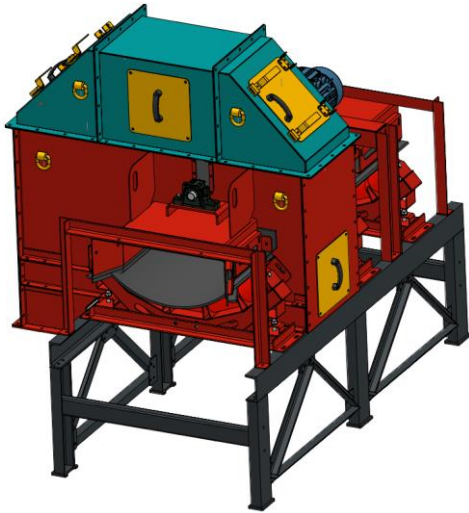


CH-CBS Conveyor Belt Sampler

Datasheet



WHAT IS THE CONVEYOR BELT SAMPLER?

The Conveyor Belt Sampler (Hammer Sampler) is an automated sampling system designed to collect representative material samples from moving conveyor belts. It operates by passing a sample collection device through the material stream, ensuring accurate and repeatable sampling across the entire cross-section of the belt. This system is widely used in industries where precise material analysis is required for quality control and process optimization.

TECHNICAL SPECIFICATIONS

- Operating Principle: Automatic, swinging hammer system
- Belt Width Compatibility: 500 mm - 2,100 mm
- Trough Angle Compatibility: 20° - 38°
- Sampling Frequency: Adjustable time intervals, configurable via PLC
- Drive System: Electric motor (AC/DC) or pneumatic actuator
- Sample Collection Mechanism: Mechanized hammer sweep with replaceable cutter blade
- Body Material Options: Carbon steel, Stainless steel (AISI 304, AISI 316)
- Protection Class: IP55 / IP65 (optional IP67 for extreme conditions)
- Power Requirements: 220V / 380V AC, 50-60 Hz, Customizable per region
- Connectivity & Automation: PLC integration, SCADA compatibility, Remote monitoring
- Environmental Protection: Optional dust-proof enclosure, Explosion-proof variants available
- Installation Orientation: Horizontal / Inclined conveyor compatibility
- Maintenance & Service: Minimal maintenance required, quick-access service panels for easy component replacement

APPLICATION AREAS

- Mining & Mineral Processing: Iron ore, coal, copper, bauxite, and other bulk materials
- Cement & Aggregates: Limestone, clinker, and raw mix analysis
- Power Generation: Coal-fired power plants for fuel quality monitoring
- Chemical & Petrochemical Industry: Sampling of bulk powders and granules
- Food & Agriculture: Grain, sugar, and feedstock quality assessment