



**COMPANY PROFILE &
INTEGRATED PRODUCT LINE**

TSM Group
Kupperlux
TSM Robotics
TSM Welding



THE ULTIMATE MANUFACTURING SOLUTION

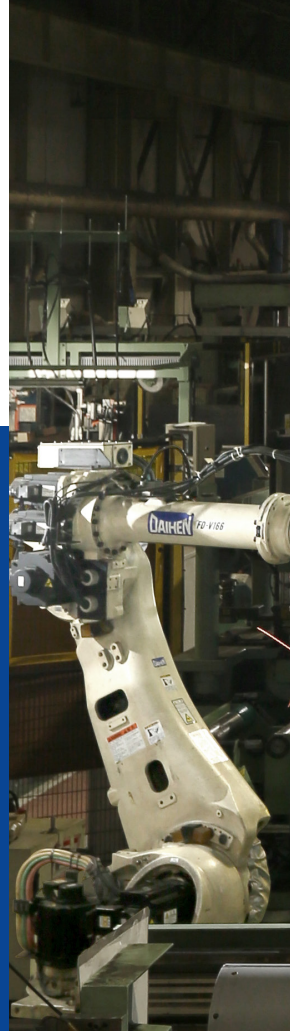


tsmgroup.com.my

OUR GUIDING PRINCIPLES & OPERATIONAL STANDARD

VISION

To be the global benchmark in high-performance alloys and integrated welding automation — setting the standard for precision, reliability, and innovation across every market we serve.



PHILOSOPHY



CEO of TSM Group
- Barry Ng



We are committed to creating shared, lasting value for our customers, employees, and all stakeholders — building partnerships that grow stronger over time.

**The Simultaneous Achievement
of Happiness for All**

Strategic Model – The Excellence Triad

TSM Group's competitive advantage is built on three interdependent pillars — Quality, Delivery, and Technology — collectively forming our QCD Focus. Together, they define how we engineer, deliver, and continuously improve every solution we bring to market.



Quality

Precision-engineered materials and systems that exceed global industrial standards. Every product is built to perform in the most demanding environments.



Delivery

Optimized supply chains and lean operations ensuring minimal lead times. We get the right product to the right place at the right time — every time.



Technology

Continuous innovation in metallurgy and robotics to future-proof production. We invest in R&D so our customers always have access to the most advanced solutions available.

