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This Excel workbook is designed to provide producers with helpful financial and processing information to support decisions about starting or expanding a bottled milk value-added dairy operation. This tool is intended to be used for investment planning considerations and should not be used for a day-to-day processing guideline.

Information needed to use the decision support tool:

- **Milk production and milk quality:** Yearly average herd size (not including youngstock and bulls), average production per cow per day, average fat and protein percentages, percentage of your raw milk you want to process.
- **Products and packaging:** Expected product percentages (such as whole, 2%, skim, etc.), packaging percentages (such as quarts, pints, gallons), and desired product sale price.
- **Costs:** Anticipated number of processing employees, hourly wage, hours worked per week, building facility costs, average utilities and other costs per year, current cost of production in CWT (if known), current mailbox milk price in CWT (if known), loan information (if available).
- **Equipment:** Desired or anticipated equipment (if you have quotes, use those).

To use this workbook, please follow the steps below. For more detailed instructions and screen captures, reference the subsequent pages.

1. Make sure you enable external content/macros in Microsoft Excel.
2. Click the “**Start**” button at the bottom of the “Instructions” sheet to bring you to the orange “Inputs” sheet.
3. Fill in the gray-shaded cells – use or adjust the pre-filled data.
4. Use the “**Next**” buttons to navigate through the green sheets: “Outputs,” “Suggested Equipment,” and “Equipment List.”
5. Reference the personalized results and suggestions generated from your farm’s data.

The gray cells contain benchmark values generated from a comprehensive survey of Tennessee value-added dairies. These values can be modified to better fit your operation.

Note about security and usability: This file contains macros for navigation, calculations, and printing, which are essential for the tool to function properly. Microsoft Office may display warnings about enabling macros. Be sure to enable the macros in this file for functionality.

Note about “Can’t Autosave” warning: Click “Save As” and save the file with the auto populated file type (macro-enabled workbook [i.e. .xlsm]) on your computer.

Note for Mac users: This file contains macro-objects (pop-up windows) that may not work.

If you would like more information or have questions about this tool or the Southeast Dairy Business Innovation Initiative (SDBII), please reference www.sdbii.tennessee.edu or contact Liz Eckelkamp, University of Tennessee Extension, at eeckelka@utk.edu or at (865)-974-8167.

Getting Started

Below are guidelines on how each page should be used, including definitions and screen captures of each page.

Instructions Sheet

- This worksheet provides a general overview of the document, brief materials needed, a quick “how-to” with instructions on navigating the tool, and materials needed to utilize the tool correctly.
- You will see three black buttons towards the bottom of the Instructions sheet.
 1. **“Reset”** button: Reset the values to the default values provided.
 2. **“Clear”** button: Clear the data from the cells.
 3. **“Start”** button: Begin the tool by directing you to the “Inputs” sheet.
- When you are ready to begin, click the **“Start”** button.



Value-Added Dairy Processing Decision Making Tool: Bottled Milk



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This Excel workbook is designed to provide producers with financial and processing information to support decisions about starting or expanding a bottled milk value-added dairy operation. This tool is intended to be used for investment planning considerations, and should not be used for a day to day processing guideline.

Information you'll need to fill out the tool:
Milk Production and Milk Quality
Milk Costs and Packaging
Costs and Pricing
Equipment

How to Use this Workbook

1. Make sure you enable external content/macros.
2. Click the start button below to bring you to the orange "Inputs" tab.
3. Fill in the grey-shaded cells - use or adjust to the pre-filled data
4. Use the next and see buttons to navigate through the green tabs: Outputs, Suggested Equipment, and Equipment List
5. Reference the personalized results and suggestions generated from your farm's data

*Outputs require bottling 7 days per week
*For explanations of the specific reference sheets, refer to the sheet or reference the user guide.

The grey cells contain averages or benchmarks from a comprehensive survey of Tennessee value-added dairies. These can be modified to better fit your operation.

To reset the Inputs screen's values back to the default, press the reset button.

Reset

To clear the Inputs screen's values, press the clear button.

Clear

For questions about this tool or the Southeast Dairy Business Innovation Initiative (SDBII) please reference www.sdbii.tennessee.edu or contact:
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Step 1: Begin

Start

Step 1: Begin

Inputs Sheet

- This worksheet is where you will enter all data associated with your farm and future processing facility into the gray cells.
- If you are unsure of what values to input, you can use the default values provided based on prior UTIA research.
- The black buttons will help you calculate values to enter into the gray cells or direct you to the next step.

