



BATTERY TECHNOLOGY SOURCE CO., LTD
www.btscl.com

PLATE MANUFACTURING MACHINES



PLATE MANUFACTURING MACHINES



PS-40 AM

FULLY AUTO. LUG BRUSHER MA-
CHINE



PCS-20AH

FULLY AUTO. MULTIFUNCTION LEAD
PARTS CASTING MACHINE



BGC-10

FULLY AUTO. GRID CASTING MA-
CHINE



BSB-3S

FULLY AUTO. CAR BATTERY PLATE
BRUSHING & SLITTING MACHINE



BIGO-10

INTERN GAS OVEN NEGATIVE
PLATES DRY CHARGE OVEN



BPP-10

FULLY AUTO. PLATES PASTING MA-
CHINE



FDO-10

BATTERY PLATES HORIZONTAL
FLASH DRYING OVEN



AHBF-10AM & BPD-10AM

FULLY AUTO. HOLE PUNCHING &
DUMPING MACHINE (WITH CON-
TAINER FEEDING SYSTEM)



HEP-10AC

FULLY AUTO. PE SEPARATOR WRAP-
PING MACHINE



VGM-20M

SEMIAUTO. AGM SEPARATOR WRAP-
PING MACHINE



PCS.20H

SEMIAUTO. LEAD PARTS CASTING
MACHINE



BFB-10C

SEMIAUTO. 3 SIDES FRAME BRUSH-
ING MACHINE

HIGH SPEED MOTORCYCLE BATTERY ASSEMBLY LINE



HV-50AM (2X)
FULLY AUTO. SHORT CIRCUIT TEST, INTER-CELL WELD & WELD QUALITY CHECK MACHINE



HV-60AM (E)
FULLY AUTO. POLARITY CHECK, INTER-CELL WELD, S/C & WELD QUALITY CHECK MACHINE



HV-60AM (X)
FULLY AUTO. POLARITY CHECK, INTER-CELL WELD, S/C & WELD QUALITY CHECK MACHINE (WITH SERVO CONTROL)



IRT-10AM (X)
FULLY AUTO. WELD CONDITION CHECKING MACHINE



HM-10AM
FULLY AUTO. HEAT SEALING MACHINE



HM-10AM (X)
FULLY AUTO. HEAT SEALING MACHINE (QUICK MOLD CHANGE)



ATC-30AM (X)
FULLY AUTO. AIR LEAK TESTING & CODING MACHINE



AHS-10AM
FULLY AUTO. ALUMINUM FOIL TOP SEAL MACHINE



AHS-20AM (X)
FULLY AUTO. ALUMINUM FOIL TOP SEAL & SIDE SEAL MACHINE



TIG-10AM
FULLY AUTO. TIG WELDING MACHINE



BD-10AM
FULLY AUTO. BATTERY DUMPING MACHINE



BSP-10AM
FULLY AUTO. SCREEN PRINTING & CONTAINER ROTATOR MACHINE

HIGH SPEED CAR BATTERY ASSEMBLY LINE



HPVT-40ACH
FULLY AUTO. ELECTRIC WELDING & SHORT TEST MACHINE



IRV-20ACX
FULLY AUTO. S/C TEST & WELD CONDITION CHECKING MACHINE



HM-20ACH
FULLY AUTO. HEAT SEALING MACHINE



ATC-20ACH
FULLY AUTO. LEAK TESTING & CODING MACHINE



TBP-20AC
FULLY AUTO. POST BURNING MACHINE



AHB-10AC
FULLY AUTO. FOIL SEALING & POST BRUSHING MACHINE



IRT-10AC
FULLY AUTO. WELD CONDITION CHECKING MACHINE



AH-10AC
FULLY AUTO. ALUMINUM FOIL SEALING MACHINE



AHB-10AC
FULLY AUTO. HEAT SEALING MACHINE (SERVO MOTOR CONTROL)