TSM GROUP REGIONAL NETWORK

LOCAL EXPERTISE. REGIONAL STRENGTH. LASTING PARTNERSHIPS



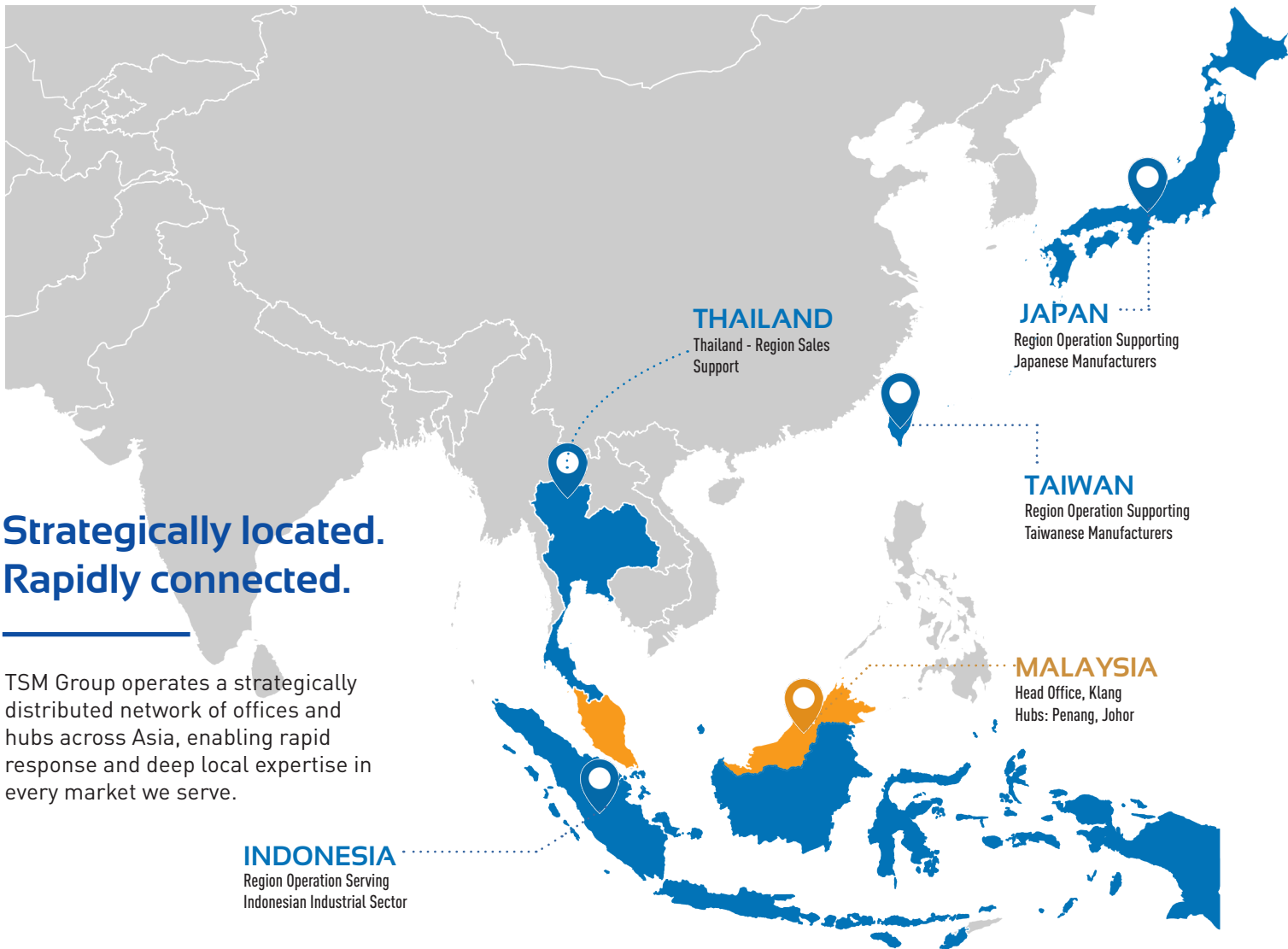
MALAYSIA

- Headquarters in **Klang, Malaysia** serving as the central command for all group operations.
- Regional hubs in **Penang** and **Johor** supporting northern and southern industrial corridors.



INDONESIA, THAILAND TAIWAN & JAPAN

- We have sales and support representatives in **Thailand, Indonesia, Taiwan** and **Japan** to serve customers across these key industrial markets.



**Strategically located.
Rapidly connected.**

TSM Group operates a strategically distributed network of offices and hubs across Asia, enabling rapid response and deep local expertise in every market we serve.

INDUSTRY FOCUS & DIVERSIFICATION

TSM Group serves a broad and strategically selected range of industries, delivering specialized automation and materials solutions where precision and reliability are non-negotiable. Our diversified portfolio ensures resilience and deep domain expertise across critical sectors.



WIRE MESH WELDING

Kupperlux copper alloy electrodes and caps deliver exceptional electrical conductivity and heat resistance, ensuring consistent, high-quality welds in high-speed wire mesh production line.



AUTOMOTIVE

Our Kupperlux copper alloy welding caps and shanks are engineered to withstand high-cycle demand of automotive spot welding- maintaining weld integrity and electrode life across mass production environments.



SHEET FABRICATORS

Kupperlux high-performance copper alloys provide the thermal and electrical properties required for precision resistance welding in steel fabrication, reducing downtime and improving weld consistency.



SEMICONDUCTOR

In semiconductor manufacturing Kupperlux copper alloy components offer the ultra-precise conductivity and contamination-free performance required for sensitive joining and bonding processes.



SCAN FOR MORE
INFORMATION

KUPPERLUX- MATERIAL EXCELLENCE

The Kupperlux brand represents TSM Group's commitment to metallurgical precision. Each series is engineered for a specific set of demanding industrial applications, from electrical infrastructure to electronic testing and high-stress resistance welding.

PRECISION
PERFORMANCE
TRUSTED BY
INDUSTRY.



CONDUCTIVITY

Kupperlux Series 1

99.9% conductivity manufacturing for critical electrical infrastructure. The gold standard for applications where electrical performance cannot be compromised.



STRENGTH &
DURABILITY

Kupperlux Series 5

Specialized Beryllium Copper alloys engineered for extreme hardness and fatigue strength — the material of choice for demanding electronic testing environments.



HIGH STRESS
RESISTANCE

Kupperlux Series 2

Advanced Chromium Copper alloys engineered for high-stress resistance welding and thermal stability, maintaining performance under sustained heat and mechanical load.



ENGINEERED
FOR PRECISION



TRUSTED
PERFORMANCE



BUILD FOR
INDUSTRY

Delivering advanced
materials solutions
that powers progress

PRECISION MACHINED COMPONENTS

TSM Group's vertical integration strategy extends from raw materials sourcing all the way through to finished, precision-machined components. This end-to-end control is a key "differentiator" — ensuring that every component meets the exact performance specifications required by our customers.

Custom-machined **electrode tips, shanks, and holders** are designed specifically for compatibility with Kupperlux Series 1, 2, and 5 alloys. This tight integration between material and component ensures optimal conductivity, wear resistance, and weld consistency in every application.