The gray cells have data entered that can be used or adjusted to better fit your operation. The pre-populated data consists of averages or benchmarks provided by a comprehensive survey of Tennessee value-added dairies.

Herd and Milk Production Related Information		Assumptions
Herd Size - All Cows	300	
Average production per animal per day	80	
Average fat%	4.05%	
Average protein %	3.80%	
How many months do you milk each year	12	
What percentage of your herd do you intend to process milk from?	20%	
How long do you intend to process milk (years)?	20	

Step 2: Fill in Gray Cells

Desired Products (in %)	
Standardized Whole Milk	25%
Standardized Reduced Fat Milk	0%
Standardized Lowfat Milk	0%
Standardized Skim Milk	25%
Creamline Milk (non-standardized & non-homogenized)	50%
Total Non-Standardized Product	50%
Total Standardized Product	50%

All your raw product has been used
You will need a Separator and Homogenizer

Desired Serving Sizes (in %)	
Gallons	25%
Half Gallons	25%
Quarts	25%
Pints	25%
Total	100%

Step 3: Determine Labor Cost

Help me calculate my labor cost!

Labor Cost in CWT	
Cost to Build Facility	\$ 657.00
Annual Utilities Costs: electric, water, sewage, gas	\$ 40,438.00
Annual Other Costs: trash, packaging, cleaning, processing, other	\$ 61,899.00
Cost to Produce Raw Milk (in CWT)	\$ 25.68

Revenue Streams	
Mailbox Milk Price (in CWT)	\$ 23.23
Desired Price for Gallons	\$ 5.16
Desired Price for Half Gallons	\$ 4.96
Desired Price for Quarts	\$ 2.85
Desired Price for Pints	\$ 1.64

Suggested Price Adjustments based on Retail Market Values (August 2025)

Gallons	3.966%
Half Gallons	100.000%
Quarts	-42.519%
Pints	-66.891%

Employee Cost Determining Pop-up Windows

- When you get to Cell B35 (Labor Cost in CWT), click **"Help me calculate my labor cost!"** This will initiate a pop-up window (see below).
- To begin, click **"Add"**, and the Employee Details screen will pop up. This is where you will enter the name (if desired), the hourly wage, and the hours worked per week.

Step 3A: Add

Labor Cost per CWT Calculation

Add Return to Inputs

Employee	Name	Hourly Wage (\$)	Hours per Week
0	Test Employee	\$-	0

Employee Details

Save Close

Employee ID 1

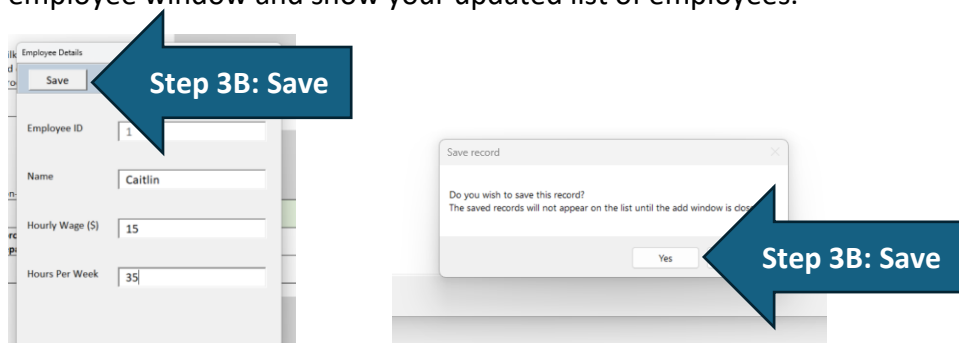
Name

Hourly Wage (\$)