HMT-10CX
SEMI-AUTO. TOP COVER HEAT SEALING MACHINE



AH-10AC
SEMI-AUTO. AIR LEAK TESTING MACHINE



HM-10ACX
SEMI-AUTO. HEAT SEALING MACHINE

ACID FINISHING LINE



BCM-AF-20AC
FULLY AUTO. CAR BATTERY ACID FILLING MACHINE



BCM-AFL-20AC
FULLY AUTO. CAR BATTERY ACID LEVEL ADJUSTING MACHINE



HM-10CS
SEMI-AUTO. SECONDARY LID HEAT SEAL MACHINE



BWD-10AC
FULLY AUTO. CAR BATTERY WASHING & DRYING MACHINE



PB-20AC
FULLY AUTO. CAR BATTERY TERMINAL POST BRUSHING MACHINE



BHRD-1000A-AC
FULLY AUTO. CAR BATTERY HRD INSPECTION MACHINE



BHRD-1500 (2)AC
HIGH RATE DISCHARGE INSPECTION MACHINE



BL-20AC
FULLY AUTO. CAR BATTERY LABELING MACHINE



ABF-10MS (V)
SEMI-AUTO. VACUUM TYPE ACID FILLING MACHINE



BCF-8MC
BATTERY CASE FORMATION CHARGER MACHINE



BHRD-300RDS (AM)
FULLY AUTO. 4 FUNCTION BATTERY DISCHARGE INSPECTION MACHINE



ABF-10MS (X)
SEMI-AUTO. ACID BOTTLE FILLING MACHINE



LABORATORY AND TESTING EQUIPMENT



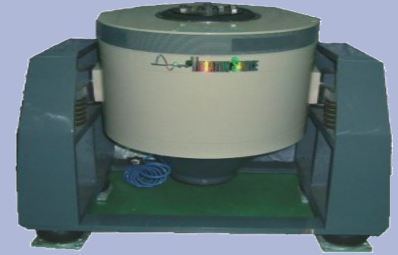
BATTERY TECHNOLOGY SOURCE CO., LTD.

HVT-100
HIGH VOLTAGE BATTERY SHORT
CIRCUIT TESTER



BATTERY TECHNOLOGY SOURCE CO., LTD.

VS-600VH
VIBRATION TESTING SYSTEM



VS-300VH
VIBRATION TESTING SYSTEM



BATTERY TECHNOLOGY SOURCE CO., LTD.

VS-5060M
REACTIVE TYPE VIBRATION TESTER



BATTERY TECHNOLOGY SOURCE CO., LTD.

BTS-LT 403T
LOW TEMPERATURE BOX



BATTERY TECHNOLOGY SOURCE CO., LTD.

NTHDR20/200
MULTI-FUNCTION DISCHARGE
TESTER



NT6CCDR20/50
MULTI-FUNCTION CHARGER AND
DISCHARGER



BATTERY TECHNOLOGY SOURCE CO., LTD.

BHRD-1000A-AC
AUTO. BATTERY HIGH RATE DIS-
CHARGE INSPECTION MACHINE



BATTERY TECHNOLOGY SOURCE CO., LTD.

BHRD-300RDS (AM)
CAPACITY TESTING DEVICE



NTCDR230/80BP-16CH-5C
CAPACITY TESTING DEVICE



NTCDR230-80-5C-16CH
MULTI-FUNCTION TESTING MCHINE
FOR SMALL BATTERIES



NTCDR-150-80-150-10CH
DICHARGE TEST MACHINE

OTHER MACHINES AND MATERIAL PARTS



BVS-300HV
ELECTRODYNAMIC VIBRATION
TESTER



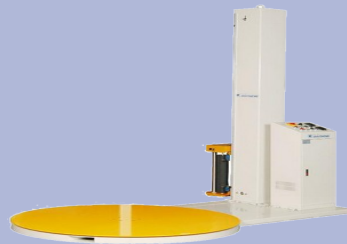
BV-5060
MECHANICAL TYPE VIBRATION
TESTER



BOP-10AM
FULLY AUTO. OVEN TUNNEL MA-
CHINE



CONTAINER PRINTING ASS. LINE
FULLY AUTO. BATTERY CONTAINER
HOLE PUNCHING & SCREEN PRINT-
ING ASSEMBLY LINE



WSV-1521 & 1821
VERTICAL WRAPPING MACHINES



BLT-40C
LOW TEMPERATURE BOX FOR BAT-
TERY QUALITY TEST LABORATORY



GLASS FIBER SEPARATOR



BCF-16MCP
CHARGER MACHINE FOR PLATES
FORMATION RECTIFIER



BATTERY TERMINAL BOLT & NUT



SCISSOR PALLET TABLE



PLASTIC INJECTION MOLD



**CAR & MOTORCYCLE BATTERY
CONTAINER SET**



AUTOMATIC GRID CASTING MACHINE

Model: BGC-10C

Function

Designed to produce high quality grids of lead-calcium or lead-antimony alloy.

