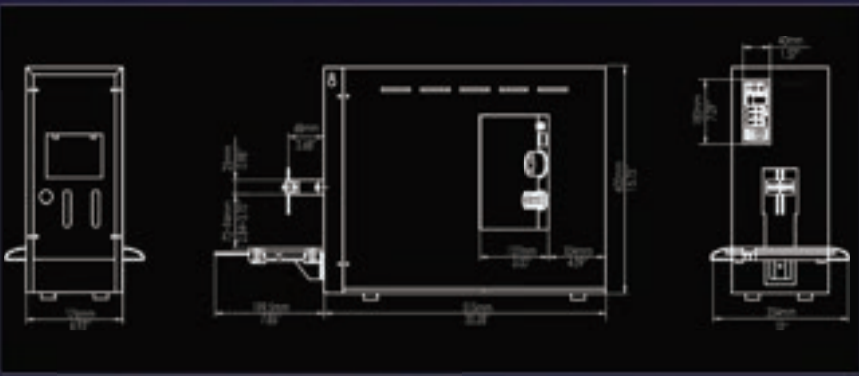


Poron™
MB7-3NP
PRECISION BATTERY TAB WELDER
Professional model for mass production

OVERALL DIMENSIONS



TECHNICAL SPECIFICATIONS

MODEL	MB7-3NP	WELDING HEAD	
POWER	7 KVA	TYPE	SWINGING ARM WITH FORCE EQUALIZER
RATE VOLTAGE	220V/110V ± 10%	ELECTRODE DIM	3.0MM(0.12") D X 60MM(2.36") X 2 1.5MM(0.06") D X 60MM(2.36") X 2
PRIMARY CURRENT [normal]	10 AMP	LENGTH OF WELD ARM	68 MM (2.67")
PRIMARY CURRENT [max]	30 AMP	ELECTRODES APARTURE	0-8 MM (0-0.31")
SECONDARY VOLTAGES (OPEN)	6.8 V	WORK TABLE SIZE	240 x 130 MM (9.45"x5.12")
FREQUENCY	50/60 HZ	WORK TABLE ADJ. HEIGHT	60 MM (2.36")
FREQUENCY COMPENSATING RATE	+/- 3%	WORK TABLE EXTENSION BEANUNIT	210 MM (8.27") OPTIONAL UNIT
DUTY CYCLE	5.0%		
VOLT COMPENSATING RATE	+30V -40V		
POWER INPUT PLUG	3 LEGS		
WELD CONTROL		OVERALL	
1 ST WELD PULSES	0-4	OVERALL DIMENSIONS	714.5 X 416 X 254 MM (28.13"x16.38"x10")
1 ST WELD ENERGY STEPS	0-999 STEPS	NET WEIGHT	41 KGS (90.4 lbs)
2 ND WELD PULSES	0-4	GROSS WEIGHT	45 KGS (99.2 lbs)
2 ND WELD ENERGY STEPS	0-999 STEPS	PACKING SIZE	540 X 380 X 175 MM (21.26" x 14.96" x 6.89")
CUSHIONING TIME	0-2.5 SEC	PACKING MATERIALS	3 PLY CARTON WITH POLYFOAM LINER
INTER HOLD TIME	0-2.5 SEC		
POST HOLD TIME	0-2.5 SEC		
COMPUTER	8 BIT MICROPROCESSOR X 3		
MEMORY	E.E PROM		
DIGITAL DISPLAY	7 SEGMENT X 3		
DOT DISPLAY	LED DOTS		
CONTROL PANEL	MEMBRANE TYPE		
CONTROL MODUL	BOX TYPE		
OPERATION			
TYPE	FOOT SWITCH TRIGGER PNEUMATIC TYPE		
AIR CYLINDER	6MM(0.63") DIA		
STROKE	22MM(0.87")		
INPUT AIR PRESSURE [MAX]	7 KGF/Sq CM (99.5 psi)		
OPERATION PRESSURE [MIN]	2 KGF/Sq CM (28.4 psi)		
AIR CONSUMPTION/1000 STOKES	4300 CU CM (262.4 cu in)		
AIR CONNECTION	QUICK AIR COUPLER		
WELD FORCE CONTROL	DIFFERENTIAL PRESSURE SYSTEM		



QUALITY : PRODUCT'S ETERNAL LIFE
RELIABILITY : THE BEST WAY TO ACHIEVE THE GOAL

Due to our policy of continuous product improvement, the specifications are subject in change without notice.

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ISO9001: 2000
Cert No.: 121 0025 097

PORON®

The machine was special designed for high quality tab welding, it is an up-graded model from our top sell item MB7-3NP, machine configurations and unique of the design has still remained, but adapted with ranges of latest new technology developed by our R&D team, that makes the new welder outstanding and fore from others.

Pioneered by PORON, the equipment equipped with bi-directional twin pulses (BDTP) system, which fully eliminated the phenomena of energy unbalance between welding points, it also performed as a pre-weld pulse to displace plating on the surface and seat electrodes against the metal surfaces.