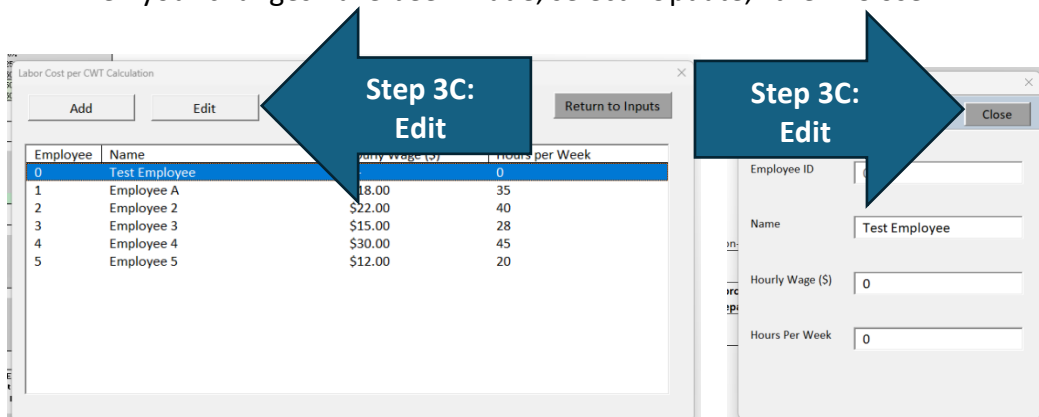
Hours Per Week

User Guide for the Bottled Milk Decision Tool

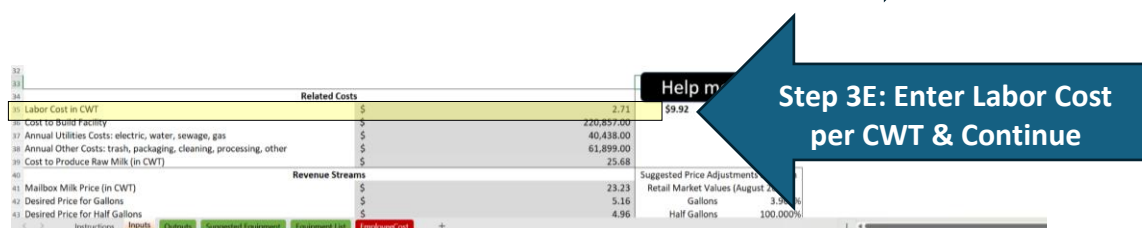
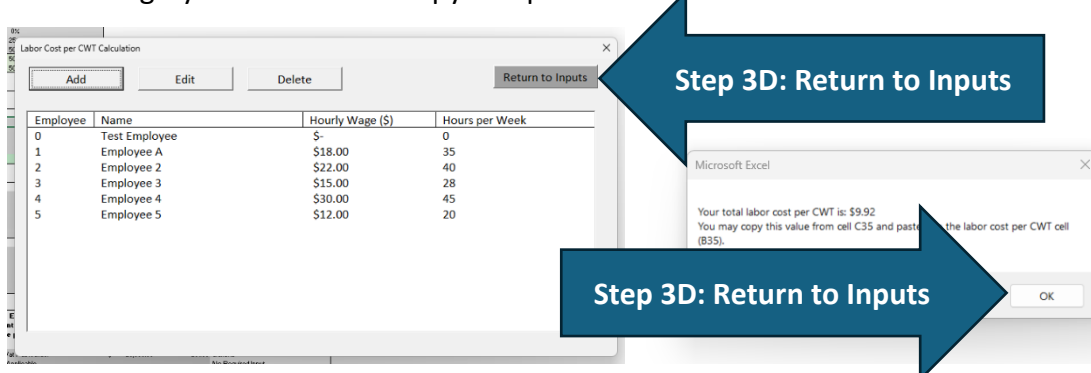
- Once you are ready to save the employee information, click “Save.” Then, accept the change with the “Save record” pop-up window.
- When you have finished adding employees, click close. This will return you to the main employee window and show your updated list of employees.



- If you need to update an employee on the list, select the employee, then select “Edit.” When your changes have been made, select “Update,” then “Close.”



- When ready, select “Return to Inputs.” This will initiate a pop-up window that will show your labor cost per CWT. This number will be entered into cell C35, the cell to the right of the gray labor cost cell. Copy and paste this cell into the labor cost cell.



User Guide for the Bottled Milk Decision Tool

- Under *Major Bottling Equipment Pieces*, you can select which equipment you would like to use according to the dropdown menu. The price and capacity will be entered for all except the “Quoted” equipment options, which you will be required to enter.

Major Bottling Equipment Pieces: Entered into 'Your Choice Equipment List'

*Please Select your desired equipment from the dropdown list. If you do not want an equipment item, select "Not Applicable". If you have a quoted price for equipment, select "Quoted" and enter the price, capacity, and units of capacity.

