 Char White Oak'
11. Activate the PdO Lines tab
 - a. Verify the component/material that will be issued from stock to fill the barrels
 - b. You should not have to make edits on this screen, as you've already assigned everything
12. Click <Process>
13. Review the Barrel Edit screen
 - a. Review the Barrel ID, the Status, the Contents and the new Batch #
14. Click <Submit>
15. Back on the Barrel Management Console:
 - a. Notice there are now 2 checkmarks next to the Barrel Aged PdO you just processed. This indicates the Barrel Aged Liquid has been expressed and is now sitting in Barrels.
16. Activate the Management tab
 - a. Search for the Batch ID of the Barrels you just filled
 - b. Double-Click the Column Header to sort
 - c. Highlight one of Barrel rows
 - d. Click <Show History>
 - e. Gives you history for that particular Barrel
17. Close Barrel Management Console



Create Blended & Bottle Proof Production Orders

1. Open up the PdO Creation Wizard (Production > Automation > PdO Creation Wizard)
2. In the PdO Creation Wizard table for Row 1, fill out the specifics to create Blended – American Whiskey
 - a. Item Code: BL1001 (Blended – American Whiskey)
 - b. Qty: 106
 - c. ProdDate: A date 3 months in the future (when Barrel-Aging is complete)
 - d. DueDate: 1 day after the ProdDate
 - e. From Whs: BA01
 - f. ToWhs: HT01
3. In the PdO Creation Wizard table for Row 2
 - g. Item Code: BP1001 (Bottle Proof – American Whiskey)
 - h. Qty: 300
 - i. ProdDate: The same date as the Blended Due Date
 - j. DueDate: 2 days after the ProdDate
 - k. FromWhs: HT01
 - l. ToWhs: Click on Magnifying glass to find Warehouses > Choose Holding Tank 1 (HT01)
4. Change the Set All Status To dropdown to 'Released'
5. Click <Preview>
6. Batch #: Enter the batch number you'd like assigned to this "run" and enter it for each Production Order
7. Click <Create> to add the Production Orders to Orchestrated

Express Blended Production Orders

2. Open the Barrel Management Console (Production > Production Forms > Barrel Management Console)
3. Check that the Top of the sheet has the correct information
 - a. Home tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'
 - d. Start Date & End Dates are set to capture the dates assigned to your Blended PdOs
4. Under the Production Orders table > click to highlight the Blended PdO you are ready to process (you can tell by the Batch # and/or date)
5. Click <Tip Barrels> (aka Dump Barrels)
6. The Upper section contains information on what you're making (receiving into inventory)
7. The Lower section contains information on what you're using up (issuing out of inventory)
8. In the Upper section
 - a. Fill out Receive Qty: 106 (how much Blended liquid you're receiving)
 - b. Fill out Proof: Enter 140



- c. Fill out Initials: Enter yours
- d. In the Lower Section
 - e. Activate the Barrel Selection tab
 - f. Select the Barrels you will be dumping/tipping
 - g. Click <Search> (opens a list of available barrels to fill)
 - h. Hold Ctrl on your keyboard and highlight the rows for ORC-8 & ORC-9
 - i. You can search by Batch Number or Fill Date to narrow down which Barrels you're looking for
 - i. Click <Select>
9. Activate the Barrel Matching tab
- a. Choose the barrel item that will be created once the PdO has been processed (we will be taking 2 filled barrels and emptying them)
 - b. Click the Created Barrel dropdown
 - c. Choose 'Empty – Barrels 53-Gal #3 Char White Oak'
10. Activate the PdO Lines tab
 - a. Verify the component/material that will be issued from stock to fill the barrels
 - b. The ActQty column should have the correct batch of barrel-aged liquid pre-selected
 - c. You should not have to make edits on this screen, as you've already assigned everything
11. Click <Process>
12. Review the Barrel Edit screen
 - a. Review the Barrel ID, the Status, the Contents and the new Batch #
13. Click <Submit>
14. Back on the Barrel Management Console:
 - a. Notice there are now 2 checkmarks next to the Blended PdO you just processed. This indicates the Blended liquid has been expressed and is now sitting in HT01.
15. Close Barrel Management Console

Express Bottle Proof Production Orders

1. Open the Stillhouse Worksheet (Production > Production Forms > Stillhouse Worksheet)
2. Check that the Top of the sheet has the correct information
 - a. Stillhouse tab is activated
 - b. Location is correct (Distillery #1)
 - c. Status set to 'Released'
 - d. Start Date & End Dates are set to capture the dates assigned to your Bottle Proof PdOs
3. Review the Current Tank Status Table
 - a. Shows your vessels and if liquid is currently being held there
4. Under the Current Production Orders table > click to highlight the Bottle Proof PdO you are ready to process (you can tell by the Batch # and/or date)
- a. Production Order Lines are located down in the bottom table (what is being consumed)
5. Click <Express>
6. The Upper section contains information on what you're making (receiving into inventory)



7. The Lower section contains information on what you're using up (issuing out of inventory)
8. In the Upper section
 - a. Fill out Receive Qty: 295 (how much distillate you're receiving)
 - b. Fill out Proof: Enter a typical proof you might see
 - c. Fill out Initials: Enter yours
9. In the Lower Section:
 - a. Check the ActQty (Right-hand Column): If you emptied the tank, leave the ActQty as is – using up the full in-stock amount.
10. Click <Process>
11. Back on the Stillhouse Worksheet:
 - a. Notice there are now 2 checkmarks next to the Bottle Proof PdO you just processed. This indicates the Bottle Proof has been expressed.
12. Check the 'Current Tank Status' table to verify your Bottle Proof is now in HT01

Close Production Orders

1. Open PdO Close Wizard (Production > Automation > PdO Close Wizard)
2. Change the Status dropdown to Received (indicates you've received the product already, and the PdO can be closed)
3. Sort by Prod Date or Batch to find the recent Production Orders you've created for American Whiskey (there should be 6 PdOs)
4. Checkoff all 6 PdOs
5. Click <Close> <Yes>
6. Closing the Production Orders allows for the cost of producing items to be finalized and any variance to be posted to a Production Variance account. This step is crucial, so the cost of items is properly adjusted to reflect what it actually cost you to make each item.

You have now created Production Orders for Mash, Fermented Mash, Distilled, Barrel Aged, Blended, Bottle Proofed liquid. You've learned how to Express those to create your product and move the liquid from stage to stage. You've also learned how to efficiently close your Production Orders. Great job!