Machine operation process

The operator should fix the mold heater in advance, assemble the stationary mold onto the supporting stand, and fasten it. Once the movable mold has been placed on the stationary mold, the lead melting furnace, lead flowing valve, lead ladle and molds can be heated up to the preset temperature, at which point the mold can be tested, and the cutter (trim die) adjusted to the intended width, lead flow volume and traveling speed, allowing to switch to automatic operation.

Features

- Smart inverter
- 24-hour preheating devices
- Titanium made trim die
- Ease of operation: easily replaceable mold with a long service life; one worker can control two machines at the same time; easy to control by just feeding lead ingots during the manufacturing process.
- Equipped with safety devices, i.e. it can't be automatically started if there is insufficient air pressure; an alarm will sound if the elevator isn't positioned.
- Cap.: approx. 8-16 panels/min



Air/power consumption

- 3 phases, voltage and frequency according to the customer's specifications
- Horsepower: 1 HP (main machine: 1 HP; heater: 2.7 KW (lead ladle), 5.2 KW (mold))

Machine outlook

- Machine dimension: approx. 3000 (L) × 900 (W) × 1500 (H) mm
- Machine weight: approx. 900 kg



AUTOMATIC PLATE PASTING MACHINE

Model: BPP-10ACM

Features

- Controlled by inverter and Mitsubishi PLC system.
- Vacuum type material feeding structure
- The driving system of the main machine uses a double-motor driving type (one set is used to drive the belt, the other to drive the lead oxide paste feeding hopper).
- Pasting speed: 100-135 pcs of grid panels (140 mmH) per minute (adjustable according to panel height and operator's experience).
- Pasting thickness accuracy: $< \pm 0.1\text{mm}$
- Easily replaceable mold with longer service life.
- Sulfuric acid and water rolling system provided at the rear section.
- A heavy-duty bearing is used on the driving shaft of the pasting belt, and there is an oil seal on the outside to protect the bearing.
- Italian made seamless belt



Air/power consumption

- 3 phases, voltage and frequency according to the customer's specifications
- Horsepower: 7.5 HP \times 6 P (pasting belt); 7.5 HP \times 6 P (paste feeding hopper); 2 HP \times 4 P (grid feeder); 2 HP \times 4 P (vacuum motor)

Machine outlook

- Machine dimension: approx. 4150 (L) \times 1700 (W) \times 1535 (H) mm
- Machine weight: approx. 2850 kg



HORIZONTAL FLASH DRYING OVEN Model: FDO-10

Function

Dries the wet pasted plates after the pasting process.

Machine operation process

After pasting, the feeder will pick up the plates from the vertical hanger conveyor through vacuum suction and put them horizontally on the drying oven conveyor. By the time they reach the end of the machine, they will be dry.

Features

- Fully mechanical control system
- Continuously adjustable horizontal conveyor speed
- Gas ratio regulator to stabilize the temperature inside the oven.
- Average air flow and temperature of the hot air circulating system
- Surface drying capacity: approx. 110-150 plates (2.0 mm thickness) per min at 190°C (the drying capacity will depend on the adjustment of the temperature and conveyor speed according to plate size and thickness, as well as the operator's experience).
- Gas burning control system, designed to achieve the goal of safety first
- Available in natural gas (methane) and LPG powered versions



Air/power consumption

- 3 phases, voltage and frequency according to the customer's specifications
- Horsepower: 15 HP (hot air circulating system); 1 HP × 2 sets (exhaust fan); 3 HP (horizontal conveyor); 0.5 HP (finished product collecting system).
- Burner power: 200, 000 kcal/hour

Machine outlook

- Machine dimension: approx. 11, 700 (L) × 1600 (W) × 2600 (H) mm
- Machine weight: approx. 9000 kg



INERT GAS OVEN FOR NEGATIVE PLATES

Model: BIGO-10

Function

Designed to improve the “deficient” dry-charging process, making it more efficient, especially for the negative plates of lead-acid batteries. More traditional methods, such as soaking acetic acid, are no longer necessary. It can also reduce nonessential manpower, and help improve both quality and efficiency.

Machine operation process

The negative plates are taken out of the forming tank and put on the drying machine's stainless steel basket. The operator controls the electric crane, submerging the stand in water several times to clean the plates so that they approach neutrality, and then proceeds with the drying. After cleaning them, the electric crane hangs out the plate basket, and then puts them into the drying chamber of the drying machine. Once the machine starts, the plates can be dried directly. It is suggested that the user provides an electric crane which can bear over 3 tons.

