enoTec User Manual

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Release Date: October 4, 2025

Platform: iOS, iPadOS, visionOS, macOS

Devices: iPhone, iPad, Apple Vision Pro, Mac (Apple Silicon)

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Welcome to enoTec

enoTec is a professional wine tank management application designed to help winemakers track inventory, monitor sulfur dioxide (SO_2) levels, and analyze volatile acidity trends over time. Whether you're managing a boutique winery or a larger operation, enoTec provides the tools you need to maintain optimal wine quality throughout the production process.

> ***Important: User Responsibility and Liability***
>
> *enoTec is provided as a calculation and tracking tool to assist winemaking operations. While we strive for accuracy and reliability:*
>
> - ***Verify Calculations****: Always independently verify SO_2 calculations and other critical measurements before making additions to your wine.*
> - ***Back Up Your Data****: Regularly export your data and enable device backups. Data loss, while rare, can occur due to device issues or software errors.*
> - ***Professional Judgment****: This app supports but does not replace professional winemaking knowledge and laboratory analysis.*
> - ***No Warranty****: enoTec is provided "as-is" without guarantees of accuracy. The developer assumes no liability for wine quality issues, production losses, or other damages resulting from app use or malfunction.*

You are responsible for all winemaking decisions and their outcomes. Use enoTec as one tool among many in your quality assurance process.

What enoTec Does

- **Inventory Management**: Create and organize tank categories with customizable parameters
- **Data Tracking**: Record volumes, SO_2 levels, and volatile acidity measurements
- **Automatic Calculations**: Get instant SO_2 addition requirements based on your targets
- **Trend Analysis**: Visualize changes over time with interactive charts
- **Data Export**: Share reports in CSV and PDF formats
- **Project Organization**: Manage multiple time periods with worksheet-based tracking

Technical Specifications

System Requirements

- **Operating System**:
- iOS 18.4 or later
- iPadOS 18.4 or later
- visionOS 2.4 or later
- macOS 15.4 or later (requires Apple Silicon chip)
- **Compatible Devices**: iPhone, iPad, Apple Vision Pro, and Mac (Apple Silicon)
- **Storage**: 1.8 MB for app installation
- **Additional Storage**: Variable based on number of projects and worksheets (typically 1-5 MB per project)
- **Network**: Not required for core functionality (offline-capable)

Data Storage

- **Local Storage**: All data is stored locally on your device
- **Backup**: Data is included in standard iOS/iPadOS/macOS device backups (iCloud or local)
- **Cloud Sync**: Not available - enoTec does not sync data between devices
- **Data Format**: Proprietary format optimized for wine industry data

- **Device Transfer**: If you restore from an iCloud or local backup to a new device, your enoTec data will be restored as part of the system backup

Export Formats

- **CSV**: Compatible with Excel, Numbers, Google Sheets, and most spreadsheet applications
- **PDF**: Universal format for reports and documentation

Performance

- **Recommended Tank Limit**: Optimal performance with up to 50 tanks per project
- **Maximum Tanks**: Tested with 100+ tanks with maintained performance
- **Worksheet Limit**: No practical limit; tested with 50+ worksheets per project
- **Trends Comparison**: Up to 3 tanks can be compared simultaneously in charts

Getting Started

Installation

On iPhone and iPad:

1. Download enoTec from the Apple App Store

2. Tap **Get** or **Install**

3. Authenticate with Face ID, Touch ID, or your Apple ID password

4. Once installed, tap **Open** or locate the enoTec icon on your home screen

On Mac (Apple Silicon):

1. Open the App Store on your Mac

2. Search for "enoTec"

3. Click **Get** or **Install**

4. Once installed, find enoTec in your Applications folder or Launchpad

On Apple Vision Pro:

1. Open the App Store in visionOS

2. Search for "enoTec"

3. Select **Get** or **Install**

4. Launch from your Home View or App Library

First Launch

When you launch enoTec for the first time:

1. You'll see the **enoTec splash screen** for 3 seconds
2. The **Welcome Screen** appears with two options:
3. **Show Me Around**: Enables contextual tips throughout the app
4. **I'll Explore Myself**: Disables tips (you can enable them later)

About the Tips System: If you enable tips, small informational prompts will guide you through key features as you use the app. You can toggle tips on or off at any time by tapping the lightbulb icon on the main screen.

Understanding the Interface

enoTec uses a **three-tab navigation system** when viewing projects:

- **Home Tab**: Returns to the main welcome screen
- **Tanks Tab**: Main workspace for viewing tanks, entering data, and filtering
- **Trends Tab**: Interactive charts for visualizing SO_2 and volatile acidity over time
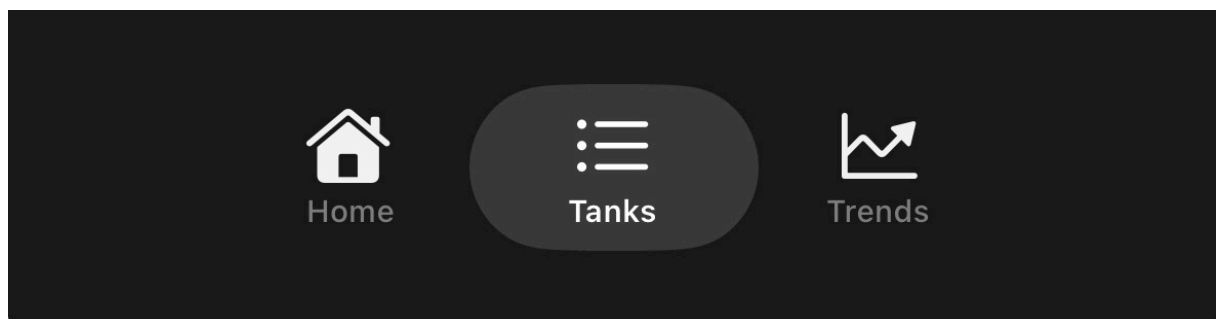
Understanding enoTec

Core Concepts

Tank Categories

Categories represent types of tanks in your winery. enoTec provides eight customizable categories that you can name and configure to match your operation. Each category has:

- **Display Name**: How the category appears in the app
- **Volume Range**: Minimum and maximum capacity for tanks in this category
- **Default SO$_2$ Level**: The target SO$_2$ level for tanks of this type

Projects

Projects are containers that hold multiple worksheets. Think of a project as a vintage year, production cycle, winery site, or any organizational unit you want to track. For example: "2025 Harvest," "Spring 2025 Production," or "Napa Facility."

Worksheets

Worksheets are snapshots of your tank data at specific points in time, typically monthly. Each worksheet contains:

- **Date**: When the measurements were taken
- **Tank Data**: Volume, SO_2 levels, and volatile acidity for each tank
- **Correction Status**: Whether each tank has been adjusted to target levels

SO_2 Management

Understanding Free SO_2 vs Total SO_2

Free SO_2 is the active form of sulfur dioxide that protects wine from oxidation and microbial spoilage. This is the measurement you track in enoTec.

Total SO_2 includes both free and bound SO_2. While total SO_2 levels are important for regulatory compliance, free SO_2 is what actually protects your wine.

enoTec focuses on free SO_2 management because this is the actionable measurement for day-to-day winemaking decisions.

The app calculates required SO_2 additions using the industry-standard formula. The concentration is adjustable per tank (defaulting to 18% / 180 g/L):

```
SO₂ Addition (grams) = (Volume × (Target - Current)) /
Concentration (g/L) / 1000
```

Users can adjust the SO_2 concentration using the **Conc pill** in the tank detail view to match their specific SO_2 product (typically ranging from 6% to 50%).