	Price	Capacity #	Capacity Units to Enter in "Capacity #"
Pasteurizers (Vat)			
In-Line Pasteurizer (HTST)			
Separator			
Homogenizer			
Bottler			
Quoted Vat Pasteurizer	28,000.00	201.00	Gallons
ANCO Equipment (200 gal. capacity)			No Required Input
ANCO Equipment (300 gal. capacity)	56,500.00	300.00	Liters per hour (L/h)
ANCO Equipment (400 gal. capacity)	10,000.00	300.00	Liters per hour (L/h)
ANCO Equipment (500 gal. capacity)			
ANCO Equipment (600 gal. capacity)	36,000.00	30.00	Gallons per hour (GPH)
ANCO Equipment (800 gal. capacity)			
ANCO Equipment (1000 gal. capacity)			
ANCO Equipment (1200 gal. capacity)			
ANCO Equipment (1500 gal. capacity)			
ANCO Equipment (2000 gal. capacity)			
Quoted Vat Pasteurizer			
Not Applicable			
cost for vat:			
Bulk Tank	\$ 5,000.00		
Holding Tank/Mixing Tank	\$ 3,800.00		
Clean Out of Place System	\$ 9,700.00		
Chiller	\$ 12,000.00		
Chart Recorder	\$ 2,100.00		
Refridgerator System	\$ 9,000.00		
Date Sprayer	\$ 5,800.00		
Labeler	\$ 23,400.00		
Antibiotic Testing System	\$ 5,500.00		
Cooling Unit	\$ 6,600.00		
Water Heater	\$ 7,200.00		

Step 4: Select Equipment

- When you are ready to proceed, you will select “**Next Page**” which will bring you to the outputs page where you can view your projected enterprise data.

Other Equipment 1	
Other Equipment 2	
Other Equipment 3	
Other Equipment 4	
Other Equipment 5	
Other Equipment 6	
Other Equipment 7	
Other Equipment 8	
Other Equipment 9	
Other Equipment 10	

Debt Financing	
Interest Rate	8.50%
Duration of Loan (years)	20
Down Payment Percent	20.0%
Amount to Finance of Construction and Equipment?	80%

To reset the Inputs screen's values back to the default, press the reset button.

Reset

To clear the Inputs screen's values, press the clear button.

Clear

Once done entering data, click the next page button

Next Page

Step 5: View Results

Step 5: View Results

User Guide for the Bottled Milk Decision Tool

Outputs Sheet

- This worksheet provides you with an overview of the projected processing outputs based on the tool inputs. You will be able to view the milk types and quantities you selected, additional skim or cream that will be left over from bottling, and the quantity of bottled milk you will have in various packaging based on your selection.
- Various equipment selections will be provided for your use and the tool will show you the equipment pieces within each equipment option that limit your ability to grow your operation's production capacity.
- A final statement will show you additional product revenue sources and a general overview of the operation.
- To see a detailed list of the equipment with suggestions, click **"See 'Suggested Equipment'"** and **"See 'Equipment List'"**.
- Make sure to export your personalized report as a PDF via the **"Export to PDF"** button. This button will allow you to choose a file name and location to save the file.
- When you have finished using the tool, or if you want to return to the beginning to re-run the tool under different scenarios, click **"Return to 'Instructions'"**.

This 'Outputs' sheet shows how much of each milk type you can produce and your potential to grow processing capacity based on equipment package option. It calculates how many pounds of milk you need to process daily to meet your selected processing percentages.

Milk Type and Quantity Amounts: *Values are presented per day			
Milk Type	Gallons/Day	Liters/Day	Percent of Actual Raw Milk Used
Whole Milk	102.94	27.19	22%
Reduced Fat Milk	0.00	0.00	0%
Lowfat Milk	0.00	0.00	0%
Skim Milk	116.76	30.84	25%
Creamline Milk	233.51	61.69	50%
Unused Product to be Bottled			
Cream	13.82	3.65	
Skim	0.00	0.00	
Quantity			
Number of Gallons:	113		
Number of Half Gallons:	226		
Number of Quarts:	453		
Number of Pints:	906		
Extra Pints:	5		

Growth Capacity - Based on Highest Capacity Used					
	Capacity Utilized	Can Grow APD By	Can Add Extra Animals	Production Limiting Equipment	Max Lbs to Produce Per Day Percent of Herd's Milk Used
Your Choice	65%	0.00	0.00	Quoted Bottler	6192 65%
Most Efficient	1%	0.00	0.00	Tetra Pak 250 (Max. 7,000 L/h)	381676 1%
Most Economical	39%	0.00	0.00	MicroDairy Designs (99 gal. capacity)	10217 39%
Basic Pasteurizer and Bottle	19%	0.00	0.00	ANCO Equipment (200 gal. capacity)	20640 19%

To process 20% of your herd's milk, you need to process 4,016 pounds per day. Based on your desired production, you will have 5 extra pints of bottled milk, and 13.82 gallons of unused cream that could be bottled into 27 quarts and 56 pints. Bottling this leftover cream will provide an additional \$174,902.88 if pints were sold at average market price of \$5.05 and quarts at \$7.27.