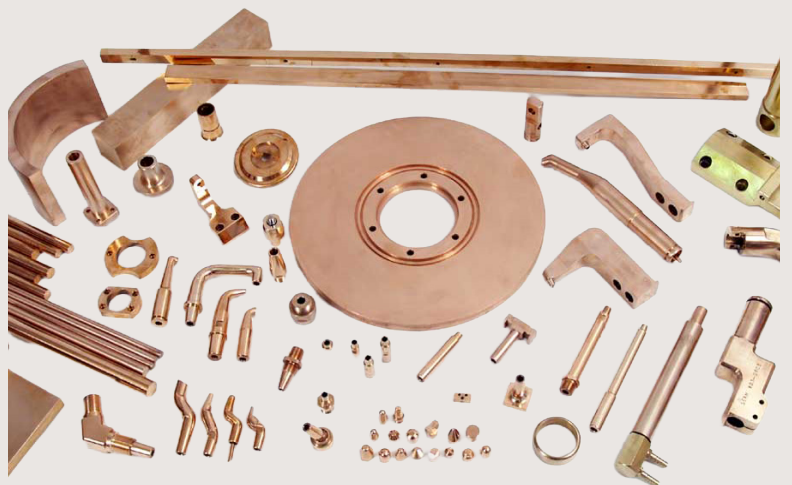
All production is governed by our rigorous **Quality, Cost, and Delivery (QCD)** framework — providing full process control from raw material intake to final product dispatch. No step in the manufacturing chain is left to chance.



ELECTRODE

Vertical Integration Benefits

- Reduced lead times through in-house manufacturing
- Designed for Kupperlux Series 1, 2 & 5 compatibility
- QCD-governed quality assurance at every stage
- Full process control from raw material to finished product
- Custom-engineered electrode tips, shanks, and holders





STATIONARY SPOT & PROJECTION WELDING

TSM Welding's stationary spot and projection welding machines are engineered for the full spectrum of industrial welding demands — from delicate micro-applications to heavy-duty, high volume production environments. Each machine is built for consistency, speed, and long-term reliability



Heavy-Duty AC Machines

Alternating current spot projection welding machines with capacities ranging from 10 kVA to 300 kVA, covering the widest range of industrial applications.

Precision Integration

Integrated with advanced timers for consistent, high-speed mass production — ensuring every weld meets specification, cycle after cycle.

Micro Welding Solutions

Dedicated solutions for tiny and high-precision welding applications, serving industries where tolerances are measured in microns.

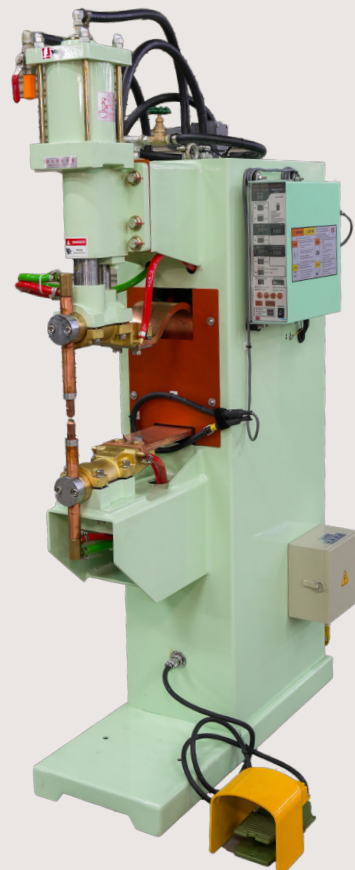
Air Compressing AC Spot Welder

Light and handy desktop type unique pressurizing mechanism, accurate adjustment of pressure speed. Welds are not liable to deforming under high pressure.

Control with computer IC circuit supported by power voltage fluctuant compensating circuit. Adoption of high-power import SCR contactless switch for the primary circuit, long using life of thyristor with stable output power.

APPLICATIONS

Suitable for the welding of hardware parts, copper wire, electrical switch, panel and fine line.





SCAN FOR MORE INFORMATION

TNS-815V2

DIGITAL WELD CONTROLLER

The TNS-815V2 is the intelligent core of TSM's welding ecosystem — a purpose-built digital controller that brings precision, adaptability, and safety to every welding operation. It is specifically tuned for all types of metal, including high-strength steels that demand exacting process control.



FEATURES

Intelligent Control



processor-based synergic control with digital monitoring for real-time process visibility and adaptive performance across all metal types.

Maximum Reliability



Multiple safety protection circuits built in as standard — ensuring consistent, fault-free operation even in the most demanding production environments.