Free SO$_2$

14	Init mg/L
30	Max mg/L
18%	Conc

Req
89
ml

− | +
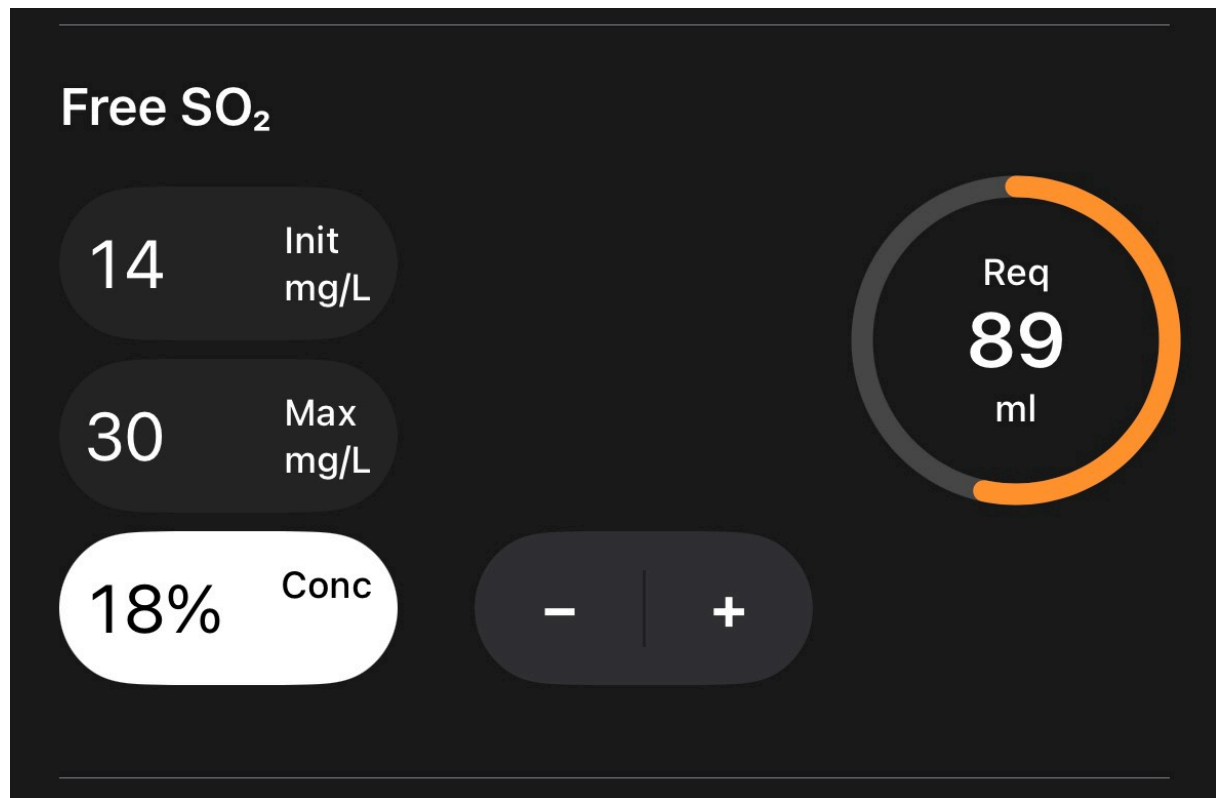
Understanding Volatile Acidity (VA)

Volatile Acidity refers to the concentration of acetic acid and other volatile acids in wine, measured in grams per liter (g/L). VA is a critical quality indicator:

- *Normal levels*: Most quality wines have VA below 0.6 g/L
- *Elevated levels*: VA above 0.7-0.8 g/L can indicate spoilage or acetobacter activity
- *SO$_2$ relationship*: Higher VA levels can bind with free SO$_2$, reducing its protective effectiveness and requiring higher SO$_2$ additions to maintain protection

Monitoring VA trends helps you detect fermentation or storage issues early, before they compromise wine quality.

Workflow Guide

Step 1: Setting Up Your Inventory

The Inventory View is where you create tank categories and add individual tanks to your inventory. This is the foundation for all projects.

Creating Tank Categories

1. From the main screen, tap **Inventory**
2. Tap the **pencil icon** (top right) to enter edit mode
3. Review the eight default categories, which you can customize with your own naming conventions
4. To customize a category:
5. Tap the category name to edit it
6. Adjust the **Maximum Volume** slider
7. Set the **Minimum Volume** (if different from default)
8. Enter the **Default SO$_2$** level (the target you want to maintain)
9. Tap **Done** when finished
10. Tap the pencil icon again to exit edit mode

Category Editor

Category

| Cat A | Cat B | Cat C | Cat D |
| Cat E | Cat F | Cat G | Cat H |

Display Name   5/10

Steel

Volume Range

Min Volume   Max Volume

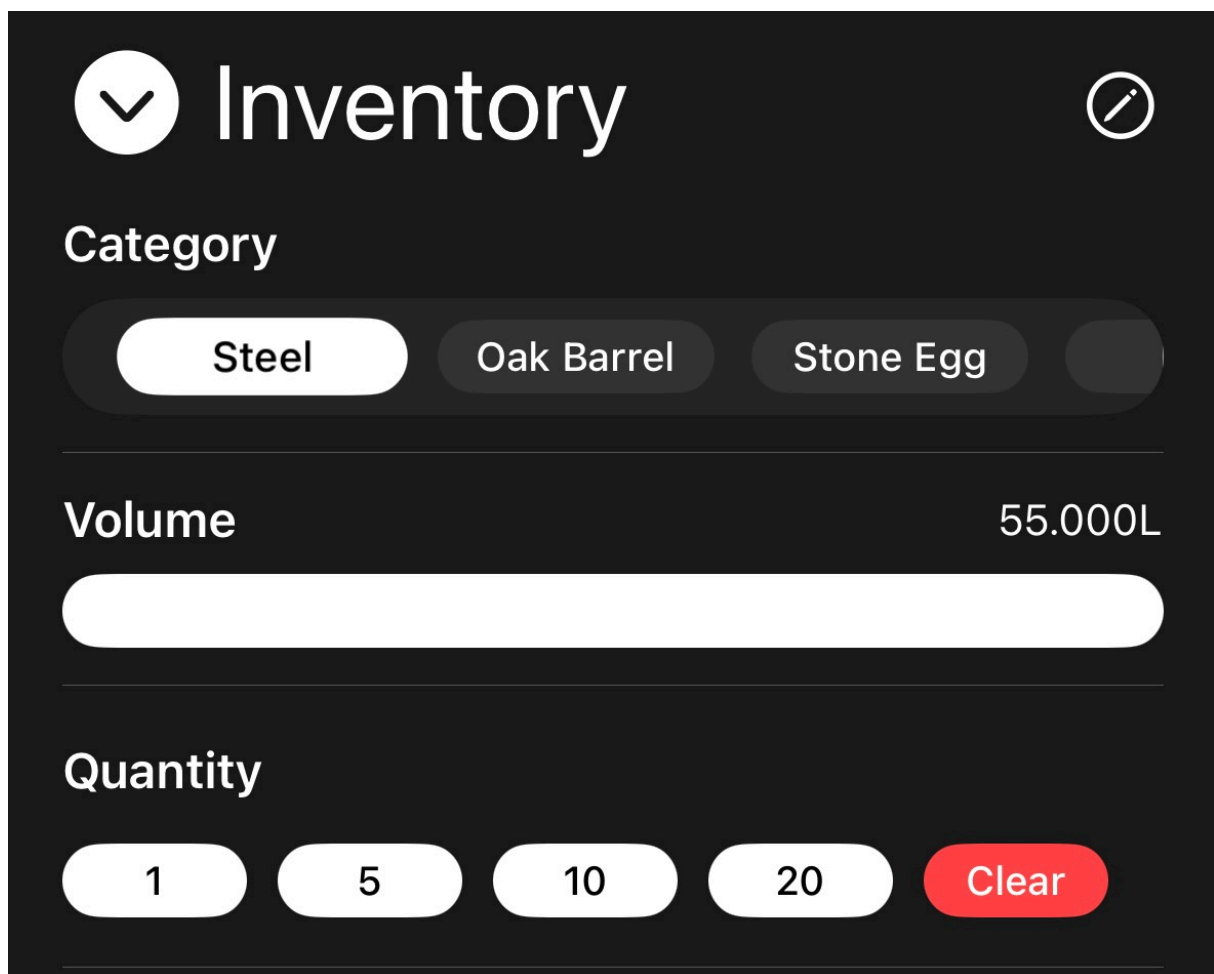55,000   55,000

Max SO$_2$ (mg/L)

35

Category Design Tips:

-   Name categories based on your winery's terminology (e.g., "Stainless Steel," "French Oak," "Concrete Egg")

- Set realistic volume ranges for each tank type
- Use default SO$_2$ levels that match your wine style

Adding Tanks to Inventory

The **Tank Creation Section** allows you to add multiple tanks efficiently.

1. Select a **category** from the horizontal category picker
2. Adjust the **volume slider** to set tank capacity
3. For categories with fixed volumes, the slider becomes a placeholder showing the fixed capacity
4. Set the **quantity** (how many identical tanks to add)

5. Tap the number buttons: **1**, **5**, **10**, or **20**

6. Tap **Add To Inventory**

Your tanks appear in the **Tank List Section** below, organized by category.

Managing Individual Tanks

- **Rename a tank**: Tap the tank name in the list

- **Edit SO$_2$ levels**: Tap the values in the right column

- **Delete a tank**: Swipe left on the tank row and confirm deletion

- **Clear all tanks**: Tap **Clear** (top right) - a confirmation dialog prevents accidental deletion

Step 2: Creating Projects

Projects organize your tank data across multiple time periods. Before creating a project, ensure you have tanks in your inventory.

