

Our History



Bob Hsiao



Mark Hsiao

MACK ELECTRICAL adheres to the following Core Values:

- **Personal and Professional Working Relationships**
- **Complete Trust and Respect for each person on Our Team**
- **Quality IS our Business**

“With over 30 years of growth development and experience with our successful product innovation, manufacturing expertise and sales performance we have proven that “Quality IS our Business”

Quality sets the guidelines and targets in order that we meet our Customers demands therefore ensuring we continually strive for improvement with our Research and Development, products and standards so they always meet with and satisfy the ever increasing needs and demands of our customers.

We also have a specific focus to develop products that enhance ‘Safety’ in the workplace. We plan to release more and more innovative devices for this sector in the very near future.”

MARK HSIAO – PRESIDENT

Mack Electrical began back in 1982, but the seeds were planted in 1972, when Mr. Bob Yuan Hsiao, a well respected businessman from Taiwan, had the vision of bringing together his thoughts, theories and experiences from many successful years of business as a founding President with a number of different companies who were involved in the low voltage electrical manufacturing sector.

Mack Electrical today is one of the top three suppliers of low voltage products in Taiwan, has its own marketing and sales channels, and is a solely private business. The focus of this business is in the field of Low Voltage Electrical Apparatus with an ongoing development of products in the area of Push Buttons, Terminal Blocks, Tower Lights and Power Section Switches.

Mack has obtained globally recognized certificates including ISO9001, UL, CSA, CE, CCC, IEC, AS/NZS are just a few of the many. The certification, together with maintaining a high level of Quality Assurance, has allowed Mack products to be widely used in major construction projects in very prestigious and important industries, both in the domestic and export sectors.



Mack currently operates from its new 5000 square meter factory in the ZhangZhou Development Zone, Fujian Province, with the capacity for large scale production, a highly skilled workforce, and "state of the art" machinery allowing for high quality and fast turn-around of production needs.

Mack contracts necessary expertise from overseas in order to provide international customers with the best possible products and services in the knowledge that compliance with International Electrotechnical Committee (IEC) standards are being met.

Mr. Mark HSIAO, the eldest son of the founder, is the President of Mack Electrical operations in ZhangZhou and has been involved with the business for over 25 years.

Mack is constantly working on developing products to fill a void in the market in addition to specifically targeting aspects of electrical SAFETY INNOVATIONS for the market sector.



Our facilities



Office

Our Office Staff are very experienced in relation to our Manufacturing Operations in the areas of Customer Service, Commercial, Human Resources, Purchasing, Sales and IT Matters. They are involved in handling matters such as basic purchasing of office equipment to liaising with Sub-suppliers on procurement of outsourced specialized component parts. Recently our staff has been increased to include English speaking members who are capable of accepting English Language Enquiries.



R & D

All Product Engineering, Research & Development is handled by our R&D team. We have a number of experienced engineers who carry out the necessary development work "in house" as well as carrying out the necessary testing at internationally accredited Test Stations. CAD designs are internally developed, utilizing the latest software including 3D visualization, in conjunction with our development engineers. Presently our commitment to R&D represents 10% of total staff.



Tooling

The majority of tooling utilized in our Punching, Injection Moulding and other parts Manufacture is internally produced. This ensures we are able to control the quality and reduce turn around time for all our tooling needs. Our Tool Room utilizes the necessary Equipment for the production of quality tools, resulting in quality products. Our regular maintenance schedule ensures that tools keep the necessary production tolerances.



Moulding

We utilize a number of Injection Moulding machines which are set up for specific material workloads. We have the capability of quickly interchanging tooling or plastics utilized for "short run" customer needs. We are planning to expand our facilities for moulding with the acquisition of further equipment in the near future. Plastics used are of "prime" quality and not recycled. We only utilize materials imported from Holland for components requiring specialized plastics for enhanced performance and reliability.



Assembly

We have a number of experienced assembly staff trained to ensure that final product quality is adhered to. Our manufacturing facilities have substantial scope for expansion utilizing trained staff, with future plans including the use of Automation in the assembly process when quantities justify such investments.