Steps 6 & 7: See Equipment

See 'Suggested Equipment'

See 'Equipment List'

Steps 6 & 7: See Equipment Options

Export to PDF

Click the button below to return to the instructions

Return to 'Instructions'

Make sure to export to PDF

Instructions Inputs Outputs Suggested Equipment Equipment List Employee Cost

Suggested Equipment Sheet

This worksheet provides various equipment combination suggestions. Each equipment combination has been defined below:

- **Your Choice Equipment:** This contains the equipment you selected on the inputs sheet.
- **Most Efficient Suggestion:** This contains the equipment combination that yields the fastest processing of one day's worth of milk.
- **Most Economical Suggestion:** This contains the lowest cost equipment, while still requiring processing less than 10 hours per day, 7 days per week.
- **Basic Pasteurizer/Bottler Suggestion:** This option is most considered by first time bottlers, as it does not require a separator or homogenizer. This will produce full-fat creamline milk.

Each equipment suggestion listed above reports various economic outputs designed to inform grant applications and loan financiers. These outputs included:

- **Years to Break Even:** Number of years it will take to overcome the initial investment cost and begin to return a profit (known as payback period in SDBII grants).
- **Net Present Value:** The total value of the investment over time; how much more you would earn bottling milk versus not bottling.
- **Internal Rate of Return:** How fast your money is expected to grow with the investment in a bottled milk operation.
- **Total Costs:** Total cost of all equipment.
- **Total Time:** Total time required to process one day's worth of raw milk.

This 'Suggested Equipment' sheet compares four equipment packages: your choice list from the inputs sheet, the most efficient combination, the most economical combination, and a basic pasteurizer and bottler combination. For each, it shows total cost, processing time (not including cleanup time), payback period (years to breakeven), net present value (NPV), and internal rate of return (IRR). Payback period represents the number of years it will take to overcome the initial investment cost and begin to return a profit. Net present value represents the total value of your investment over time, in other words, how much more you would earn compared to the alternative (not processing). Internal rate of return tells you how fast your money is expected to grow with the investment in a bottled milk operation. Lower payback period and larger net present values and internal rate of returns are best.

****Total Time does not include cleanup time**** *****Anything over 100% capacity utilized, means you have used more than your equipment can handle**

Your Choice Equipment List	Equipment Description	Equipment Cost	Time Required	Capacity Utilized	Extra Capacity	Extra Capacity
Pasteurizers (vat)	Quoted Vat Pasteurizer	\$ 28,000.00	0 days, 4 hours, 38 minutes and 49 seconds	23.36%	56 lbs/day	209 cows
In-Line Pasteurizer	Not Applicable		0 days, 0 hours, 0 minutes and 0 seconds	0.00%	0 lbs/day	0 cows
Separator	Quoted Separator	\$ 56,500.00	0 days, 5 hours, 53 minutes and 35 seconds	24.53%	41 lbs/day	154 cows
Homogenizer	Quoted Homogenizer	\$ 10,000.00	0 days, 5 hours, 53 minutes and 35 seconds	24.53%	41 lbs/day	154 cows
Bottler	Quoted Bottler	\$ 35,000.00	0 days, 15 hours, 34 minutes and 3 seconds	64.87%	7 lbs/day	27 cows
Total Cost		\$ 130,500				
Added Cost from Equipment Selected on inputs Page		\$ 90,100				
Total Time	1 day, 8 hours, 0 minutes and 2 seconds					
	Years to Break Even:		0.83			
	Net Present Value	\$	3,889,251			
	Internal Rate of Return		135%			