Creating Your First Project

1. Return to the **main screen** (Home tab)
2. Tap the **+ button** (top right)
3. Enter a **project name** in the text field at the top
4. Your current inventory automatically populates the first worksheet

Smart Inventory Protection

If you attempt to create a project with an empty inventory, enoTec will show an alert: "Set Up Your Inventory First." Tap "Go to Inventory" to add tanks before creating your project.

Project Naming

When you create projects, enoTec automatically prevents name conflicts:

- If you create a project with an existing name, you'll see a confirmation dialog:
- **Replace**: Overwrites the existing project
- **Choose Different Name**: Allows you to rename
- Sequential naming: "New Project," "New Project 2," "New Project 3," etc.

Step 3: Recording Data

The Tank List View displays all tanks in your current worksheet based on your imported inventory. This is where you can view tank status at a glance, see required SO_2 values, mark tanks as corrected after making additions, and access individual tanks for detailed data entry. Tanks can also be removed from the current worksheet if needed. When new worksheets are created, the inventory is automatically initialized from your most recent worksheet data.

Understanding the Tank List

Each tank row displays:

- **Status indicator** (left): Green circle (corrected) or red circle (uncorrected)

- **Tank name**
- **Free SO$_2$** required level

Inox 3

SO$_2$ Req (L): 1.198

Inox 4

SO$_2$ Req (L): 0.000

🗑

Delete

Inox 6

SO$_2$ Req (L): 0.000
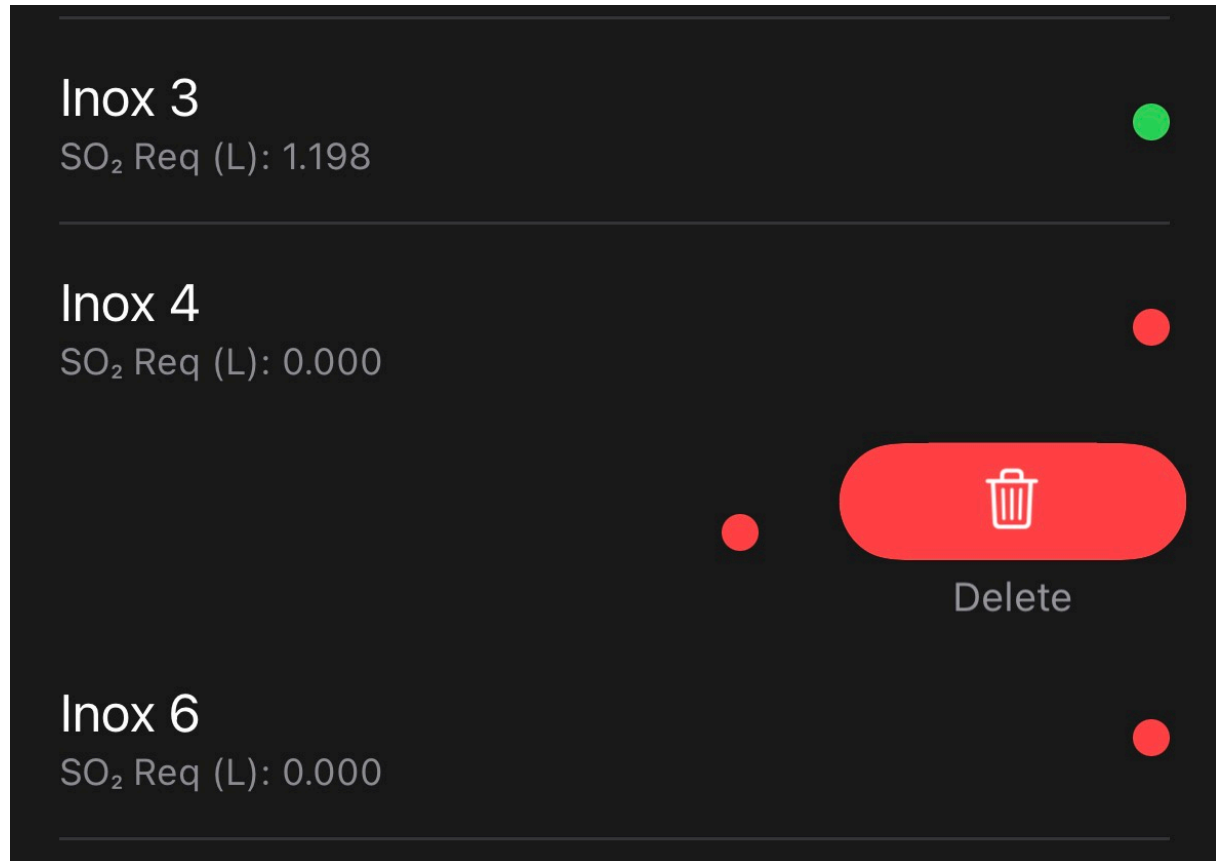
Searching for Tanks

1. Tap the **magnifying glass icon** (top right)

2. The search field smoothly slides into view

3. Type the tank name

4. Matching tanks appear in the list

5. Tap the **X** to close search

Filtering Tanks

The **multi-select filter system** allows sophisticated tank filtering:

    Status Filters (mutually exclusive):

- **Green circle**: Show only corrected tanks
- **Red circle**: Show only uncorrected tanks
- **All**: Show all tanks (default)
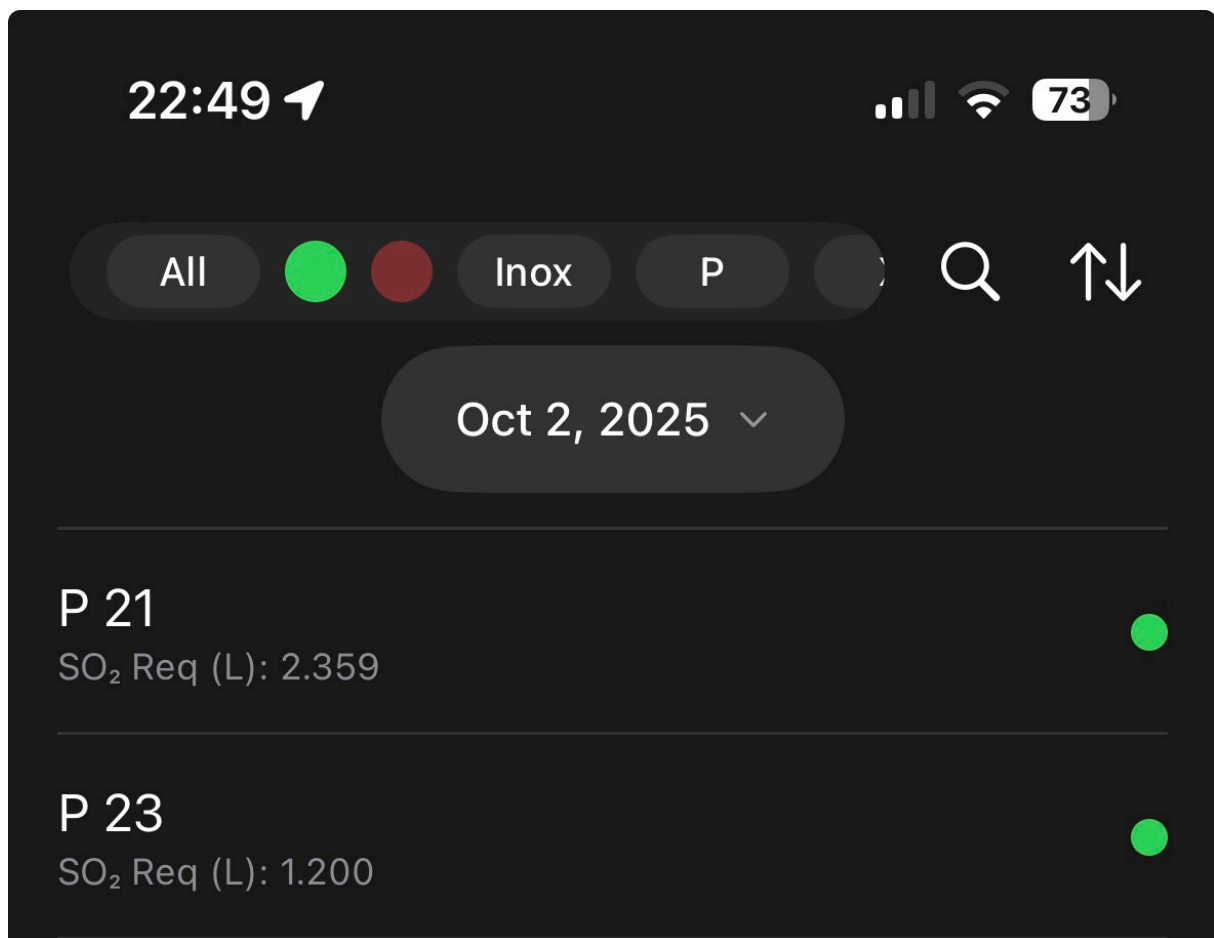
Category Filters (can select multiple):

- Tap category chips to filter by tank type
- Up to eight categories available based on your inventory setup

- Multiple category selections work as "OR" logic (show tanks matching any selected category)

Combining Filters:

- You can combine one status filter with multiple category filters
- Example: "Show uncorrected tanks from multiple selected categories"

Inox | P | X | Bo

Oct 2, 2025 ∨

Bota 8
SO_2 Req (L): 0.011

Bota 10
SO_2 Req (L): 0.002

Bota 11
SO_2 Req (L): 0.007

Bota 13
SO_2 Req (L): 0.013

Inox 3
SO_2 Req (L): 1.198

Tap a chip again to deselect it. The tank list updates immediately.