Features

- PLC electric machinery control system and air compressor system
- High quality gas burner system for better safety, stability and efficiency
- Gas safety device uses world-class brands like Honeywell or Yamatake to control burner safety and stabilize its performance.
- Drying capacity: approx. 3000-5000 panels in 2.5-3 hours (the lesser the panel quantity, the shorter the drying time).
- The drying chamber can load 4 trays of stainless steel baskets; drying degree and quality depend on the basket quantity.
- After drying, the water content of the plates shall be less than 0.1%, and the lead oxidation (PbO) increase rate shall be less than 1%.
- BIGO-10 can also dry positive plates (under customer request), keeping their temperature between 60 °C-80 °C to assure their quality.





- Available in natural gas (methane) and LPG powered versions
- Hot water cooling system:
 - Hot water discarded by this machine must be cooled in a cooling tower before re-turning to the drying machine for circulation.
 - The user has to provide a cooling tower with at least 10 tons/h capacity.
 - It is suggested that the circulation volume of the tower be 20 tons/h, to make sure that it will still be able to supply sufficient water if water consumption increases.

Air/power consumption

- 3 phases, voltage and frequency according to the customer's specifications
- Applied horsepower:
 - Circulatory blower 30 HP (22.5 KW)
 - Fanner for gas burner: 3 HP (2.25 KW)
 - Water in-letting pump: 2 HP (1.5 KW)
 - Water draining pump 3 HP (2.25 KW)
- Gas burner burning capacity: 120, 000 Kcal/h
- LPG consumption: about 7-8 kg/h

Machine outlook

- Machine dimension: approx. 3300 (L) × 2150 (W) × 2600 (H) mm
- Electric control box size: approx. 1000 (L) × 400 (W) × 1700 (H) mm
- Machine weight:
 - Drying machine: 5000 kg
 - Electric control box: 200 kg

The specification can be changed without prior notice

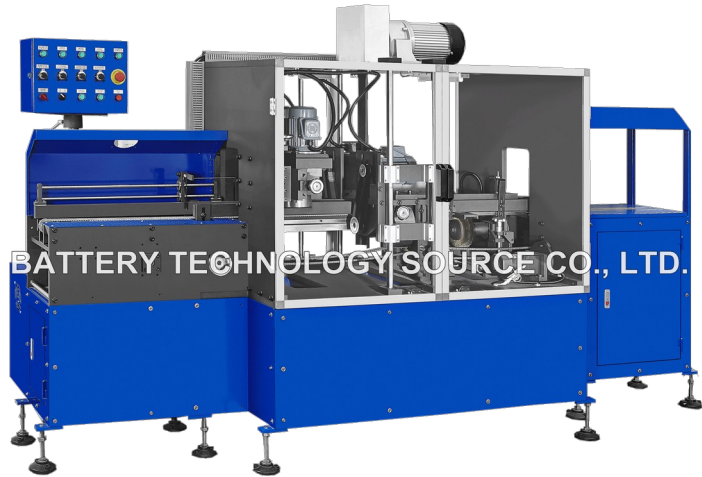


FULLY AUTO. 4 SIDE FRAME BRUSHING MACHINE

Model: BFB-40AM

Function

Used for brushing the plates' borders after cutting the panel. Generally, it is used after the plate slitting and brushing machine, but it can be used independently as well. It is used for brushing the 4 sides of the frame area after the plates are cut.



Features

- A single operator for plate feeding and collecting.
- Suitable for all types of motorcycle battery plate
- Easy to adjust, operate and maintain
- Capacity: 400-800 pcs/min

Air/power consumption

- 3 or 1 phases, voltage and frequency according to the customer's specifications
- All electricity, no air consumption

