BUUBO YNB-111

BUUBO YNB-111 Paint Thickness Gauge User Manual

Product Overview

The BUUBO YNB-111 Paint Thickness Gauge is a compact and precise instrument designed for measuring the thickness of coatings on various metal substrates. It automatically identifies magnetic (Fe) and non-magnetic (nFe) metal matrices, and also includes a function for detecting non-magnetic coatings like zinc on magnetic metals (Fe+Zn). This device is ideal for manufacturing, workshops, and paint shops requiring accurate coating thickness measurements.

Package Contents

Verify that all items listed below are included in your package:

- 1 X Coating Thickness Gauge YNB-111
- 1 X Iron Calibration Substrate
- 1 X Aluminum Calibration Substrate
- 6 X Calibration Films (50um, 100um, 250um, 500um, 1000um, 1500um)
- 1 X English & Russian User Guide
- 1 X Lanyard
- 1 X Retail Box



Image: The BUUBO YNB-111 Paint Thickness Gauge shown with its included accessories, including calibration films and substrates.

Setup

Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Slide the cover open.
3. Insert two 1.5V AAA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Close the battery compartment cover securely.



Image: The open battery compartment of the YNB-111 gauge, showing the slots for two AAA 1.5V batteries.

Operating Instructions

Powering On/Off

To power on the device, press and hold the /**ZERO** button until the display illuminates. To power off, press and hold the /**ZERO** button again, or the device will automatically shut down after a period of inactivity to conserve battery.

Taking a Measurement

1. Ensure the device is powered on.
2. Place the probe tip of the gauge firmly and perpendicularly onto the surface to be measured.
3. The device will automatically detect the substrate type (Fe, nFe, or Fe+Zn) and display the coating thickness measurement on the screen.
4. Lift the gauge from the surface to prepare for the next measurement.



Image: A close-up view of the YNB-111 gauge's sensor tip, which makes contact with the surface for measurement.

Unit Selection

Press the **UNIT** button to cycle through available measurement units (e.g., micrometers (um) or mils). The selected unit will be displayed on the screen.

Automatic Substrate Identification

The YNB-111 gauge automatically identifies the underlying metal substrate. It can distinguish between magnetic metals (Fe), non-magnetic metals (nFe), and magnetic metals with a non-magnetic coating (Fe+Zn), such as zinc plating. The detected substrate type will be indicated on the display.

Calibration

Regular calibration ensures the accuracy of your paint thickness gauge. The YNB-111 offers three calibration functions: Zero Point, Two Point, and Basic Calibration. Refer to the included English & Russian User Guide for detailed step-by-step instructions on performing each calibration type using the provided calibration films and substrates.

Zero Point Calibration

Used to set the zero reference on an uncoated substrate.

Two-Point Calibration

Used for more precise calibration across a range of thicknesses, typically using two known film thicknesses.

Basic Calibration

A general calibration method to ensure overall accuracy.

Key Features

- Measures the thickness of non-magnetic coatings on magnetic metal substrates.
- Measures the thickness of non-metallic coatings on non-magnetic metal substrates.
- Automatic identification of magnetic and non-magnetic metal matrices.
- Automatic identification of non-magnetic metal coating (e.g., zinc) on magnetic metal matrices (Fe+Zn function).
- Three calibration functions: zero point, two point, and basic.



Image: The YNB-111 gauge display, illustrating its resolution and error range specifications.

Specifications

Parameter	Value
Model	YNB-111
Resolution	0.1um (<100um); 1um (>100um)
Error Range	±5um (≤150um); ±(3%H+1um) (>150um)
Substrate Types	Fe, nFe, Fe+Zn
Power Source	2 x 1.5V AAA Batteries (not included)
Item Weight	50 g
Parcel Dimensions	3 x 2 x 1 cm
Manufacturer	BUUBO

Maintenance

Cleaning

Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure the probe tip is clean and free of debris before each use to maintain accuracy.

Storage

Store the gauge in a dry, cool place, away from direct sunlight and extreme temperatures. If storing for extended periods, remove the batteries to prevent leakage.

Battery Care

Replace batteries when the low battery indicator appears on the display. Dispose of used batteries responsibly according to local regulations.

Troubleshooting

Device Does Not Power On

- Check if batteries are inserted correctly with the right polarity.
- Replace with new AAA batteries.
- Ensure the power button is pressed and held sufficiently.

Inaccurate Readings

- Perform a calibration (Zero Point, Two Point, or Basic) as described in the user guide.
- Ensure the probe tip is clean and free of any residue.
- Verify that the gauge is placed firmly and perpendicularly on the surface.
- Check if the measurement surface is stable and free from vibrations.

Display Issues

- If the display is dim or flickering, replace the batteries.
- If the display shows an error code, refer to the detailed user guide for specific error interpretations.

Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the contact details provided in the original product packaging or contact your retailer. Keep your purchase receipt as proof of purchase.