Sorting Tanks

Tap the **sort icon** (arrows) to choose a sort order:

- Name A-Z / Name Z-A

- Category A-Z / Category Z-A

- Volume High-Low / Volume Low-High

Oct 2, 2025 ⌄

Bota 8
SO_2 Req (L): 0.011 ●

Bota 10
SO_2 Req (L): 0.002 ●

Bota 11
SO_2 Req (L): 0.007 ●

Bota 13
SO_2 Req (L): 0.013 ●

Inox 3 ●

Name A-Z

Name Z-A

Category A-Z

Category Z-A

Volume High-Low

Volume Low-High

Cancel
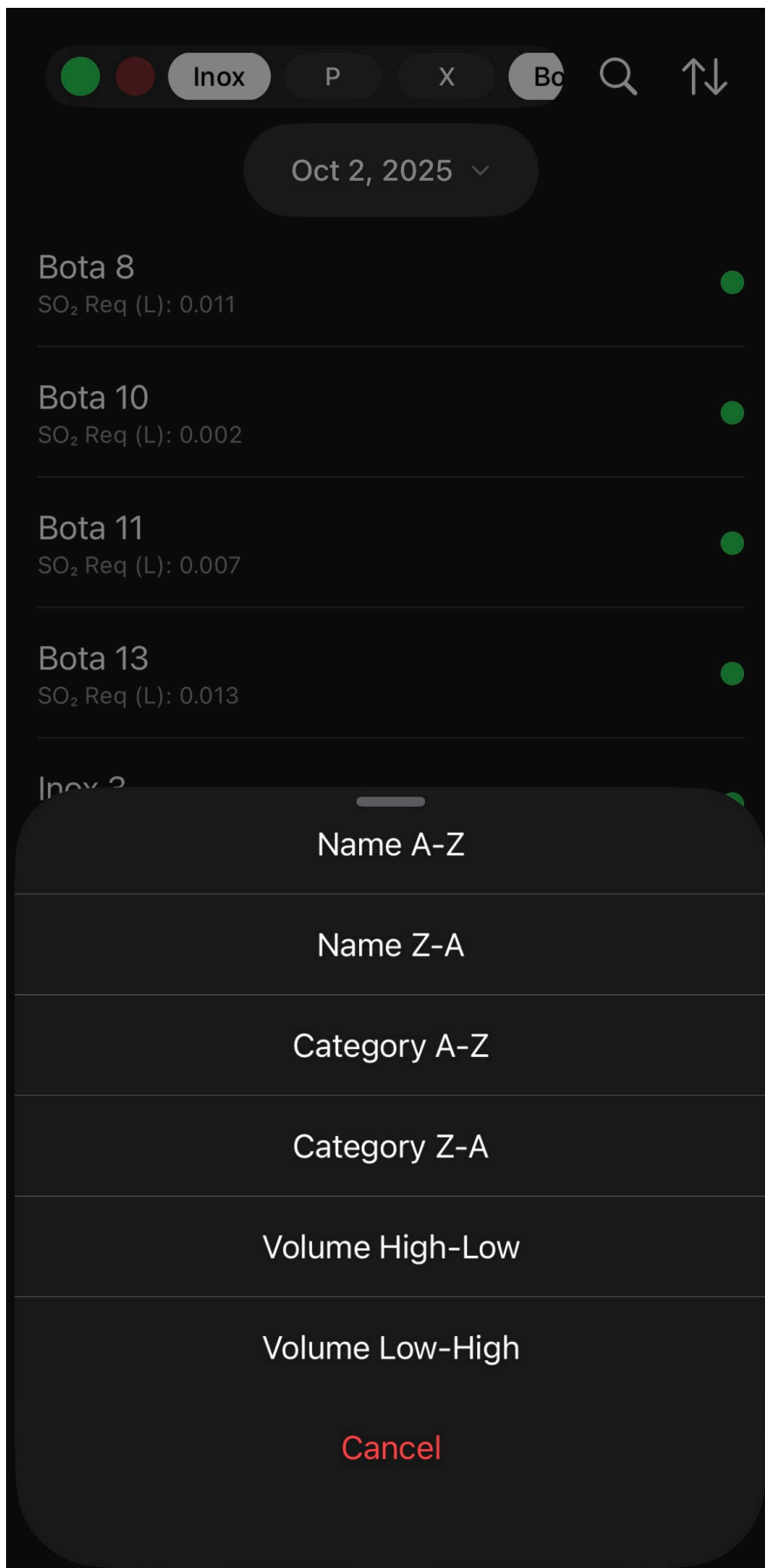
Editing Tank Data (Detail View)

The Tank Editor is where you enter wine data for individual tanks. Tap any tank in the list to open the detail view.

The detail view contains:

1. **Tank Name** (fixed header at top)
2. **Volume Section**:
3. Current volume field
4. Visual slider showing volume percentage
5. Capacity indicator
6. **SO$_2$ Section**:
7. Three selectable pills for data entry:
8. **Init** (Initial/Current SO$_2$ in mg/L)
9. **Max** (Target SO$_2$ in mg/L)
10. **Conc** (SO$_2$ Concentration - tap to toggle between % and g/L)
11. **Circular progress indicator** showing correction status:
12. Green: Tank is at or near target
13. Orange/Red: Tank needs SO$_2$ adjustment or has overage
14. Pulsing animation indicates overage condition
15. **+/− buttons** to adjust the selected pill value
16. **Required SO$_2$ display** showing calculated addition amount (displays in mL for amounts under 1L, or in L for larger amounts)
17. **Volatile Acidity Section**:
18. VA measurement field (g/L)
19. Visual bar indicator with color-coded segments

Inox 3

Current Volume

43.120

79%

Max (L): 55.000
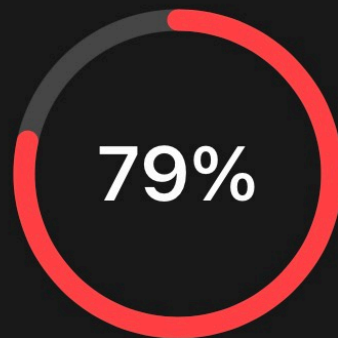
Free SO$_2$

25	Init mg/L
30	Max mg/L
18%	Conc

− | +

Req
1,198
L

Volatile Acidity

(g/L)

0,62

Corrected ●

Done

Entering Data:

1. **Volume**: Tap the volume field and enter the current volume

2. **SO$_2$ Values**:

3. Tap a pill (Init, Max, or Conc) to select it

4. The selected pill highlights in white

5. Use **–** and **+** buttons to adjust the value

6. Hold buttons for rapid adjustment (5-unit increments)

7. For concentration: tap the Conc pill again when selected to toggle between % and g/L display

8. **Volatile Acidity**: Tap the VA field and enter the measurement

9. Tap **Done** or navigate away to save automatically

Visual Feedback:

- **Circular Progress Indicator**: Shows real-time SO$_2$ correction status:
- Percentage fill indicates how close to target
- Green: Corrected or near target
- Orange: Moderate deficit
- Red: Significant deficit or overage
- Pulsing animation: Indicates SO$_2$ overage (current exceeds target)
- **Required SO$_2$ Display**: Automatically calculates and shows the amount of SO$_2$ to add based on:
- Current volume
- Current SO$_2$ level
- Target SO$_2$ level
- Selected concentration (adjustable via Conc pill)

Quick Actions from the List

Swipe right on a tank row to access the **checkmark button**:

- Quickly mark a tank as corrected without opening detail view

- Useful after you've made SO_2 additions in the cellar
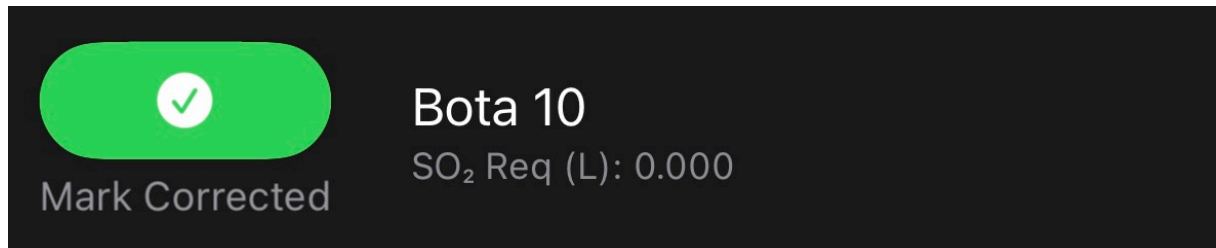
Step 4: Managing Worksheets

Worksheets allow you to track tank data across multiple time periods. The **worksheet chip** (displaying the current date) provides gesture-based navigation.