Most Efficient	Equipment Suggestion	Equipment Cost	Time Required	Capacity Utilized	Extra Capacity	Extra Capacity
Pasteurizer	In-line Pasteurizer 3500 gal/hr	\$ 120,000.00	0 days, 0 hours, 8 minutes and 0 seconds	0.00%	2395 lbs/day	8980 cows
Separator	Tetra Pak H10 Hot Milk (Max. Capacity 75,000 L/h)	\$ 160,000.00	0 days, 0 hours, 1 minutes and 25 seconds	0.10%	13618 lbs/day	51067 cows
Homogenizer	Tetra Pak 250 (Max. 2,000 L/h)	\$ 152,040.00	0 days, 0 hours, 13 minutes and 9 seconds	1.05%	1239 lbs/day	4720 cows
Bottler	Federal 309 Gravity Filler (Max. Capacity for 1 gal)	\$ 600,000.00	0 days, 0 hours, 3 minutes and 54 seconds	0.27%	4940 lbs/day	18525 cows
Total Cost		\$ 1,032,040				
Added Cost from Equipment Selected on inputs Page		\$ 90,100				
Total Time	0 day, 0 hours, 28 minutes and 28 seconds					
	Years to Break Even:		2.81			
	Net Present Value	\$	2,987,111			
	Internal Rate of Return		44%			

Most Economical	Equipment Suggestion	Equipment Cost	Time Required	Capacity Utilized	Extra Capacity	Extra Capacity
Pasteurizer	MicroDairy Designs (99 gal. capacity)	\$ 18,000.00	0 days, 9 hours, 28 minutes and 6 seconds	39.31%	21 lbs/day	78 cows
Separator	Tetra Pak H10 Hot Milk (Avg. Capacity 41,000 L/h)	\$ 160,000.00	0 days, 0 hours, 2 minutes and 35 seconds	0.18%	7418 lbs/day	27894 cows
Homogenizer	Tetra Pak 250 (Avg. 5,250 L/h)	\$ 152,040.00	0 days, 0 hours, 20 minutes and 12 seconds	1.40%	941 lbs/day	3528 cows
Bottler	Federal 309 Gravity Filler (Min. Capacity for 1 gal)	\$ 600,000.00	0 days, 0 hours, 4 minutes and 27 seconds	0.33%	4323 lbs/day	16264 cows
Total Cost		\$ 930,040				
Added Cost from Equipment Selected on inputs Page		\$ 90,100				
Total Time	0 day, 9 hours, 53 minutes and 28 seconds					
	Years to Break Even:		2.57			
	Net Present Value	\$	3,089,111			
	Internal Rate of Return		48%			

Basic Pasteurizer/Bottler	Equipment Suggestion	Equipment Cost	Time Required	Capacity Utilized	Extra Capacity	Extra Capacity
Pasteurizer	ANCO Equipment (200 gal. capacity)	\$ 518,000.00	0 days, 4 hours, 40 minutes and 13 seconds	15.45%	55 lbs/day	208 cows
Bottler	Federal 309 Gravity Filler (Avg. Capacity for 0.5 gal)	\$ 600,000.00	0 days, 0 hours, 6 minutes and 29 seconds	0.23%	5931 lbs/day	22241 cows
Total Cost		\$ 618,000				
Added Cost from Equipment Selected on inputs Page		\$ 90,100				
Total Time	0 day, 4 hours, 46 minutes and 42 seconds					
	Years to Break Even:		1.84			
	Net Present Value	\$	3,401,751			
	Internal Rate of Return					

Return to 'Outputs' See 'Equipment List' **Steps 6 & 7: See Equipment Options**

Click the button below to return to the instructions sheet.

Return to 'Instructions'

User Guide for the Bottled Milk Decision Tool

Equipment List Sheet

- This worksheet lists all equipment options that can be generated by the tool.
- Price estimates are from 2023 and are listed by category from shortest to longest run time.
- Each equipment line calculates the total run time based on your operation with the specific equipment piece corresponding to that line, the estimated cost based on prior quotes, the total equipment capacity used (number of pounds of bottled milk that can be processed), and based on that capacity utilized, how many more pounds could be processed, or how many animals could be added to maximize the equipment.

This 'Equipment List' sheet presents all available pasteurizers, separators, homogenizers, and bottlers used in this tool, sorted from shortest to longest run-times. It includes estimated cost as well as processing and growth capacities.

