

“Shingania” are pioneers in manufacturer of battery making machines & equipments. Our team includes expertise in every field of battery manufacture and can provide with viable guidance in —

- **Product Design**
- **Selection of Machines**
- **Utilities Selection (Electricity, DM water, gas, acid, E.T.P etc.)**
- **Manufacturing Method and Process Instructions**
- **Factory Layout congenial for production.**
- **Total Greenfield Eco-friendly projects**

“Shingania” offers the following services

- Turn-key-solutions
 - Battery factory from Green-field stage
- The most dependable ‘Team of Professionals’ for giving Turn Key solutions in Battery Manufacturing Plant”.

*** AUTO / SLI * MOTORCYCLE**

*** VRLA * INDUSTRIAL**

Due to the strength of having “A Dependable Team”, Shingania can offer most appropriate solution when it comes to -

- a) Plate making plant
 - b) Assembly line
 - c) Battery charging & finishing line
 - d) Ready made second hand plants OR reconditioned second hand machines.
 - Machines manufactured in India under license from reputed European companies.
- Owing to our association with reputed partners in Europe, we can also offer solutions such as second hand plants, machines and equipments.
- Second hand ready made battery plants
 - Second hand machines either reconditioned with one years guarantee OR on as-is-where-is basis.

Many customers have purchased branded second hand machines & they are very happy about their decision.

Our list of clients includes all the reputed battery manufactures such as Exide, Amco, Amara-Raja, Tata GS Yuasa, HBL, Prestolite, Luminous, NED, Okaya Tafe, Sukam, Jay-Ace etc.

We have also supplied machines & offered services to battery manufacturing industries in countries such as Africa, Sri Lanka, Bangladesh, UAE, Egypt, Philippines etc.

Shingania machines give most uninterrupted services in an exhaustive production requirements.

Some of the machines which have been running round the clock at reputed factories are :

- Planishing tools
- Trim dies
- Lead pump
- Grid stackers
- Paste mixer
- Pasting machine with flash drying oven
- Acid surfer
- Dry charge oven.
- Automatic brushing & parting machine
- Enveloper & stacker
- Auto boxing machine
- Semi automatic component casting machine
- Automatic component casting machine
- Group burning machines
- Group assembly machines
- Acid filling machine
- Acid leveling machine
- Air leakage testing machine
- Pole brushing machine
- Washing tunnel

Paste Master



The most dependable **‘Team of Professionals’** for giving **Innovative solutions to all Battery Industry Needs**



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PASTE MASTER

Paste Mixing Plant of capacity 1000 kgs & 500 kgs.

Paste Mixing Plant, designed & manufactured by 'Shingania' to suit the battery plate manufacture.

Salient Features :

- Paste Mixing Shell, constructed in Acid Resistant stainless steel SS 316L. The bowl ID & centre housing duly machined, for optimum efficiency of mixer to produce quality paste.
- The turret head / cross arm with shearing blades & mixing ploughs constructed in SS 316L, with strong PTFE inserts, resulting in high shearing & lesser losses .The side scrapers are adjustable to make-up for wear.
- The side & bottom water cooling jackets provide controlled mix temperature.
- 50HP siemens motor with state-of-art shaft reducer.
- Robust exhaust system with necessary dampers for air inlet & exhaust.
- 15HP exhaust pump for dust free environment & controlled moisture.
- Heavy duty mounting platform designed to absorb & minimize vibrations, during operation, with standard staircase & hand rail. The deck height is maintained to 10 feet.
- Optional online paste temperature sensing system, designed to check the temperature during mixing operation.
- Wash port provided for easy cleaning of bowl & bowl + turret & ploughs.
- Batch weighing system based on shear beam type load cells, designed to meet suitable capacity for oxide, water & acid, with a resolution of 1 kg for oxide & 100 gms for water & acid.
- The oxide, water & acid dispensing system complete with all required features such as vibration motor, actuators etc.
- The paste discharge door, the top doors, the exhaust damper doors & gates are pneumatically operated, with provision of safety interlocks, to avoid manual errors & mishaps.
- The cone feeder, constructed in stainless steel SS 316L, with a capacity of 1500 kgs, runs at a drive ratio of 33:1, with a drive motor of 5HP capacity. This help to retain paste density till the whole batch get consumed.
- The cycle time for 1000kgs batch is less than 40 minutes, which provides 27 batches per day of three shifts. Such cycles can be seen in organisations like Exide India - Taloja & Ahmednagar plants, where the Paste Master manufactured by “Shingania” is running throughout the day, all the 24 hrs, round the clock providing batches after batches without interruption.



Electric control panel --- PLC based control panel with "User friendly flow chart" MMI – Touch screen.

Control Panel: Control Panel with PLC, switchgears for protection of motors etc such as O/L protection, contactors, MPCB, ELCB, etc. Required function interlocked for safety point of view. 'User friendly Flow Chart' MMI (Man Machine Interface) for operational ease – Manual or Auto cycle mode. Thus gives options to choose different proportion of weight & time to design suitable recipe for driving desired moisture control, plasticity & density, to be controlled with the help of suitable converters for weight, temperature etc. data scanner transmitters, thermocouple etc.



Capacity & Cycle Period Data :

Model	Capacity of dry oxide	Capacity of wet mix	Cycle time per batch	Capacity of cone feeder
PM-500	500kgs	700kgs	29 mins	800kgs
PM-1000	1000kgs	1350kgs	40 mins	1500kgs