Understanding Worksheet Navigation
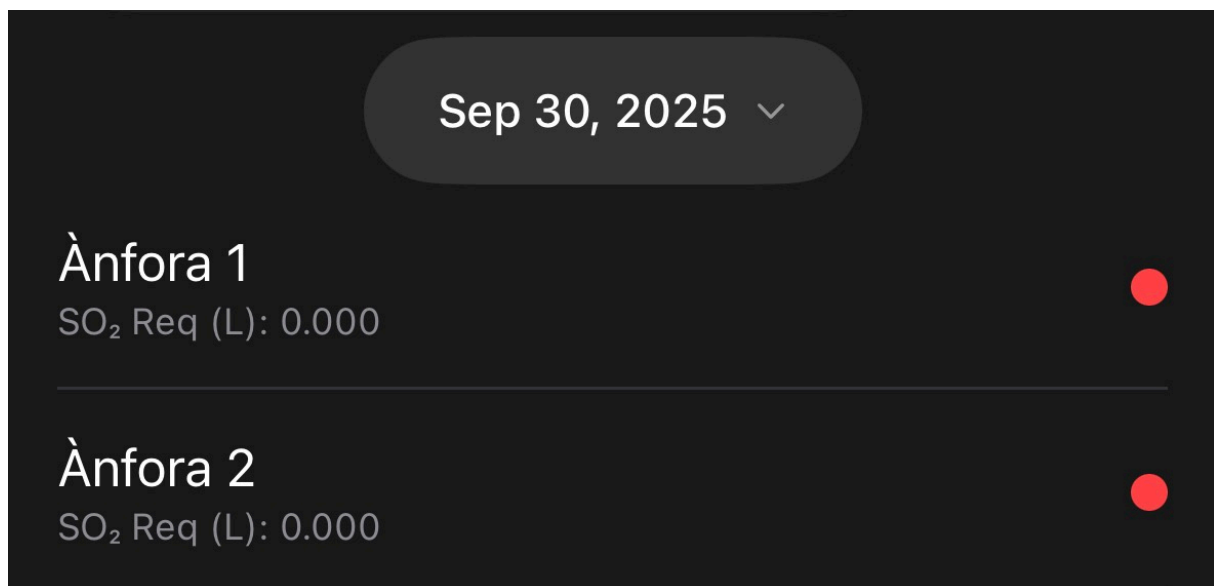
The date chip at the top of the tank list shows your current worksheet date. This chip supports multiple gestures:

Gesture Controls:

- **Swipe left/right**: Navigate between existing worksheets chronological-ly
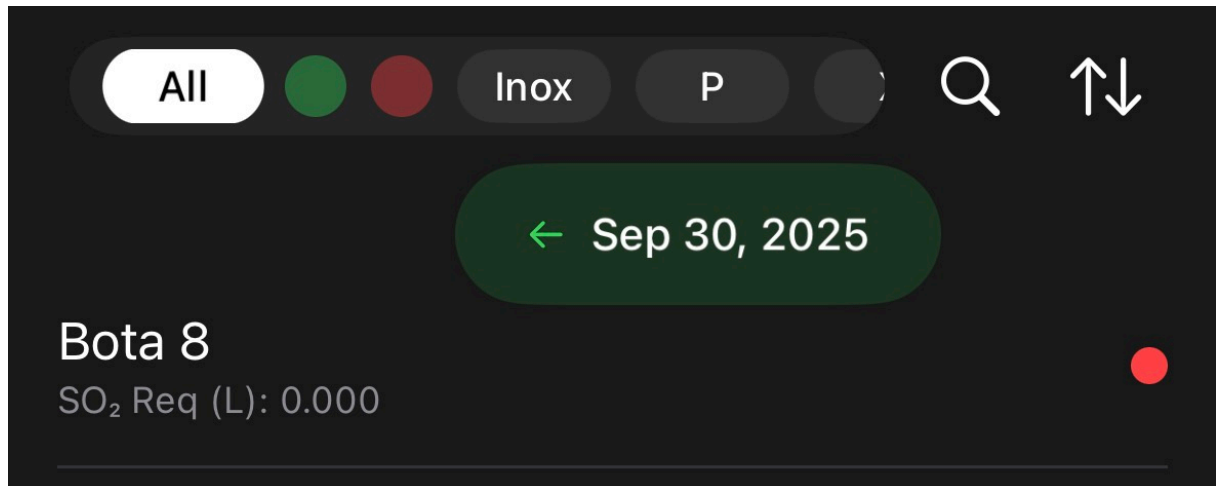
- **Swipe up**: Delete the current worksheet (with confirmation dialog)
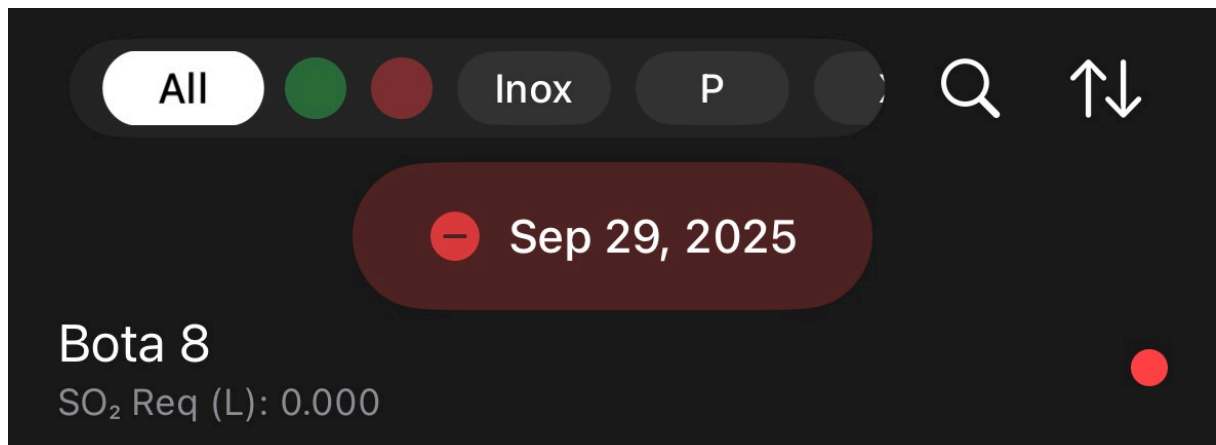
- **Pull down**: Export the current worksheet to CSV (chip turns blue with share icon)
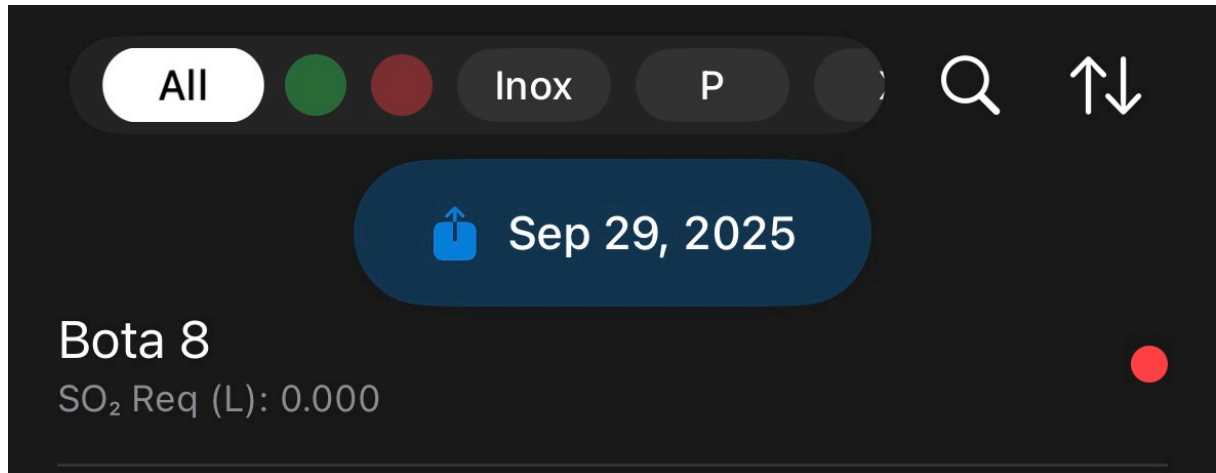
- **Tap**: Open worksheet search/creation interface
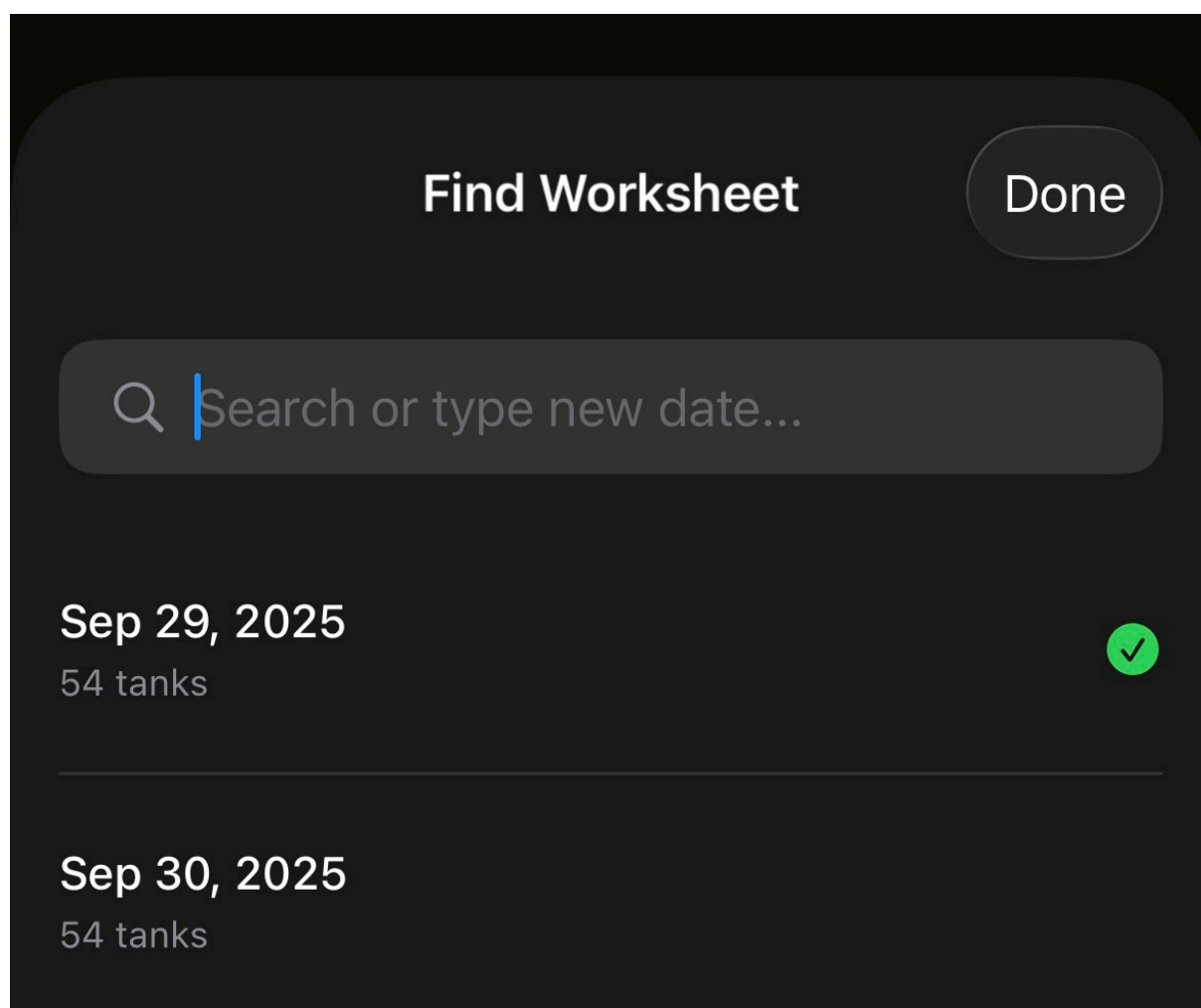
Creating New Worksheets