Quality, Calibration & Testing

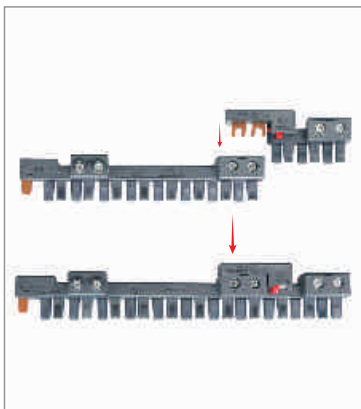
Without exception our staff is fully focused on the needs for quality products to be produced. We have a dedicated "Quality Team" who regularly carries out random inspections as well as their routine quality checks on incoming components and completed products. We have designed and installed specific calibration and testing equipment to ensure that finished products comply with specifications and meet all the necessary compliance standards.

Our products



RCBO'S

This product has been in development for a considerable amount of time. Our aim was to produce a device in accordance with IEC 61009.1 and capable of 6kA interrupting capacity, yet maintain the size of MCB's of 18 mm x 80 mm. In achieving this goal we believe we are the ONLY Company in the world to do so. Available in current ranges of 10, 16, 20, 25 & 32 Amp (B,C & D curve), the products are protected with both Patent and Design registration. The advantages to Installers and End Users is a time reduction of 80 %. The MRR range will also be promoted as the "Super Safety Switch" and available in "Type A" and "Type AC" characteristics.



MPC (Power Comb)

The MACK POWER COMB is a specifically designed bus system for minimizing time taken to connect to the MRR range of RCBO's. Unlike many of the other Bus Combs offered on the market, the MPC units are fully tested to confirm performance standards; GB/T10316, IEC60439 and IEC61009. It is engineered for high performance, low contact resistance, 6kA withstand for 100ms, 63 Amp rated and IP20 touch protection. The MACK Power comb is composed of only two parts. This is the MPC-9 which allows for one MCB isolation of the incoming LINE connection, and possibility of 8 x RCBO installations. The MPC-3 is an "adder", complete with Safety lock for secure connection, which simply snaps onto the MPC-9 giving the possibility of a further 3 RCBO's to be installed. Up to 3 x MPC-3 units can be utilized for a total of 18 way boards. Mack's "Power Comb" has been approved for safety, reliability, time-saving, fast-connection and good performances. Up to 80% time saving can be achieved when using "Power Comb".



Safety Lockouts

This product is a simple Lockout device for the MRR range of RCBO's. Designed with safety of operators working on electrical installations, the MSL-1 will securely LOCK-OFF potentially live circuits but can also be used as a device to LOCK-ON applications such as Essential Services. The MML-6 is used in conjunction with MSL-1 to expand the locking Function from a single lock to 6 locks. The Units have been strengthened with special steel inserts (completely plastic shrouded for safety) allowing a total weight of up to 2kg. The Minimum/Maximum lock size is achievable from 4mm-8mm with circuits unable to be operated until the last lock is removed.



Pushbuttons

Our range of pushbuttons is extremely large with all possible configurations available. The products conform to IEC60949.5.1, CSA-C22.2, UL 508 as well as other standards. The range is available in both 22mm and 30mm configurations with ratings of 600 Volt A/C and 10Amp capacity. Our pushbutton range has been widely used in many industry sectors including; Hospitals, Industrial Factory installations, Mass Rapid Transit Subway engineering, Government projects.....etc



Terminals

The terminals we produce comply with IEC60947.7.1 and UL 1059 standards. We utilize only prime quality Polycarbonate material in our products which offers high temperature performance. With conformity to IP20, our terminal range is from 15Amp to 370Amp. Terminals we manufacture are extensively used in many transformer terminal block applications used for both high and low voltage control panels and power controls. We believe that it could be concluded that our range affords excellent protection to the installers and end users alike.



Tower Lights

The Tower Lights we produce comply with IEC60947.5.1 standards. The range is available in sizes including 30mm, 45mm, 57mm and 90mm diameter units. These products are available in voltage ranges of 6V, 12V, 24V, 110V, 220V and so on. The advantages of our "Tower Lights" are in their high abrasion resisting properties as well as high brightness output. Units are also available with an audible alarm of up to 90 decibels. These units have very popular applications in all plant safety and automation applications including textile machinery, injection moulding machinery and tooling equipment.



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