AMS 405.57

AMS 405.57 1 1/2" x 12" Aluminum Liner User Manual

Model: 405.57 | Brand: AMS

Introduction

This manual provides essential information for the proper use, maintenance, and care of your AMS 405.57 1 1/2" x 12" Aluminum Liner. This liner is designed for use with various 1-1/2" AMS core samplers, facilitating efficient and reliable sample collection.

Product Overview

Image Description: A single, cylindrical aluminum tube, approximately 12 inches in length, with an outer diameter of 1 1/2 inches. The surface appears brushed or slightly textured, indicative of aluminum material. Both ends are open, showing the hollow interior of the liner. This image illustrates the primary component of the AMS 405.57 product.

The AMS 405.57 Aluminum Liner is a precision-engineered component for soil and sediment sampling. It features a 1-1/2 inch outer diameter and a 12-inch length. The wall thickness is approximately 0.060 inches, providing a balance of durability and lightweight handling. This liner is specifically designed to integrate seamlessly with compatible AMS core samplers.

Key Features:

- **Dimensions:** 1 1/2" outer diameter x 12" length.
- **Material:** High-quality aluminum construction.
- **Wall Thickness:** Approximately 0.060 inches.
- **Compatibility:** Designed for use with various 1-1/2" AMS core samplers.
- **Origin:** Manufactured in the United States.

Setup

Before using the aluminum liner, ensure you have the appropriate AMS core sampler that is compatible with a 1-1/2 inch liner. The liner is intended to be inserted into the core sampler barrel to collect and retain soil or sediment samples.

1. **Inspect the Liner:** Carefully examine the aluminum liner for any signs of damage, dents, or deformities that could affect its performance or fit within the core sampler.
2. **Clean the Liner:** Ensure the interior and exterior of the liner are clean and free from debris, dirt, or residues from previous uses. Use a soft cloth and mild detergent if necessary, then rinse thoroughly and dry completely.
3. **Prepare Core Sampler:** Refer to your AMS core sampler's manual for specific instructions on preparing it for liner insertion. Ensure the sampler barrel is clean and free of obstructions.
4. **Insert Liner:** Gently slide the aluminum liner into the designated slot or barrel of your 1-1/2" AMS core sampler. Ensure it seats properly and securely. Do not force the liner, as this could cause damage to either the liner or the sampler.
5. **Verify Fit:** Once inserted, confirm that the liner is flush and stable within the core sampler, ready for sampling operations.

Operating Instructions

The aluminum liner functions as a disposable or reusable sleeve within a core sampler to preserve the integrity of collected samples. Its operation is directly tied to the use of the core sampler itself.

1. **Attach Core Sampler:** Assemble your AMS core sampler with the aluminum liner installed, following the sampler's specific instructions.
2. **Perform Sampling:** Use the core sampler as directed by its manual to collect the desired soil or sediment sample. The liner will fill with the sample as the sampler penetrates the ground.
3. **Retrieve Sampler:** Carefully extract the core sampler from the ground.
4. **Remove Liner:** Once the core sampler is retrieved, gently remove the aluminum liner containing the sample. This may involve detaching the sampler's cutting tip or other components as per your sampler's design.
5. **Seal Sample:** If the sample is to be transported or stored, cap both ends of the liner immediately to prevent sample loss, contamination, or disturbance. Use appropriate end caps or sealing methods.
6. **Label Liner:** Clearly label the liner with all necessary sample identification information (e.g., date, time, location, depth, project ID).

Note: *Always refer to the specific operating instructions of your AMS core sampler for detailed sampling procedures. The aluminum liner is a passive component designed to hold the sample.*

Maintenance

Proper maintenance extends the life of your aluminum liner, especially if intended for multiple uses, and ensures sample integrity.