Method 1: Gesture Navigation

1. Swipe left on the date chip past the last worksheet

2. A new worksheet is created automatically for the next month

Method 2: Worksheet Search

1. Tap the date chip

2. Type a future date in various formats:

3. "tomorrow"

4. "Jan 15" or "January 15"

5. "March 2025"

6. "next month"

7. "2/7/26" or "2.7.26"

8. "030726" (rapid 6-digit entry: MMDDYY)

9. Press **Create Worksheet** or press Return

10. The new worksheet is created with data from your current inventory

Date Format Tips:

- Two-digit years (26) are interpreted as 20xx (2026)

- Slash (/) and period (.) separators both work

- Month names can be abbreviated or spelled out

Searching Existing Worksheets

1. Tap the date chip

2. Type the month name or date

3. Matching worksheets appear below

4. Tap a worksheet to jump to it

Deleting Worksheets

1. Swipe up on the date chip, or

2. Tap the date chip and use the search interface

A confirmation dialog prevents accidental deletion.

Worksheet Data Behavior

When creating a new worksheet:

- Tank structure comes from your most recent worksheet

- SO_2 targets come from your inventory defaults (not the previous work-sheet)

- Current volumes, SO_2 measurements, and VA values are reset to zero/nil

- Correction status is reset to uncorrected

Step 5: Analyzing Trends

The Trends View provides interactive visualization of SO_2 and volatile acidity changes over time. This Apple Health-inspired interface uses horizontal scrolling and precise data point interactions.

Understanding the Trends Interface

The Trends view displays two horizontally scrolling charts:

- **Top Chart**: Free SO_2 levels (mg/L) over time
- **Bottom Chart**: Volatile Acidity (g/L) over time

Both charts scroll synchronously, maintaining alignment across time periods.

Selecting Tanks to Compare

At the bottom of the view, you'll see three colored tank selectors:

- **Yellow** (left)
- **Orange** (middle)
- **Red** (right)

To select a tank:

1. Tap on a tank selector wheel

2. Scroll through available tanks

3. Select up to 3 tanks to compare simultaneously

Each tank's data appears in its corresponding color across both charts.

Tank Selection Conflicts: If you select the same tank in multiple wheels, the chip and chart lines will pulse to alert you to the conflict. The most recent selection takes priority, and the original chip automatically resets to "N/A".

Interacting with Charts

Viewing Data Points:

- Tap any data point on either chart

- A vertical indicator line appears, connecting related data across both charts

- Static value displays appear next to chart titles with color-coded indicators

- Example: 🟡 23.5 🟠 18.2 🔴 N/A

Scrolling Through Time:

- Swipe left/right on the charts to scroll through all worksheets

- Charts scroll in sync, maintaining time alignment

- Data points have the highest touch priority

Chart Features:

- **Overflow indicators**: Triangle markers appear when values exceed chart limits

- **Empty states**: "N/A" appears when data is missing for a tank/date

- **Responsive scaling**: Charts adjust to show available data optimally

Exporting Individual Charts

Each chart has an export icon in its title area:

1. Tap the **SO$_2$** or **VA** chart title chip

2. The chart is exported as an individual PDF

3. Choose your sharing method (email, Files, AirDrop, etc.)

PDFs maintain the dark theme and include:

- Chart visualization

- Data table with values

- Project name and date information

- Professional Apple-inspired styling

Step 6: Exporting Data

enoTec provides two export formats optimized for different use cases.

Exporting Worksheet Data (CSV)

CSV exports capture a snapshot of the current worksheet from the Tank List View.

1. From the **Tank List**, **pull down on the worksheet chip** (the date display at the top)
2. The chip will turn blue and display a share icon
3. Choose your sharing destination:
4. Email
5. Files app (save to iCloud or local storage)
6. AirDrop
7. Other apps

CSV Contents:

- Tank name
- Current volume
- Free SO_2 (current and target)
- Correction status (Yes/No)
- Required SO_2 addition (grams)
- Volatile acidity (g/L)

Opening CSV Files:

- **Excel**: Opens directly; format columns as needed

- **Numbers**: Opens directly with auto-formatting
- **Google Sheets**: Upload via Files or email

Exporting Trends Data (PDF)

PDF exports are created from the Trends view for visual reports.