Machine outlook

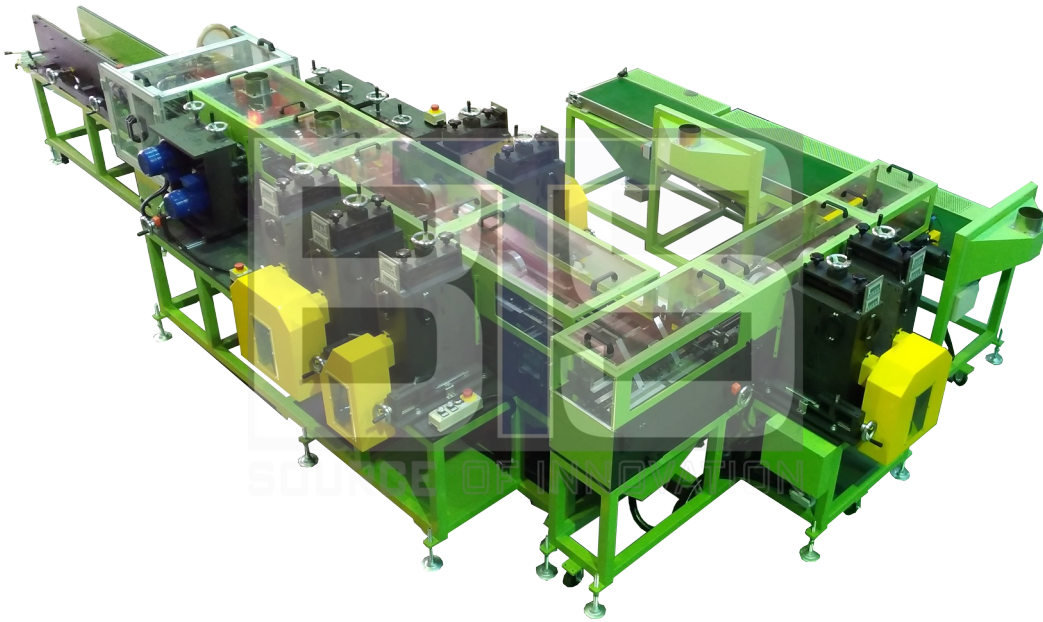
- Approx. dimension: 3.116 (L) × 1, 010 (W) × 1, 740 (H) mm
- Weight: approx. 2300 kg

AUTOMATIC PLATE CUT AND LUG BRUSH MACHINE

Model: BPBS-90AMGS

Function

The automatic lead acid battery plate lug brush and slitting machine was specially designed for motorcycle lead acid battery plate production. It is suitable for the plate cutting and brushing of both sides of the lug –one of the most important parts of the lead acid plate production.



Machine operation process

The operator places the plate into the machine, and the feeding suction system starts to convey the plates for the lug brushing process. The slit blade will then cut off the lug hanger area (saw blades no. 1 & 2), slit the connecting area of the “X” axis and automatically change the slitting position (90°), so that the plate can be slit on the “Y” axis connecting area. After finishing the plate slitting, the plates will be automatically stacked on the output conveyor and the operator will collect the stacked plates manually.

Features

- High precision slitter blades
- State of the art, user-friendly vertical and horizontal adjustment system (fast and stable), allowing to increase the cutting speed up to 60-100 pcs/min.
- Easily adjustable suction feeding system and slitter position
- Able to cut up to nine plate formation designs in a panel.



- All parts in contact with the plate are made of stainless steel.
- Manual and automatic operation mode options
- The output conveyor can be connected to the 4 side frame brush machine for further processing.
- Patented design
- Lead dust collector designed to meet environmentally friendly standards.
- Slitting system helps minimize the lead dust problem and it can extend the machine's service life, protecting it against lead dust.

Air/power consumption and parameters

- Cut size range: 221 × 106-360 × 140 mm (adjustable as per customer's demand)
- Cutting speed: 60-80 pieces/min
- Cut width range: 1.1-5.0 mm
- Brush plate width range: 8-20 mm
- Cutter range:
 - 0-10 mm (up and down can be adjusted)
 - 0-10 mm (front and back can be adjusted)
- Power consumption: 8 KW, 3 phases, 380 V, 50 Hz

Lead dust collector system

Conveyor lead dust handling system

The entire plate conveyor is completely covered by the cover protector, which has transparent windows so that the user can inspect the production easily. The cover can be opened easily at any time during maintenance; it is also possible to remove the entire cover when needed. The bottom funnel is connected to the bottom conveyor, so that the dust will drop on it and be conveyed to a single exit gate connected to the dust collector container.

Funnel lead dust handling system

The bottom funnel is connected directly with the production conveyor. Waste and lead dust will fall into the lower conveyor belt dust collector. The dust collector conveyor is connected to the funnel hole, which can be opened to discard the lead dust.



AUTOMATIC CAR BATTERY LUG BRUSH AND PLATES SLITTING MACHINE

Model: BSB-3S

Function

Helps reduce noise and air pollution during the cutting and brushing process. The newest model can help obtain a more economical scrap condition and accurate plate dimension.

