



**/ INTRODUCING HITEK ENVELOPER/STACKER**

# **Battery Production Designed to Exceed Industry Expectations**

- ✓ Accommodates various battery types (flooded, AGM, Gel)
- ✓ Achieves speeds from 110 to 260 envelopes per minute.
- ✓ Prioritises operator safety with secure design
- ✓ Features automatic changeover and simplified interface
- ✓ Incorporates cutting-edge technology and automation
- ✓ Utilises pure lead and stringent quality control

# Why Choose TBS?

## Versatility in Product Range

Accommodates various battery types including flooded, AGM, and Gel, meeting diverse needs in the automotive and standby power sectors.

## Plate Feeders

Achieves remarkable speeds from 110 to 260 envelopes per minute, ensuring efficient production rates.

## Enhanced Safety

Prioritises operator safety with a design that ensures a secure working environment during the manufacturing process.

## Operational Efficiency

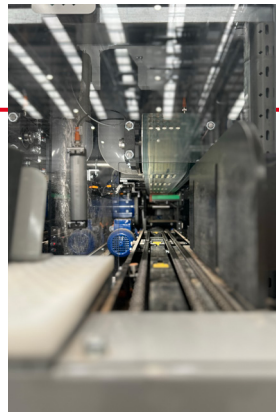
Features such as automatic changeover and a simplified operation interface reduce downtime and facilitate ease of use, enhancing overall operational efficiency.

## Advanced Technology

Incorporates cutting-edge technology and automated processes to optimise every aspect of the production cycle, meeting modern manufacturing demands.

## Super Quality Control

Utilises manufacturing and stringent quality control measures to produce energy storage solutions that exceed customer expectations and industry standards.



## KEY FEATURES

### Dual Unwind

#### Remarkable Efficiency in Reel Change

The Dual Unwind system holds two rolls of separator material, automatically splicing them when one runs out, ensuring continuous operation without stopping the machine. This minimises downtime and is especially beneficial in AGM battery production, where reel changes are needed every 20 minutes, significantly improving efficiency.

#### Pneumatic Mandrel for Toolless Changeover

Enables quick and efficient changeovers without the need for tools, optimising production speed.

#### Live Reel Speed Control

Utilises ultra-sonic laser technology for live reel speed control, ensuring optimal and consistent speed that prevents separator pull and supports separator lag.

#### Enhanced Safety and Cleanliness

The fully enclosed housing design ensures that separator dust is contained and safely extracted, maintaining a clean and safe working environment.

### Plate Feeders

#### Ergonomic Design

Horizontal loading and belt feeder pickup are designed for enhanced plate loading, promoting better health and safety through improved ergonomics.

#### Servo-Adjusted Belt Feeder

Features live feedback for automatic belt tension adjustment, reducing excessive wear and extending the lifespan of the system.

#### Advanced Detection Systems

Incorporates double plate detection and lug position detection to minimise operator error, enhancing reliability and efficiency.

#### Improved Working Environment

The enclosed design, fitted with local extraction, significantly improves the working environment by reducing dust and noise.

### Envelope Head

#### Vacuum Envelope Head

Optimizes AGM material handling, reducing the risk of material damage and enhancing production quality.

#### Adjustable Folding Unit

Allows for adjustments to accommodate plate and separator thickness variations, ensuring precision and flexibility in production.

#### Cut and Crease Mechanism

Enables precise envelope shaping, which is critical for maintaining battery integrity and performance. (Details to be rechecked and further explored in additional notes.

#### OPTIONAL EXTRA: Advanced Vision System

Equipped with upper and lower cameras for detecting short materials, enhancing the quality control process.

## **Tamping Alignment**

### **Improved Group Tamping**

Enhances the accuracy of alignment, ensuring that battery components fit precisely, which is critical for battery performance.

### **Outside Lug Bend Feature**

Ensures that all lugs are correctly fused during the Cast-On Strap process, improving the reliability of the electrical connections.

### **Fibre Optic Lug Counting**

Offers precise group plate count checks, enhancing the accuracy of the assembly process and reducing the risk of assembly errors.

## **Compression & Check Weigh**

### **Group Compression with Dimensional Thickness Tolerancing**

Designed in line with original equipment manufacturers' specifications, ensuring that the produced batteries meet high-quality standards.

### **Group Data Traceability**

Offers comprehensive data traceability for group compression, enabling precise quality and production monitoring.

**These expanded benefits and features highlight HiTek's commitment to innovation, safety, and efficiency in battery production technology, setting new industry standards for performance and reliability.**

## **Maximise Efficiency and Safety with HiTek's Advanced Upgrades**

Elevate your battery production capabilities with HiTek's Enhanced Plate Loader (EPL) and Auto Plate Loader (APL). These cutting-edge upgrades are designed to boost productivity and ensure operator safety while integrating seamlessly with existing HiTek machines.

**Contact the Sales Team to find out more.**