1. From the **Trends View**, tap a **chart title chip**
2. Individual PDFs are generated for SO_2 or VA charts
3. Choose your sharing method

PDF Contents:

- Chart visualization with selected tanks
- Data table showing all values
- Date range information
- Project name
- Dark theme styling (matches app appearance)

PDF Use Cases:

- Sharing reports with winery team
- Documentation for production records
- Analysis for consultants or labs

Feature Reference

Main Welcome Screen

The Welcome Screen is your home base in enoTec.

Screen Elements:

- **Lightbulb icon** (top left): Toggle tips system on/off
- **+ button** (top right): Create new project
- **Recent Projects list**: Quick access to recent work
- **Inventory button**: Access tank inventory management
- **Tips status**: Shows whether contextual tips are enabled

Tips System Management:

- Tap the lightbulb icon at any time to:
- Re-enable tips if you disabled them
- See the Welcome Screen again for tip preferences
- Tips persist across app launches based on your preference

Inventory View

A comprehensive tank management interface for creating and organizing your inventory.

Main Sections:

1. **Tank Creation Section**:
2. Category selector (horizontal scrolling tube design)
3. Volume slider (or fixed volume placeholder)
4. Quantity controls
5. Add button
6. **Tank List Section**:
7. Organized by category
8. Tap to edit tank names
9. Swipe to delete individual tanks
10. Visual organization with consistent spacing

Edit Mode:

- Pencil icon toggles category editing
- Modify category names, volumes, and defaults
- Professional section labels for clarity

Tank List View

The Tank List View displays your imported inventory. It is where you can view all tanks available in the project, their required SO_2 values, and mark tanks as corrected if an addition has been made. Tanks can also be removed here for the particular worksheet date. When new worksheets are created, the inventory is initialized.

   Key Features:

- **Search bar**: Smooth slide-in animation when activated
- **Filter chips**: Multi-select status and category filters
- **Sort button**: Six sorting options
- **Worksheet chip**: Current date with gesture controls

- **Tank rows**: Comprehensive data display with progress indicators
- **Export button**: CSV export of current worksheet

Primary Functions:

- View all tanks available in the current project/worksheet
- See required SO_2 values at a glance
- Mark tanks as corrected (swipe right on tank row, tap checkmark)
- Remove tanks from the current worksheet (swipe left, delete)
- Search and filter tanks for quick access
- Tap any tank to open the Tank Editor for detailed data entry

Visual Design:

- Color-coded status indicators (green/red circles)
- Progress bars showing SO_2 correction status
- Clean typography hierarchy
- Edge-to-edge list for maximum space utilization

Worksheet Initialization: When you create a new worksheet, the tank inventory is automatically populated from your most recent worksheet, preserving tank structure while resetting measurement values.

Single Tank Detail View (Tank Editor)

The Tank Editor is your primary workspace for entering and viewing detailed data for individual tanks. Access this view by tapping any tank in the Tank List.

Layout:

1. **Fixed Header**: Tank name stays visible during scrolling
2. **Scrollable Content**:

3. Volume section with visual feedback

4. SO_2 section with pill selectors and circular progress indicator

5. Volatile acidity section with segmented color bar

SO_2 Interface Design:

- **Three Selectable Pills**:
- **Init**: Current/Initial SO_2 measurement (mg/L)
- **Max**: Target SO_2 level (mg/L)
- **Conc**: SO_2 concentration (toggle between % and g/L by tapping when selected)
- **Single +/− Control**: Works with whichever pill is currently selected
- Single tap: Adjust by 1 unit
- Hold: Rapid adjustment by 5 units (with haptic feedback)
- **Circular Progress Indicator**: Shows correction status with color-coded feedback
- Fill percentage indicates position relative to target
- Color changes from green (good) to orange (moderate) to red (needs attention)
- Pulsing animation when SO_2 is over target (overage condition)

Data Entry:

- Tap pill to select, use +/− buttons to adjust
- Volume field: Direct text entry with numeric keyboard
- VA field: Direct text entry with numeric keyboard
- Automatic calculation updates
- Haptic feedback for button interactions

Visual Indicators:

- Circular SO_2 progress wheel with graduated colors and overage pulse
- Volume slider: percentage fill visualization
- VA segmented bar: color-coded quality indicator (green = good, red = problematic)

Trends View

An interactive charting interface inspired by Apple Health's design language.

Components:

1. **Tank Selectors**: Three colored wheels at top
2. **SO_2 Chart**: Horizontally scrolling line chart
3. **VA Chart**: Synchronized scrolling below SO_2
4. **Value Displays**: Static indicators next to chart titles

Interaction Model:

- **Gesture Hierarchy**:
- Data points (highest priority)
- Chart scrolling
- Title export
- **Visual Feedback**:
- Vertical indicator lines
- Color-coded data points
- Overflow triangles
- Smooth animations

Export Options:

- Individual PDF per chart

- Tap title chips to export

- Dark theme preservation in PDFs

Tips & Best Practices

Getting Started

1. **Set up inventory before creating projects**: The app will prevent you from creating empty projects, but planning your inventory structure first ensures smooth workflow.

2. **Use meaningful category names**: Instead of generic "Type A," use your winery's terminology like "French Oak" or "Stainless Fermenters."

3. **Enable tips on first launch**: Even experienced users benefit from seeing the guided tour once to understand gesture controls and features.

Data Entry

1. **Establish a regular measurement schedule**: Weekly or bi-weekly worksheets provide better trend data than sporadic measurements.

2. **Use consistent date formats**: While the app accepts many formats, consistency in your entry pattern speeds up worksheet creation.

3. **Enter volume first**: The app uses volume to calculate SO_2 additions, so entering volume before SO_2 levels provides immediate feedback.

4. **Verify SO_2 target levels**: Check that inherited SO_2 targets match your current wine style, especially when starting new worksheets.

Organization

1. **Name projects clearly**: Use naming conventions like "2025 Chardonnay" or "Fall 2024 Harvest" for easy identification.
2. **Archive completed projects**: Export final data before starting new vintages to maintain clean workspace.
3. **Use filters strategically**: Combine status and category filters to focus on specific tank groups that need attention.

Trend Analysis

1. **Compare similar tanks**: Get the most insight by comparing tanks with similar wine types or capacities.
2. **Use consistent time ranges**: When reviewing trends, examine equivalent time periods across different tanks.
3. **Export trend PDFs regularly**: Create periodic reports for winery records and team communication.

Maintenance

1. **Regular backups**: Enable iCloud backup for your device to protect your data.
2. **Update the app**: Install updates promptly to access bug fixes and new features.

3. **Review exported data**: Periodically export CSV files as secondary backups of critical measurements.

Troubleshooting

App Performance

Issue: App feels slow with many tanks

- **Solution**: Consider archiving older projects. Performance is optimal with up to 50 active tanks.
- **Workaround**: Use filters to reduce visible tanks in the list view.

Issue: Charts take time to load

- **Solution**: Reduce the number of worksheets by archiving historical data.
- **Note**: Charts are tested to handle 50+ worksheets, but devices with low memory may experience delays.