Features

- Conventional or HMI control system (at the customer's requirement)
- Adjustable transmission speed (using a frequency transformer)
- Workable panel thickness: 1.1-3.8 mm
- Adjustable stacking type product output system
- Workable ranges:
 - Panel thickness: 1.1 mm-3.8 mm
 - Panel width: 210 mm-320 mm
 - Panel height: 90 mm-165 mm
 - Lug brusher width: 8.5 mm
 - Lug length: 10mm-30mm
- Capacity: 50-100 panel/min



Air/power consumption

Power consumption: 4 KW

Machine outlook

- Machine dimension: approx. 5865 (L) × 1500 (W) × 1500 (H) mm
- Machine weight: approx. 1950 kg



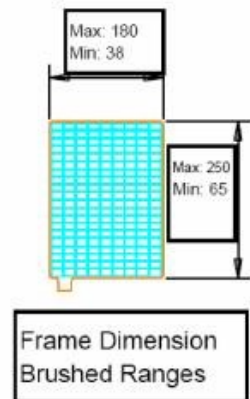
SEMIAUTO. 3 SIDES FRAME BRUSHING MACHINE Model: BFB-10C

Function

Designed to brush the three sides of the battery plate frames after the slitting, cutting and lug brushing, which will improve the battery's performance. Once the plates have been put in position, the machine will start (after pressing the button) automatically.

Machine operation process

After the plates have been cut in the panel cutting machine, the side frame has to be brushed in order to get a better quality. This machine is able to brush 3 sides of the frame (all except the lug side).



Features

- User friendly adjustment system
- 2 HP motor system
- Production capacity: 260-300 plates/min

Air/power consumption

- 1 or 3 phases, voltage and frequency according to the customer's specification
- Power consumption: 1.35 KW
- Air consumption: 5 kg/cm²

Machine outlook

- Size: 1280 (L) × 1160 (W) × 1370 (H) mm
- Weight: 5000 kg (drying machine),
200 kg (electric control box)



BATTERY TECHNOLOGY SOURCE CO., LTD.



FULLY AUTO. PLATE CUTTING MACHINE

Model: GPC-30AC

Function

This machine has been designed to improve plate cutting efficiency by automatically cutting the plates in bulk in just one cycle, using a carbide saw blade.

Machine operation process

The operator puts a bulk of panels into the input conveyor. The input pick up clamp will then put the plates in the cutting area, so that the blade can start cutting them. Finally, the plates will be stacked and the output clamp will put them back on the conveyor.



Features

- Suitable for automotive grid panel plates
- Quick tooling changeover
- Pneumatic system for easy maintenance
- Auto-stop (no feeding) and auto-start (re-feeding) system
- Human Machine-Interface with touch panel operation for additional convenience
- Capacity: 220-400 pcs/min

Air/power consumption

- 1 or 3 phases, voltage and frequency according to the customer's specifications
- Power consumption: 7.2 KW
- Compressed air consumption: 609.57 NI/min at 6 kg/cm

Machine outlook

- Approx. 4, 050 (L) × 2, 100 (W) × 2, 340 (H) mm
- Approx. 3000 kg



AUTOMATIC LUG BRUSHING MACHINE

Model: PS-40AM

Function

The machine is meant for brushing of the lug area of VRLA battery grid plates.

Machine operation process

After the grid has been cut by the semi auto plate cutting machine, the plates are stacked into the magazine/cassette (4 sets in total). The machine will push each of the plates into the conveyor for brushing and brush the top and the bottom of the plates separately (plate by plate). After the brushing process, the plates are sent to the finishing conveyor.

Features

- Easily configurable PLC
- Suitable for all types of MCB
- Easy mold change and adjustment
- Adjustable guide rail to fit plate size
- Capacity: 14,000-14,400 pcs/h (12 V battery)



Air/power consumption

- 1 or 3 phases, voltage and frequency according to the customers' specifications
- Power consumption: 1.35 KW

Machine outlook

- Machine dimension: approx. 3320 (L) × 1500 (W) × 1550 (H) mm
- Machine weight: approx. 1500 kg



AUTOMATIC HOLE PUNCHING AND DUMPING MACHINE

Model: BPD-10AM

Function

This machine is used for hole punching and dumping. The battery containers are loaded by conveyor into the station, where the holes will be punched. After the holes for the inter-cell welding are done, the machine will automatically dump the leftovers.

Machine operation process

Once the containers have been loaded into the station, each battery case will be punched for holes (through which the inter-cell connectors will be welded). After receiving the holes, the container is locked in position, lifted up and turned upside down with two quick movements to ensure that any particles remaining inside the container will fall into the collector.