Vat Pasteurizers					
	Total Run Time	Equipment Cost	Capacity Utilized	Extra Capacity	Extra Capacity
ANCO Equipment (2000 gal. capacity)	0 days, 0 hours, 28 minutes and 1 seconds	\$ 56,000.00	2%	674.61	2529
ANCO Equipment (1500 gal. capacity)	0 days, 0 hours, 37 minutes and 22 seconds	\$ 49,500.00	3%	502.61	1884
ANCO Equipment (1200 gal. capacity)	0 days, 0 hours, 46 minutes and 42 seconds	\$ 45,500.00	3%	399.41	1497
ANCO Equipment (1000 gal. capacity)	0 days, 0 hours, 56 minutes and 3 seconds	\$ 39,500.00	4%	380.61	1239
ANCO Equipment (800 gal. capacity)	0 days, 1 hour, 10 minutes and 3 seconds	\$ 32,000.00	5%	268.81	929
ANCO Equipment (600 gal. capacity)	0 days, 1 hour, 33 minutes and 24 seconds	\$ 28,500.00	6%	193.01	723
ANCO Equipment (500 gal. capacity)	0 days, 1 hour, 52 minutes and 5 seconds	\$ 26,500.00	8%	158.61	594
ANCO Equipment (400 gal. capacity)	0 days, 2 hours, 20 minutes and 7 seconds	\$ 24,000.00	10%	124.21	465
ANCO Equipment (300 gal. capacity)	0 days, 3 hours, 6 minutes and 49 seconds	\$ 20,000.00	13%	89.81	336
Quoted Vat Pasteurizer	0 days, 4 hours, 38 minutes and 49 seconds	\$ 28,000.00	19%	55.76	209
ANCO Equipment (200 gal. capacity)	0 days, 4 hours, 40 minutes and 13 seconds	\$ 18,000.00	19%	55.41	207
MicroDairy Designs (99 gal. capacity)	0 days, 9 hours, 26 minutes and 6 seconds	\$ 18,000.00	39%	20.67	77
MicroDairy Designs (60 gal. capacity)	0 days, 15 hours, 34 minutes and 3 seconds	\$ 16,000.00	65%	7.25	27
MicroDairy Designs (45 gal. capacity)	0 days, 20 hours, 45 minutes and 25 seconds	\$ 13,000.00	86%	2.09	7
MicroDairy Designs (30 gal. capacity)	1 days, 7 hours, 8 minutes and 7 seconds	\$ 10,000.00	130%	-3.07	-11
MicroDairy Designs (15 gal. capacity)	2 days, 14 hours, 16 minutes and 14 seconds	\$ 7,000.00	259%	-8.23	-30
MicroDairy Designs (4 gal. capacity)	9 days, 17 hours, 30 minutes and 51 seconds	\$ 5,500.00	973%	-12.01	-45

High Temperature Short Time (HTST) In-Line Pasteurizers					
	Total Run Time	Equipment Cost	Capacity Utilized	Extra Capacity	Extra Capacity
In-line Pasteurizer 3500 gal/hr	0 days, 0 hours, 8 minutes and 0 seconds	\$ 120,000.00	1%	2394.61	8979
In-line Pasteurizer 3000 gal/hr	0 days, 0 hours, 9 minutes and 20 seconds	\$ 120,000.00	1%	2050.61	7689
In-line Pasteurizer 2500 gal/hr	0 days, 0 hours, 11 minutes and 13 seconds	\$ 120,000.00	1%	1706.61	6399
In-line Pasteurizer 2000 gal/hr	0 days, 0 hours, 14 minutes and 1 seconds	\$ 120,000.00	1%	1362.61	5109
In-line Pasteurizer 1500 gal/hr	0 days, 0 hours, 18 minutes and 41 seconds	\$ 120,000.00	1%	1018.61	3819
In-line Pasteurizer 1000 gal/hr	0 days, 0 hours, 28 minutes and 1 seconds	\$ 120,000.00	2%	674.61	2529
In-line Pasteurizer 500 gal/hr	0 days, 0 hours, 56 minutes and 3 seconds	\$ 120,000.00	4%	330.61	1239
In-line Pasteurizer 200 gal/hr	0 days, 2 hours, 20 minutes and 7 seconds	\$ 120,000.00	10%	124.21	465
In-line Pasteurizer 100 gal/hr	0 days, 4 hours, 40 minutes and 13 seconds	\$ 120,000.00	19%	55.41	207
Quoted In-Line Pasteurizer	25 days, 0 hours, 0 minutes and 0 seconds	\$ -	0%	0.00	0