Data Entry

Issue: Keyboard covers input fields

- **Solution**: The app automatically scrolls to keep active fields visible. If this fails, try:
- Dismiss the keyboard
- Scroll manually to the field
- Tap to re-activate

Issue: Numbers aren't formatting correctly

- **Solution**: The app accepts various formats. Try:
- Using periods instead of commas for decimals
- Entering numbers without formatting (e.g., 15000 instead of 15,000)
- Deleting the field contents and re-entering

Issue: SO_2 addition calculation seems wrong

- **Solution**: Verify:
- Current volume is entered
- Current SO_2 is less than target SO_2
- SO_2 concentration matches your addition product (default: 180 g/L)

Worksheet Management

Issue: Can't create worksheet for a specific date

- **Solution**: Check that:
- The date format is supported (see Step 4 for accepted formats)
- You're not trying to create a duplicate date
- The year is in the 2000s (two-digit years are interpreted as 20xx)

Issue: Worksheet deleted accidentally

- **Solution**: Worksheets cannot be recovered after deletion. Prevention:
- Pay attention to confirmation dialogs
- Export CSV backups regularly
- Use swipe gestures carefully

Filtering and Sorting

Issue: Tanks disappear when applying filters

- **Solution**: This is expected behavior - filters hide non-matching tanks. Check:
- Which filters are active (look for highlighted chips)
- Tap "All" to reset status filters
- Deselect all category chips to see all tank types

Issue: Search doesn't find tanks

- **Solution**:
- Search is case-insensitive but must match part of the tank name
- Clear search to verify tanks exist in current worksheet
- Check that filters aren't hiding the tanks you're searching for

Export Issues

Issue: CSV won't open in Excel

- **Solution**:
- Ensure Excel is updated to latest version
- Try opening in Numbers or Google Sheets first
- Re-export from enoTec if file appears corrupted

Issue: PDF doesn't include all data

- **Solution**:
- PDFs show only the selected tanks in Trends view
- Verify tanks are selected before exporting

- Each chart exports individually - export both SO_2 and VA separately

Issue: Can't share exported files

- **Solution**:
- Check device storage space
- Verify sharing destination is available (internet required for email)
- Try different sharing methods (Files app as fallback)

Display Issues

Issue: Text is too small

- **Solution**: enoTec respects iOS Dynamic Type settings:
- Go to Settings > Display & Brightness > Text Size
- Adjust the slider
- enoTec will update automatically

Issue: Colors are hard to distinguish

- **Solution**: For visual accessibility:
- Go to Settings > Accessibility > Display & Text Size
- Enable "Differentiate Without Color"
- enoTec uses system-wide accessibility settings

Tips System

Issue: Tips won't appear

- **Solution**:

- Check that tips are enabled (lightbulb icon should be bright)

- Tips appear only once per screen for new screens you haven't visited

- Toggle tips off and on to reset

Issue: Can't dismiss tips

- **Solution**:

- Tap anywhere outside the tip bubble

- Tap the lightbulb icon to disable all tips

- Tips auto-advance through key features

Frequently Asked Questions

General

Q: Is my data backed up?

A: Data is stored locally and included in your standard iOS/iPadOS/macOS device backup (iCloud or local). enoTec does not provide its own cloud sync service. To protect your data, ensure your device is regularly backed up using iCloud or a computer.

Q: Can I use enoTec offline?

A: Yes. enoTec is fully functional without an internet connection. Internet is only required for sharing exported files via email or cloud services.

Q: Does enoTec work on iPad and Mac?

A: Yes. enoTec is a universal app that runs on iPhone, iPad, Apple Vision Pro, and Mac (Apple Silicon) with an optimized interface for each platform.

Q: How much does enoTec cost?

A: Pricing information is available on the App Store listing.

Data Management

Q: How many tanks can I add?

A: There is no hard limit, but optimal performance is maintained with up to 50 tanks per project. The app has been tested with 100+ tanks.

Q: Can I import existing data?

A: Data import is not currently available. All data must be entered manually.

Q: What happens if I delete the app?

A: All data will be deleted unless you have an iOS/iPadOS/macOS backup. Export important data before uninstalling. If you reinstall on the same device and restore from backup, your data will be recovered.

Q: Can I share projects with other users?

A: Projects cannot be transferred directly between devices or users. You can export CSV and PDF files to share data with others.

Measurements

Q: What SO$_2$ concentration does the app use for calculations?

A: The app defaults to 180 g/L (18% solution), which is a common concentration for winemaking SO$_2$ products. However, each tank has an adjustable **Conc pill** in the detail view where you can set the exact concentration of your SO$_2$ product (ranging from 6% to 50%). This allows accurate calculations based on your specific SO$_2$ solution. Tap the Conc pill when selected to toggle between percentage (%) and grams per liter (g/L) display.

Q: Does enoTec measure Total SO$_2$?

A: No. enoTec tracks Free SO$_2$, which is the active form that protects wine. Total SO$_2$ includes both free and bound forms.

Q: Can I track other parameters besides SO$_2$ and VA?

A: Currently, enoTec tracks volume, Free SO$_2$, and volatile acidity. Additional parameters are not available at this time.

Q: What units does enoTec use?

A:

- Volume: Liters (L)

- SO$_2$ levels (Init/Max): Milligrams per liter (mg/L)

- SO$_2$ concentration (Conc): Percentage (%) or Grams per liter (g/L) - toggle by tapping

- Volatile Acidity: Grams per liter (g/L)

- SO$_2$ Addition (Required): Milliliters (mL) for amounts under 1L, Liters (L) for larger amounts

Features

Q: Why is the chart limited to 3 tanks?

A: This ensures charts remain readable and performance stays optimal. Comparing more than 3 tanks typically makes trends difficult to interpret.

Q: Can I customize the app's appearance?

A: enoTec uses a dark theme optimized for cellar environments with low lighting. Theme customization is not currently available.

Q: Will there be an Android or Windows version?

A: enoTec is currently available exclusively on Apple platforms (iOS, iPadOS, visionOS, macOS).

Troubleshooting

Q: What should I do if the app crashes?

A:

1. Force quit the app

2. Restart your device

3. Update to the latest iOS version

4. Reinstall enoTec if crashes persist

5. Contact support if the issue continues

Q: My data isn't saving. What's wrong?

A: Check:

- Device has sufficient storage space

- iOS is updated to latest version

- enoTec has necessary permissions

- Try force-quitting and restarting the app

Glossary

Wine Industry Terms

Category: A grouping of similar tank types with shared characteristics (volume range, default SO_2 levels)

Correction Status: Indicates whether a tank has been adjusted to reach target SO_2 levels

Free SO_2: The unbound, active form of sulfur dioxide that protects wine from oxidation and microbial spoilage

g/L: Grams per liter, the unit for measuring volatile acidity

mg/L: Milligrams per liter, the standard unit for measuring SO_2 concentration

SO_2 (Sulfur Dioxide): A preservative used in winemaking to protect wine and inhibit unwanted microorganisms

Total SO_2: Combined measurement of free and bound SO_2 forms

VA (Volatile Acidity): Measurement of acetic acid and other volatile acids in wine, expressed in g/L. Elevated VA can indicate spoilage.

App-Specific Terms

Category: A grouping of similar tank types with shared characteristics

Inventory: The master collection of all tanks available for use in projects

Project: A container holding multiple worksheets for a specific production cycle or time period

Worksheet: A snapshot of tank data at a specific date, typically monthly measurements

Technical Terms

CSV (Comma-Separated Values): A universal spreadsheet format compatible with most data applications

Export: The process of saving app data to an external file format

Filter: A way to show only tanks matching specific criteria

Gesture: Touch interactions like swipes and taps used to navigate the app

LED Indicator: Visual feedback showing SO_2 correction status with color-coded lights

PDF (Portable Document Format): A universal document format for reports and archiving

Sort: Arranging tanks in a specific order (alphabetically, by volume, etc.)

Trend: A pattern of change over time visualized in charts

Version History

Version 1.1.1 (Current) - October 4, 2025

UI Polish & Animation Enhancement

- Enhanced inventory feature with professional section labels and tube-style category picker
- Added confirmation dialogs for destructive actions (Clear inventory)
- Fixed glitchy tab transitions between Tank List and Trends views
- Resolved visual jumping when switching between tank categories
- Improved safe area handling for edge-to-edge list display

Version 1.1.0 - September 2025

Enhanced Trends & Critical Fixes

- Apple Health-style interactive charts with horizontal scrolling
- Individual PDF export per chart (SO_2 and VA)
- Fixed category filter issues (Type A, Type B filters now work correctly)
- Fixed 2-digit year parsing (26 now correctly interprets as 2026)
- Enhanced project collision detection and sequential naming
- Improved search animations and visual feedback
- Standardized number formatting across all fields

Version 1.0.1 - Initial Release

Foundation Features

- Complete tank inventory management system

- SO_2 and volatile acidity tracking with automatic calculations

- Advanced multi-select filtering and sorting

- Interactive trends visualization

- CSV and PDF export functionality

- Intuitive gesture-based worksheet navigation

- Contextual guided tips system

Support & Feedback

Getting Help

For support with enoTec:

1. Review this manual and the Troubleshooting section
2. Check the FAQ section for common questions
3. Visit the enoTec support page (link in App Store listing)
4. Contact support: **tokistudios@pm.me**

Providing Feedback

We value your input:

- **Feature Requests**: Email tokistudios@pm.me with your suggestions
- **Bug Reports**: Include device model, OS version, and steps to reproduce the issue
- **General Feedback**: Share your experience and suggestions for improvement

All feedback is reviewed by the developer and helps shape future updates.

Stay Updated

- Enable automatic app updates in the App Store for the latest features

- Follow enoTec on social media for tips and announcements

- Check the App Store listing for release notes with each update

Thank you for choosing enoTec for your winery's tank management needs.

enoTec User Manual v1.1.1

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