INTRODUCING TBS'S NEW ACTIVMAT® LINE OF ELECTRODE MAKING EQUIPMENT

ELBC SEPTEMBER 2024









Excellence in High Performing Active Material

...OUR NEW LINE OF ELECTRODE MAKING EQUIPMENT BASED UPON...

- Innovative Technology ensuring precise parameter and process control, reducing variability and enhancing product performance and quality.
- Optimized for manufacturing efficiency and output.
- Reduced production costs and waste without compromising battery performance or quality.
- Sustainability engineered to significantly reduce overall environmental footprint.
- TBS has prided itself on a legacy of innovation, from its market leading Cast-on-Strap automation to its highly
 efficient Expander technology. Our ActivMat line is the next step in providing the lead acid battery industry with
 new, disruptive innovation based upon leading-edge technology.





...CONTINUOUS TECHNOLOGICAL INNOVATION VIA...

TBS ADVANCED ENERGY EQUIPMENT ALLIANCE







- Alliance Philosophy:
 - Collaboration leads to breakthrough technologies critical for long-term energy storage performance gains.
 - The <u>Strength</u> and power of the Alliance is created from years of developing technical and manufacturing expertise which can be <u>Combined</u> for true innovative disruption.



Excellence in High Performing Active Material

ELECTRODE MAKING EQUIPMENT PORTFOLIO:

- CONTINUOUS PASTE MIXER
- FLASH DRYER
- CURING CHAMBER
- SERVO SPINDLE PUNCH PRESS





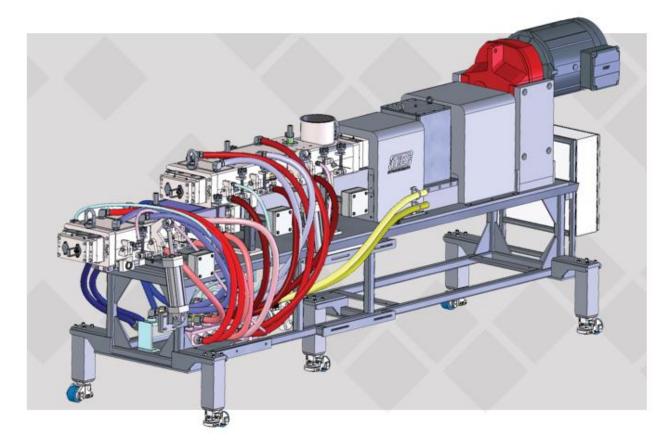




Uniform Paste Mixture

- continuous mixing
- Precise Temperature Control
 - 6 temperature monitoring zones
- Effective Moisture Control
 - immediate paste application
- Reduced Lead Emissions
 - encapsulated mixing reactor
- **Eco-Friendly and Cost-Effective**
 - automatic cleanse cycle
 - sustainable energy management

Unmatched Mixing Precision and Efficiency



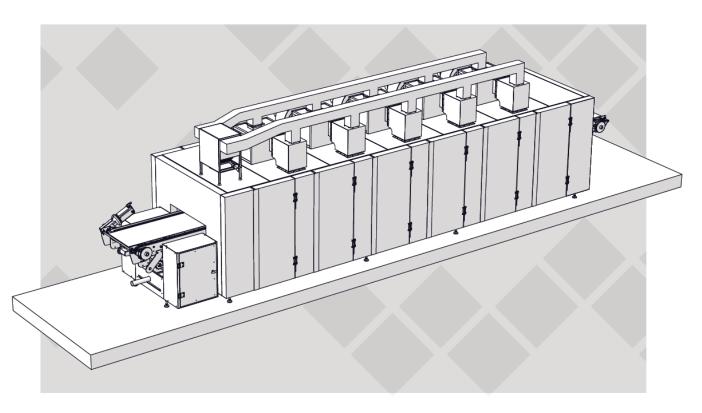




FLASH DRYER

/ WITH PINCO FIREFLY TECHNOLOGY

- Precision Moisture Control
 - only removes surface moisture
- Customizable Processing
 - 6 adjustable temperature + airflow zones
- Energy Efficiency
 - reduced energy use
- Easy Maintenance
 - modular design with easy access
- Eco-Friendly
 - IR heating, no gas emissions



Ultimate Moisture Control



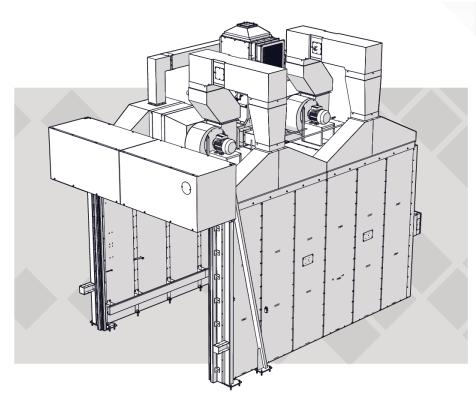


■ Enhanced Precision and Accuracy

- exact temp and humidity control in every stack position
- **Faster Curing**
 - improved heat and moisture removal
- Energy Efficiency
 - reduced power consumption
- **Eco-Friendly Operation**
 - eliminates burner and gas emissions
- Flexible and Durable Design
 - modular, stainless steel construction

CURING CHAMBERS

/ WITH PINCO ECOCURING TECHNOLOGY



Enhanced Eco Curing System





SERVO SPINDLE PUNCH PRESS

/ WITH H&T SSP TECHNOLOGY

- Accurate Grid Geometry
 - servomotor controlled positioning
- Cleaner Grids
 - no oil or emulsion required
- Versatile Processing
 - pure lead to lead alloys
- Energy Efficiency
 - reduced energy consumption
- Quick and Durable
 - 30 minute tool changes and longer lasting tooling due to reduced wear