Features

- Fully automatic, with pneumatic system
- Suitable for all types of motorcycle battery
- If an abnormal process is detected, the machine will stop and alert the operator.
- Panel control box with easy access to all the buttons and switches
- If air pressure is insufficient, the machine will stop and trigger an alarm.
- Easy to operate and maintain
- Capacity: 360-480 pcs/h



Air/power consumption

- 1 or 3 phases; voltage and frequency to suit the customer's specifications
- Power consumption 0.6 KW
- Air: 86.86 NI/min at 6 kg/cm²

Machine outlook

- Dimension: approx. 1180 (L) × 900 (W) × 1150 (H) mm
- Weight: approx. 150 kg



SEMIAUTO. PARTITION HOLE PUNCH MACHINE

Model: HP-10C

Function

The machine is used for punching the car battery container partition in each cell simultaneously.

Machine operation process

After placing the PP container upside down into the jig, the operator pushes the start button with his foot so that the machine can proceed to punch the entire cell by using air cylinder pressure.

Features

- User friendly design
- Designed for quick tool change
- It can punch 5 holes in each cell at the same time.
- Suitable for all types of car battery
- Easily changeable and adjustable mold
- Air cylinder pressure system for easy maintenance
- Cycle time: 5-6 pcs/min

Air/power consumption

Compressed air consumption: 20 NI/min at 6 kg/cm²

Machine outlook

- Machine dimension: approx. 720 (L) × 300 (W) × 750 (H) mm
- Machine weight: approx. 110 kg



BATTERY TECHNOLOGY SOURCE CO., LTD.



SEMIAUTO. PARTITION HOLE PUNCH MACHINE

Model: HP-10M

Function

This machine is used for punching the motorcycle battery container partition in each cell at the same time.

Machine operation process

After placing the PP container upside down into the jig, the operator pushes the start button with his foot so that the machine can proceed to punch the entire cell by using air cylinder pressure.



Features

- User friendly design
- Quick change tool design
- It can punch 5 holes in each cell at the same time.
- Suitable for all types of motorcycle battery
- Easily changeable and adjustable mold
- Air cylinder pressure system for easy maintenance
- Capacity: 9-10 pcs/min

Air/power consumption

Compressed air consumption: 20 NI/min at 6 kg/cm²

Machine outlook

- Machine dimension: approx. 450 (L) × 300 (W) × 750 (H) mm
- Machine weight: approx. 90 kg



SEMIAUTO. LEAD PARTS CASTING MACHINE Model: PCS-20H

Function

This machine casts the lead parts for motorcycle and automobile batteries using a hydraulic method. One lead tank or pot is necessary under the customer's own arrangement.

Machine operation process

The operator loads the required casting mold to the machine and switches the heating on; once the temperature has reached the desired value, the worker pours the melted lead into the casting mold. After melting, the lead solidifies and the mold can be opened to take out the solid lead parts manually.

Features

- Easily changeable tooling
- Exact, well finished products
- Easy to operate and maintain
- Mold design according to the customer's samples or drawings

Air/power consumption

- 1 or 3 phases; voltage and frequency according to the customer's specification
- Electric power 3 KW
- Hydraulic motor: 1 HP
- Power consumption: 4 KW

Machine outlook

- Machine dimension: approx. 1300 (L) × 1350 (W) × 1900 (H) mm
- Machine weight: approx. 250 kg



BATTERY TECHNOLOGY SOURCE CO., LTD.



AUTOMATIC LEAD PARTS CASTING MACHINE

Model: PCS-20AH

Function

Once set up by the operator, this machine will automatically cast small lead parts and pieces for motorcycle and automotive batteries.

Machine operation process

First, the casting mold is fixed using a hoist, after which the heating can start. When the temperature has reached the desired value, pushing the “auto” button allows to begin normal, sequential operation, during which the lead parts will be cast and removed automatically.



Features

- Suitable for casting any lead parts for car and motorcycle batteries
- Lead scraps are automatically removed for recycling.
- Capacity: depending on the shape of the lead parts.
- Easily changeable tooling
- Mold design based on the customer’s samples or drawings.

Air/power consumption

- 1 or 3 phases, voltage and frequency according to the customer’s specifications
- Power consumption: 30 KW

Machine outlook

- Dimension (approx.): 2500 (L) × 2150 (W) × 2050 (H) mm
- Weight (approx.): 2500 kg



FULLY AUTOMATIC ENVELOPING MACHINE FOR PE SEPARATOR Model: PE-20AC



Function

This machine can wrap and seal the PE separator and stack the car battery plates.

Machine operation process

The operator places a roll of PE separator in the feeder, and stores the desired plate type in the correct location. The parameters are set in the control panel according to the plate type. After that, the machine can begin to operate automatically, pulling the PE separator up to a preset length, cutting it and pushing each plate into the working area, where they can be folded, sealed and counted. Upon completion of one cycle, the finished enveloped plates will be automatically stacked and placed on the conveyor.