Separators					
	Total Run Time	Equipment Cost	Capacity Utilized	Extra Capacity	Extra Capacity
Tetra Pak H10 Hot Milk (Max. Capacity 75,000 L/h)	0 days, 0 hours, 1 minutes and 25 seconds	\$ 160,000.00	0%	13617.89	51057
Tetra Pak C10 Cold Milk (Max. Capacity 50,000 L/h)	0 days, 0 hours, 2 minutes and 7 seconds	\$ 190,000.00	0%	9074.13	34027
Tetra Pak H10 Hot Milk (Avg. Capacity 41,000 L/h)	0 days, 0 hours, 2 minutes and 35 seconds	\$ 160,000.00	0%	7438.38	27893
Tetra Pak C10 Cold Milk (Avg. Capacity 30,000 L/h)	0 days, 0 hours, 3 minutes and 32 seconds	\$ 190,000.00	0%	5439.12	20396
Tetra Pak C10 Cold Milk (Min. Capacity 10,000 L/h)	0 days, 0 hours, 10 minutes and 7 seconds	\$ 190,000.00	1%	1804.12	6765
Tetra Pak H10 Hot Milk (Min. Capacity 7,000 L/h)	0 days, 0 hours, 15 minutes and 9 seconds	\$ 160,000.00	1%	1256.86	4720
Quoted Separator	0 days, 5 hours, 53 minutes and 35 seconds	\$ 56,500.00	25%	41.14	154

Homogenizers					
	Total Run Time	Equipment Cost	Capacity Utilized	Extra Capacity	Extra Capacity
Tetra Pak 250 (Max. 7,000 L/h)	0 days, 0 hours, 15 minutes and 9 seconds	\$ 152,640.00	1%	1258.86	4720
Tetra Pak 250 (Avg. 5,250 L/h)	0 days, 0 hours, 20 minutes and 12 seconds	\$ 152,640.00	1%	940.80	3528
Tetra Pak 250 (Min. 3,500 L/h)	0 days, 0 hours, 30 minutes and 18 seconds	\$ 152,640.00	2%	622.74	2335
Quoted Homogenizer	0 days, 5 hours, 53 minutes and 35 seconds	\$ 10,000.00	25%	41.14	154
Tetra Pak S05 (Max. 30 GPH)	0 days, 15 hours, 34 minutes and 3 seconds	\$ 81,910.00	65%	7.25	27
Tetra Pak S05 (Avg. 22.50 GPH)	0 days, 20 hours, 45 minutes and 25 seconds	\$ 81,910.00	86%	2.09	7
Tetra Pak S05 (Min. 15 GPH)	1 days, 7 hours, 8 minutes and 7 seconds	\$ 81,910.00	130%	-3.07	-11

Bottlers: Filler + Capper					
	Total Run Time	Equipment Cost	Capacity Utilized	Extra Capacity	Extra Capacity
Federal 309 Gravity Filler (Max. Capacity for 1 gal)	0 days, 0 hours, 3 minutes and 54 seconds	\$ 600,000.00	0%	4940.21	18525
Federal 309 Gravity Filler (Avg. Capacity for 1 gal)	0 days, 0 hours, 4 minutes and 10 seconds	\$ 600,000.00	0%	4609.97	17287
Federal 309 Gravity Filler (Min. Capacity for 1 gal)	0 days, 0 hours, 4 minutes and 27 seconds	\$ 600,000.00	0%	4321.01	16203
Federal 309 Gravity Filler (Max. Capacity for 0.5 gal)	0 days, 0 hours, 5 minutes and 50 seconds	\$ 600,000.00	0%	6591.41	24717
Federal 309 Gravity Filler (Avg. Capacity for 0.5 gal)	0 days, 0 hours, 6 minutes and 29 seconds	\$ 600,000.00	0%	5930.93	22240
Federal 309 Gravity Filler (Min. Capacity for 0.5 gal)	0 days, 0 hours, 7 minutes and 18 seconds	\$ 600,000.00	0%	5270.45	19764
Quoted Bottler	0 days, 15 hours, 34 minutes and 3 seconds	\$ 36,000.00	7%	7.25	27

Finished? Wish to Retry the Model? Return to the "Instructions" and Clear/Reset the Data

Return to 'Instructions'

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< > Instructions Inputs Outputs Suggested Equipment Equipment List EmployeeCost +