

BELT GUARD · COVER CARE

CC222 PORTABLE

REMAINING COVER THICKNESS — STEEL CORD BELTS

Spot cover thickness measurement for steel cord conveyor belts.



CC222 INSTRUMENT AND INDUCTIVE HAND PROBE

OVERVIEW

REMAINING COVER THICKNESS, MEASURED ON THE BELT

The Belt Guard Cover Care CC222 is a fully portable instrument for spot measurement of remaining cover thickness on steel cord conveyor belting. An inductive hand probe is placed in contact with the belt surface and detects the steel cords beneath the cover; a microprocessor calculates the distance from the probe face to the tops of the cords and displays it in millimetres.

Because the measurement is inductive rather than ultrasonic, no coupling medium is required and readings are not affected by changes in ambient temperature. The belt must be stationary, and the conveyor and associated machinery isolated, before measurement.

MEASURING RANGE 0 – 50 mm	RESOLUTION ±0.1 mm	BELT TYPE Steel cord
BELT CONDITION Stationary	ENCLOSURE Aluminium · IP68	GROSS WEIGHT 4.0 kg cased

WHY CC222



INDUCTIVE SENSING

The inductive hand probe locates the steel cords beneath the cover and reports the distance from the probe face to the tops of the cords; the instrument derives the rubber thickness above them.



NO COUPLING MEDIUM

The probe is placed directly on the belt surface. No gel, no water, nothing to carry, apply or clean up afterwards.



UNAFFECTED BY TEMPERATURE

Because the measurement is inductive rather than ultrasonic, readings are not affected by changes in ambient temperature – a reading taken in the morning is comparable with one taken at noon.



CALIBRATED PER BELT

A stored belt profile matches the instrument to each belt construction, from light duty through to heavy ST grades.



FIELD PORTABLE

Handheld instrument, 4.0 kg cased. Battery powered in an IP68 enclosure, cased with charger, probe and calibration shims. No installation, no fixed hardware, nothing left on the conveyor.



SITE-OPERABLE

Used by site personnel during a shutdown. Training is provided at handover.

CASED INSTRUMENT

Supplied as a complete cased instrument – gauge, hand probe, charger and calibration shims. Nothing is installed on the conveyor and nothing is left behind.

WHAT IT MEASURES

- ☐ Remaining top cover thickness above the steel cords, in millimetres
- ☐ Spot measurements at any accessible point on a stationary belt
- ☐ Wear trends over time when readings are logged and compared

What it does not do

- ☐ Assess cord or splice condition
- ☐ Provide rip protection
- ☐ Measure fabric or PVC belts, which have no steel cords to read against
- ☐ Measure while the belt is running – the belt must be stationary

SYSTEM OPERATION

HOW IT WORKS

The instrument is used on a stationary, isolated belt. Select the belt profile, place the probe on the surface, and read remaining cover thickness in millimetres.

001

SELECT THE BELT PROFILE

Load or select the correct belt construction and calibration profile for the belt being measured.

002

STOP AND ISOLATE THE BELT

The CC222 is a handheld spot-measurement instrument used on a stationary belt. The conveyor and any associated machines must be isolated and all site safety requirements met before measurement.

003

PLACE THE PROBE

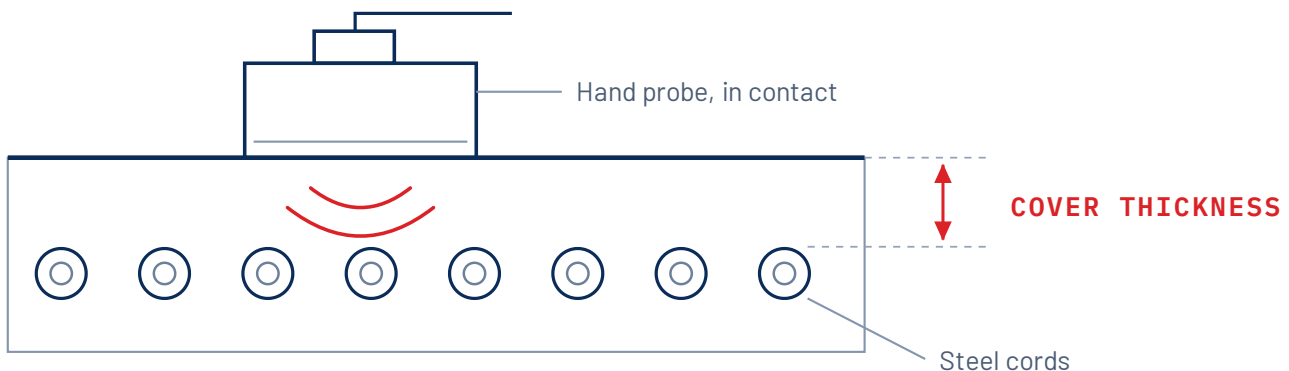
Position the probe squarely on the required measurement location. Because minimum cover is usually what matters, the probe is moved over an area to confirm the lowest reading.

BELT STATE

The belt must be stationary. The conveyor and any associated machines must be isolated and all site safety requirements met before measurement.

DEPLOYMENT

HOW IT READS



IN THE FIELD

- 01 Isolate the conveyor and park the belt. Readings are taken with the belt **stationary**.
- 02 Plug in the probe to power the instrument, then place the probe face **squarely on the belt surface**.
- 03 Move slowly across the cord and take the **minimum reading** — the thinnest cover above the cord crown.
- 04 Record the value in millimetres and trend it against previous inspections.

TECHNICAL DATA

Belt type	Steel cord
Belt condition	Stationary – belt and machinery isolated
Measuring range	0 – 50 mm
Resolution	±0.1 mm
Contact	Contact instrument – probe placed on the belt surface
Coupling medium	None required
Temperature effect	Readings unaffected by ambient temperature
Enclosure	Powder-coated aluminium, IP68
Battery	12 V 1.3 Ah, approximately 9 hours
Operating temperature	–10 °C to +60 °C
Gross weight	4.0 kg cased
Case size	330 × 130 × 280 mm

WHAT'S INCLUDED

CC222 INSTRUMENT

Powder-coated aluminium enclosure, IP68.
Microprocessor, display and stored belt profiles

INDUCTIVE HAND PROBE

Contact probe, placed directly on the belt surface. No coupling medium required

CHARGER AND BATTERY

12 V 1.3 Ah battery, approximately 9 hours endurance. Charger supplied in the case

CALIBRATION SHIMS

Supplied with the instrument for field checks

USING THE INSTRUMENT

Belt state: the belt must be stationary. The conveyor and any associated machines must be isolated and all site safety requirements met before measurement.

Belt profile: load or select the correct belt construction profile for the belt being measured before taking readings.

Taking a reading: position the probe squarely on the measurement location. Because minimum cover is usually what matters, move the probe over an area and take the lowest reading.

ONGOING REQUIREMENTS

Calibration shims are supplied with the instrument for field checks. Charge the battery between uses and keep the probe face clean and undamaged.

WHERE IT'S USED

Steel Cord Belts

Shutdown Inspections

Wear Trending

Mining Operations

Coal Handling Plants

Port Facilities

Overland Conveyors

Belt Replacement Planning