Another important feature is our advance force system differential pressure control (DPCS), which controlling weld pressure precisely with excellent electrode following up force. The DPCS system also successfully reduced down impact causing by the weight and momentum of the welding head, the resultant of impact which is harmful to the joint and formed extra press marks on the battery, once if weld electrodes punching to the metal surface..

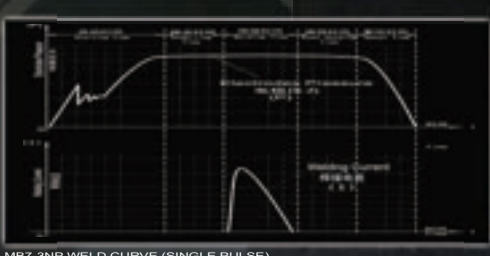
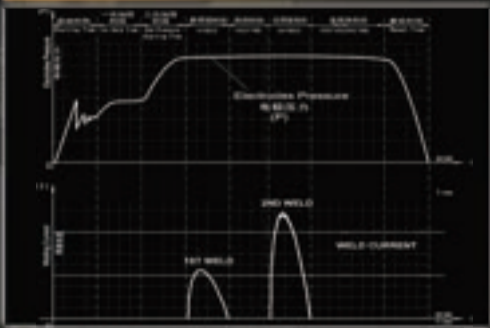
MB7-3NP is a perfect tool for battery manufacturers and power pack assemblers, its repetition of accuracy and superior reliable in performance, has earned a lot of reputations in battery industries. With above benefits, MB7-3NP is the best choice of welding equipment in the field.

SCOPE OF APPLICATIONS

1. Mass/ medium size battery production.
2. Electronic appliances battery pack assemblies
3. Power tools battery pack assemblies
4. Equipment battery pack assemblies.
5. Mobile phone lithium battery mass production.
6. Precision metal parts series weld.



2 DIFFERENT WELD MODES



FEATURES

- Multi chips hand-shaking microprocessors**
 Built-in with three microprocessors each handling various of jobs, interfaced and linking by our unique soft ware to achieve the goal of reliable, high quality and ultimate weld.
- Self-contained digital display and memory**
 Weld data are digitally set and store into the memory chip set and maintains forever.
- Equipped both user-friendly SIMPLE and professional ADVANCE weld modes**
 MB7-3NP equipped with uc30 professional weld controller, it was developed with both consideration of simple set up "SIMP", which is user friendly for the beginners, and the precision "ADV" mode is special for technicians and professional people. A two ways key switch is located on the front panel for the selection. In SIMP mode, only three weld perimeters are require to be set, quality joints can be easy to obtain. However, switched to ADV mode, all weld perimeters are opening to the technician, small alignment can be adjust accordingly. Goal of ultimate joint will be achieved.
- Bi-directional / twin welding pulses [BDTP]**
 MB7-3NP already built in with two individual of welding pulses but in separate adjustment of energy level, user can either apply both either pre-weld or bi-directional weld functions. Setting for pre-weld, basically the first pulse displacing plating and burnt dirt away from contacting surfaces, and seating electrodes against the base metal preparing for the second weld, it is a preparation process for twin pulses welding. By applying bi-directional weld, twin pulses are act as a single energy group, energy to each points can be adjust separately, according to pulse polarities to get a perfectible balance. Generally speaking, bidirectional pulses weld is an ideal energy system for tab welding.
- Welding points initial check [WPIC] (ONLY FOR TAILOR MADE MODEL)**
 MB7-3NP equipped with an advance electronic detecting system know as "welding points initial check". During operation, once if electrodes tips touched the tab surface, detecting signal will automatically send from the processor to the joint, checking conductivity level between electrodes and tab, if level been checked was in the set range, the machine will release weld energy to weld the joint. Otherwise it will consider as a "bad weld" then it will terminate the process and sending signal to alert the operator. The WPIC provided benefits to minimize over sparks / bursting, electrode saving and also preventing false weld caused by bad contact.
- Precision differential weld pressure control [DWPC]**
 The welding pressure of MB7-3NP is precisely control by our unique "differential pressure system", which successfully applied from our latest technology "Precision differential weld pressure theory. The system can successfully minimize the weight of welding head, at the same time eliminated exceed impact caused by downward momentum, Both gaining benefits of process smoothness as well as precisely control of welding force, with the help of [DWPC], light force welding for coin batteries can be easily applied.
- Automatic Power compensation system [APCS]**
 Microprocessor frequently scans and monitors the power input AC voltages also cycle frequency, once fluctuating reading recorded and compare as out of range, within millisecond, the processor automatically triggers power compensation software and re-adjusts weld energy back to the level, ensure weld energy for each weld is perfectly stable.
- Power line interference eliminator [PLIE]**
 In mass production line, machines and apparatus of different kinds are operating together but using the same electrical source, amount those, some apparatus may generate strong electronic interference signals, especially machine operating in high frequency, when those signal emits to the power line, they will seriously affects other equipment from operating. Thanks for the advance [PLIE] interference eliminator, the system can identify and automatically clear out interference signals from the power source, even if the AC wave from of the power lines has been deformed seriously, with the helps of [PLIE] stability of weld energy can be still maintaining.

SCOPE OF APPLICATIONS