- **Cleaning:** After each use, if the liner is to be reused, thoroughly clean both the interior and exterior. Remove all soil, sediment, or other residues. Use warm water and a mild, non-abrasive detergent. A brush designed for tube cleaning may be helpful.
- **Rinsing:** Rinse the liner thoroughly with clean water to remove all detergent residue.
- **Drying:** Allow the liner to air dry completely before storage. Ensure no moisture remains inside, as this could lead to corrosion or contamination.
- **Inspection:** Regularly inspect the liner for any signs of wear, corrosion, dents, or structural damage. Even minor deformities can affect its fit and the quality of sample collection.

- **Storage:** Store liners in a clean, dry environment, away from corrosive chemicals or extreme temperatures. Keep them protected from physical impact that could cause bending or denting.

Troubleshooting

This section addresses common issues that may arise during the use of your aluminum liner.

Problem	Possible Cause	Solution
Liner does not fit into core sampler.	Incorrect liner size. Liner is dented or deformed. Core sampler barrel is obstructed or damaged.	Verify liner dimensions (1 1/2" OD) against sampler specifications. Inspect liner for damage; replace if necessary. Clean and inspect core sampler barrel.
Sample is difficult to extract from liner.	Compacted sample. Rough interior surface of liner (due to wear or damage).	Use appropriate sample extrusion tools. Consider replacing the liner if interior surface is compromised.
Liner gets stuck in core sampler.	Liner or sampler barrel is dirty. Liner is slightly deformed. Excessive force during insertion.	Clean both components thoroughly. Inspect liner for subtle deformities; replace if needed. Always insert gently.

Specifications

Attribute	Detail
Model Number	405.57
Outer Diameter	1 1/2 inches (approx. 3.81 cm)
Length	12 inches (approx. 30.48 cm)
Wall Thickness	Approximately 0.060 inches (approx. 1.52 mm)
Material	Aluminum
Approximate Weight	1 Pound (approx. 0.45 kg)
Package Dimensions	14 x 4 x 4 inches
Manufacturer	AMS Incorporated
Country of Origin	United States
Date First Available	December 12, 2017

Warranty and Support

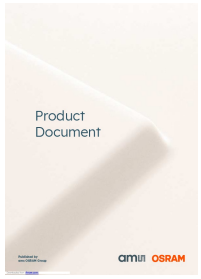
Specific warranty information for the AMS 405.57 Aluminum Liner is not provided in this document. For details regarding product warranty, technical support, or replacement parts, please contact AMS Incorporated directly through their official

website or customer service channels.

Manufacturer: AMS Incorporated

Please refer to the manufacturer's official resources for the most current support information.

Related Documents - 405.57

	ams AS5600L Adapter Board Eval Kit Manual This manual provides comprehensive information for the ams AS5600L-WL_EK_AB adapter board, including kit contents, board description, mounting instructions, pinout details, I2C mode operation, hardware schematics, PCB layout, and ordering information.
	ams AS5048 14-bit Rotary Position Sensor User Manual This user manual provides detailed information on the ams AS5048, a 14-bit rotary position sensor with digital angle and PWM output. It covers the AS5048 adapter board, mounting, pinout, operation cases (SPI, Daisy Chain), firmware coding examples, and hardware schematics. Essential for engineers integrating this sensor into their systems.
	AMS Wall Clock Operating Instructions Operating instructions for AMS wall clocks, covering battery installation, replacement, and general usage in multiple languages.
	TSL2521 EVM User Guide: Ambient Light Sensor Evaluation Kit User guide for the ams TSL2521 EVM, detailing its features as a highly sensitive ambient light sensor with selective flicker detection and fast sampling for use behind OLED or auxiliary to camera. Includes hardware and software descriptions, setup, and legal information.

	ams TMD2636 EVM Miniature Proximity Sensor Module User Guide User guide for the ams TMD2636 EVM, a miniature proximity sensor module. Details hardware, software, controls, and legal information for evaluating the TMD2636 sensor.
	AS7341 11-Channel Spectral Sensor User Guide This user guide provides comprehensive information on the AS7341 11-Channel Spectral Sensor Evaluation Kit, detailing its features, hardware, software, and various application use cases. It covers setup, operation, and troubleshooting for both ALS Ambient Light Sensing and Reflection Mode.