

Battery Manufacturing Unit (Manual)

Manual Battery Manufacturing Unit is designed to manufacture 50 batteries per day. It consists of manual grid casting machines. Once the grid is casted, with the use of furnace and casting machines, they are left for 2-3 days before plate making section comes in. The paste is formed in the mixer as per our tested recipe with our patented additives for better performance. This paste is then manually pasted homogeneously to make the plate. This section is very important as it defines the quality of plates and hence the life. In order to get more homogeneous placement of paste rollers are used. Then the plates are left for curing which can be done manually or with the use of curing chambers depending on the budget deployed in the project. After curing plates are dried till all the moisture is removed. The plates are then put on comb and Jig sets to make cells of desired applications and capacity. Here comb and Jig sets are used to complete the cell making process and combining the cell leg from leg die mould in case of open lid container and intercell connector in case of heat seal container. After the cells are formed they are placed in the individual cells of the battery container. In open lid container the leg mould is then connected to the leg connector to other cell through the intercell strap connector above the cell lid. In heat seal container the intercell welding machine is used to do the intercell strap connection and then heat sealing machine is used to seal the top lid of the container. Then the acid of 1265-1270 SG is filled homogeneously and the batteries are put to charging on the charger. After the charging is complete we randomly select batteries for testing the batteries on Universal tester.

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Manual GRID CASTING SECTION



Manual Gravity Grid casting machines: These Manual Grid casting machines are mounted with Grid Moulds. The Moulds can be designed to cast Grid of any dimensions. These are specially designed to give the best application specific Grid plate. We can get the grids for all type of Flat Plate batteries, Tubular batteries used for various applications like Auto, Solar, Inverter, E-rickshaw, Traction etc.

MIXER FOR PASTE MAKING



Mixer has the Maximum capacity of 100KG paste making capability per cycle. Inbuilt motor, Blower and rotatory tub for best performance. Minimum Capacity is 50Kg per cycle. The power requirement is Three Phase 5KW.

MANUAL LEAD MELTING FURNACE



Furnace has the capacity to melt 50KG Lead in one cycle. It is used with the grid casting machine to cast out the grids for any type of application. This is a manual furnace comes with the burner which can run on LPG. Diesel, Kerosene options are also available on demand.