Features

- Easily adjustable to fit every plate size (changeover requires just a few minutes).
- Suitable for various types of car battery plates
- Workable range:
 - Plate length (lug excluded): 75-135 mm
 - Plate width: 95-165 mm
 - Plate thickness: 1-3 mm
 - Separator cut length: adjustable from 150 to 300 mm
 - Separator cut width: adjustable from 100 to 165 mm
 - Separator roll: max. diameter: 1000 mm



- Core size: 180-250 mm (diameter)
- Capacity: 75-90 enveloped plates per minute

Air/power consumption

- 1 or 3 phases; voltage and frequency according to the customer's specifications
- Power consumption: 1 KW
- Compressed air consumption: 340 NI/min at 5 kg/cm²

Machine outlook

- Machine dimension: approx. 5000 (L) × 1900 (W) × 1650 (H) mm
- Machine weight: approx. 1500 kg



FULLY AUTOMATIC ENVELOPING MACHINE FOR PE SEPARATOR Model: PE-20AM



Function

This machine can wrap and seal the PE separator and stack the motorcycle battery plates.

Machine operation process

The operator places a roll of PE separator in the feeder, and stores the desired plate type in the correct location. Then, the parameters are set in the control panel according to the plate type. After that, the machine can begin to operate automatically, pulling the PE separator up to a preset length, cutting it and pushing each plate into the working area, where they can be folded, sealed and counted. Upon completion of one cycle, the finished enveloped plates will be automatically piled by a conveyor.

Features

- Easily adjustable to fit every plate size (changeover requires just a few minutes).
- Suitable for various types of motorcycle battery plates
- Workable range:
 - Plate length (lug excluded): 47-100 mm; width: 48-90 mm; thickness: 1-3 mm
 - Separator cut length: Adjustable from 97 mm to 220 mm
 - Separator cut width: Adjustable from 50 mm to 100 mm
 - Separator roll: max. diameter: 1000 mm; core size: 180-250 mm (diameter)
- Capacity: 80-95 enveloped plates per minute



Air/power consumption

- 1 or 3 phases; voltage and frequency according to the customer's specifications
- Power consumption: 1 KW
- Compressed air consumption: 340 NI/min at 5 kg/cm²

Machine outlook

- Machine dimension: approx. 4800 (W) × 1900 (D) × 1650 (H) mm
- Machine weight: approx. 1200 kg



AUTOMATIC PE SEPARATOR WRAPPING MACHINE Model: HEP-10C

Function

This machine automatically cuts and wraps the PE separator to a bag shape, with no plates inside. It is suitable for all sizes of car battery separator.

Machine operation process

After placing the PE roller into the rolling system, pull the separator roller and guide it into the guider until reaching the cutting area; press the manual cutting button in order to reset the cutting position back to zero. After starting the machine, the first product can be checked; if the result is satisfactory, the process can continue in automatic mode.

Features

- HMI touchscreen and PLC electric control system, easy to set up and modify.
- Suitable for all types of car battery
- Easily changeable and adjustable mold
- Adjustable separator length
- Auto feeding system
- Capacity: 3500-3600 pcs/h (12)

Air/power consumption

- 1 KW, 1 or 3 phases; voltage and frequency according to the customer's specification
- Power consumption: 1 KW
- Power: 700 W
- Air consumption: 1.87 NI/min at 6 kg/cm²



Machine outlook

- Machine dimension: approx. 3270 (L) × 790 (W) × 1565 (H) mm
- Machine weight: approx. 500 kg



SEMIAUTO. SINGLE LAYER V TYPE AGM SEPARATOR WRAPPING MACHINE Model: VGM-20M

Function

Automatically wraps positive and negative plates.

Machine operation process

Once the plates have been wrapped, the machine will cut the AGM separator automatically, inserting the negative plates into the lower layer of the round disc. Finally, the operator will collect the wrapped positive and negative plates and stack them as manually.

Features

- HMI and touchscreen control panel
- Auto-stop and auto-start system
- Capacity: 2880-3600 pcs/h (positive plate) and 3000-3600 pcs/h (negative plates)

Air/power consumption

- 3 phases, 380V, 50 Hz
- Power consumption: 1.5 KW
- Compressed air: 10.37 NL/min at 6 kg/cm²

Machine outlook

- Approx. 2650 (L) × 1000 (W) × 1700 (H) mm
- Approx. 650 kg



BATTERY TECHNOLOGY SOURCE CO. LTD.