

# BAMbino®

## Conveyor Idler Bearing Monitor

Failure of conveyor systems is a significant problem in the mining industry, causing extended downtime, lost productivity, and increased risk of fire. The most common cause of conveyor failure (and belt damage) is bearing seizure in the idlers supporting the belt.

Inspectors currently use individual audio assessment, without technical documentation, to detect faulty bearings. This highly unreliable and subjective method only detects bearings in the late stage of fragmentation, resulting in costly unscheduled maintenance.

**BAMbino®** is the world's first portable Bearing Acoustic Monitor that provides accurate, easy and early detection of faulty idler bearings. **BAMbino®** is a handheld portable instrument that extracts bearing fault signatures measured from a distance of 0.5m to 5m away from the belt.

A visual and audible alarm gives early notice of bearing damage whilst ranking the severity of the detected fault, allowing forward planning of cost effective maintenance.



## Advantages

- ✓ Fast and effective tool for predictive maintenance.
- ✓ Easy-to-use.
- ✓ Simple button operation via tactile membrane keypad with LCD display.
- ✓ Hand-held (250 x 120 x 50mm)
- ✓ Lightweight (less than 1kg)
- ✓ Screens out extraneous sources of noise, therefore usable in highly reverberant underground tunnels.
- ✓ Pre-programmable for up to 10 belt sections.
- ✓ Robust construction.
- ✓ Visual and audible alarm.
- ✓ User programmable.
- ✓ Threshold settings.
- ✓ Rechargeable battery.
- ✓ 12 month warranty.

# Reduce the Risk of Conveyor Belt Damage

# **BAM**bino®

## **BAM**bino® Technical Specifications

Measurement Method	Sound pressure
Frequency Range (3dB point)	80Hz to 5kHz
Dynamic Range	72dB
Max Sound Pressure Level	110dB
Maximum Measurement Distance	3.0m
Directionality	Omni-directional
Operating Modes	Monitoring and diagnosis
Response Time	1.0s in Monitoring Mode Approx. 3km/h
Gain	Auto-ranging
Alarm	Flashing LED Audible Tone
Displayed Parameters	Bearing O.K./Faulty (All limits are variable by software command)
Applicability*	Pre-programmed for common bearing types e.g. 6204, 6206, 6305, 6309 (can also be modified for other types of bearing)
Power Supply	In-built rechargeable batteries ("Battery Too Low" indicated in display, automatic power-off below 2.2V)
Operating Time	16 hours continuous
IP Rating	IP55
Microphone	7.5mm electret, frequency range 50Hz - 15kHz
Display	Backlit 240 x 160 graphics
Keypad	40 keys tactile membrane keypad
Weight	480g
Physical Dimensions	260 x 120 x 50mm
Temperature Range	0° - 45°C
Humidity Range	20% - 90%

E&OE

\*Contact AutoTest Products for bearings different from the above

Outer appearance and specifications are subject to change without prior notice.

**Autorised Distributor**



**Proudly Designed and Manufactured in Australia by:**

**AUTO  
TEST**  
Products Pty Ltd