PLATE PRESSING ROLLER

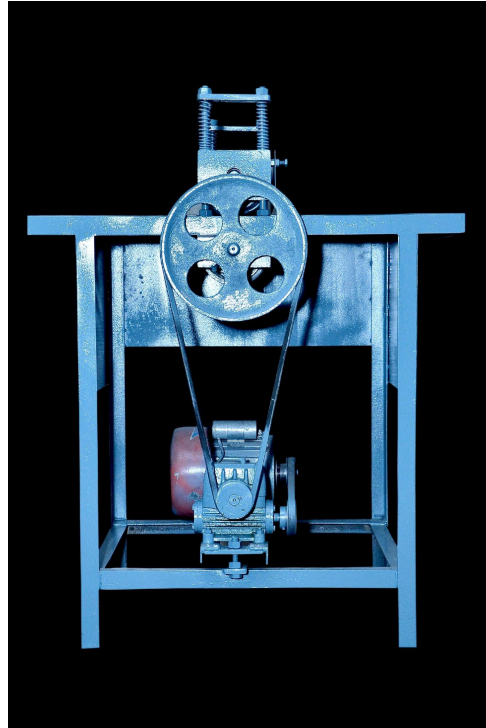
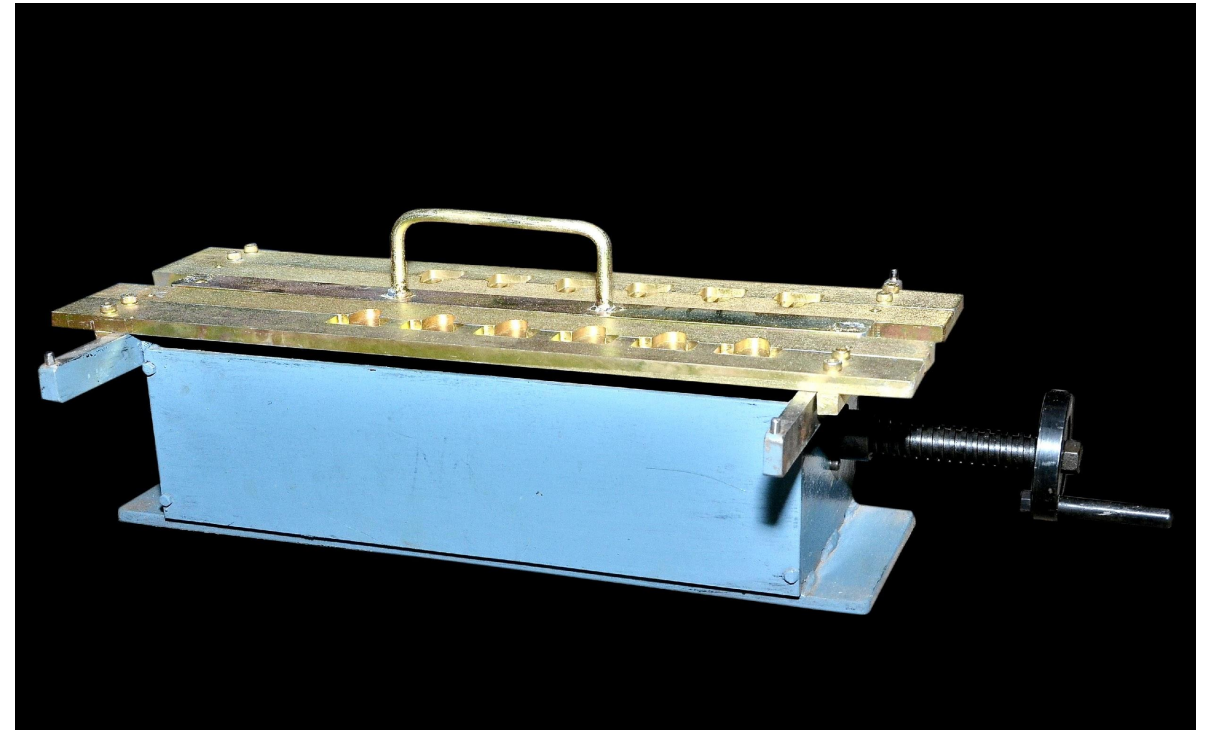
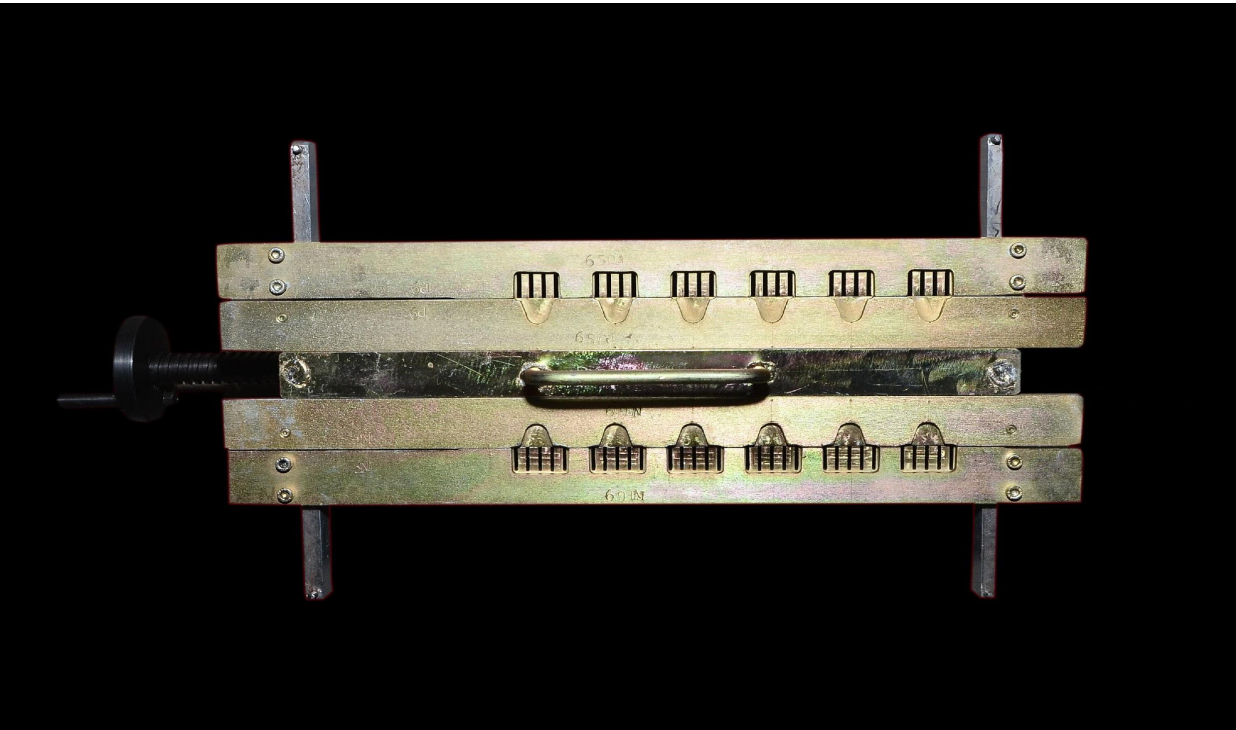


Plate pressing roller is used to press the paste into the grid for homogenous distribution in grid. High speed roller can do 15-20 Plates per minutes. The power consumption is Single Phase 1KW.

BOX TYPE COMB AND JIG SET



Box Type Comb and Jig set with manual handle for compression of cells at defined pressure. Unique design helps to get the best results.

COMPRESSOR



German Compressor used for Heat sealing and leakage test is of 100Kg compression strength. It is also used for spraying of kork powder on the Moulds with the spray gun during the grid casting section. Power consumption is about 1.5KW.

Connection Moulds



Strap Connection Mould



Leg Mould



All in One strap Mould

SEALING AND INTERCELL WELDING



HEAT SEALING MACHINE



INTERCELL WELDING MACHINE

CHARGING AND TESTING



CHARGER

- AC Input: 220V
- DC Output: 20A/325V
- Total Batteries: 20 of 12V
- Transformer Based

Universal Battery Tester

- Capacity Test
- Cycle Test
- Resistance to overcharge (Endurance test)
- Ah / WH efficiency test
- Loss of capacity on storage test