Seamless Automation

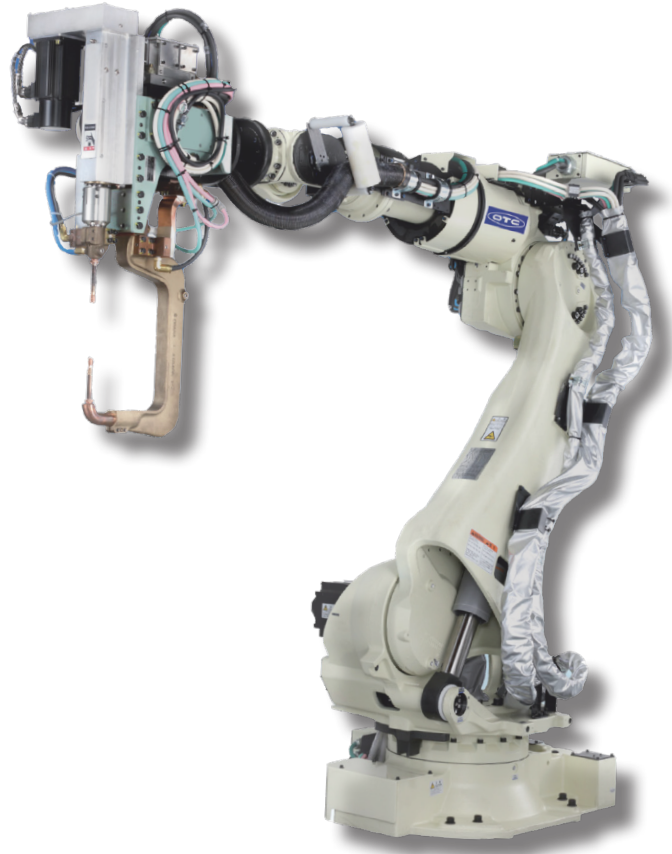


Seamless Automation Universal communication interface enables seamless integration with third-party automation systems, making the TNS-815V2 a truly open-platform solution.



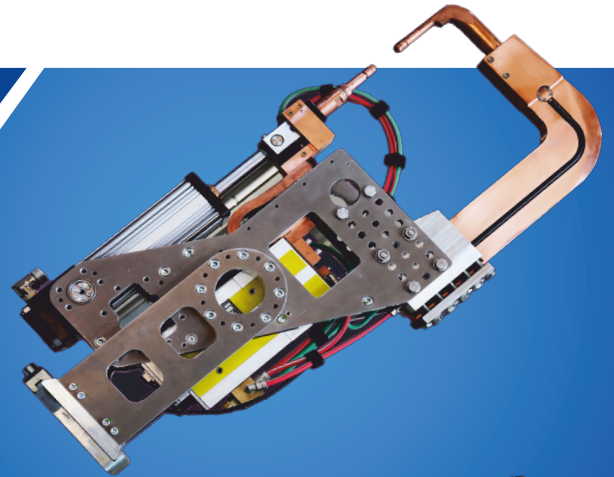
ROBOTIC SPOT GUNS

TSM Robotics' high-performance robotic spot guns are purpose-engineered to maximize the capabilities of Almega robotic systems. Every design decision — from material selection to cable routing — is made to enhance speed, accessibility, and long-term reliability on the production line.



LIGHTWEIGHT, HIGH-RIGIDITY DESIGN

Optimized for Almega robotic systems, the guns achieve an ideal balance between low inertia for fast movement and structural rigidity for precise, repeatable weld placement.



INTEGRATED ENGINEERING

Built-in wrist motors and integrated cabling eliminate jig interference and maximize accessibility in tight, complex fixture environments — reducing downtime and simplifying maintenance.



SCAN FOR MORE
INFORMATION

VERTICAL ARTICULATED ROBOT

TSM Robotics' vertical articulated robot lineup — the V25, V166, and V210 — covers the full range of industrial automation requirements, from high-speed versatile handling to the most demanding heavy-duty fabrication tasks. Each model is engineered to deliver maximum performance within its class.



PAYLOAD ROBOT LINEUP



V25

25kg Payload



V80

80kg Payload



V100

100kg Payload



V130

130kg Payload



V166

166Kg Payload



V210

210Kg Payload

MEDIUM PAYLOAD ROBOT

High-speed robot with a 25kg payload, ideal for versatile handling and welding tasks where agility and cycle time are the primary performance drivers.



HEAVY PAYLOAD ROBOT

Heavy-duty models engineered for highpressure clamping in heavy industrial fabrication — delivering the force and structural integrity required for the most demanding applications.





ARC SPECIALISTS

TSM Robotics' arc welding specialist models are designed for environments where speed, compactness, and high-density installation are critical success factors. The FD-V8(L) and FD-B6(L) represent the leading edge of arc welding robot design.



MODEL

FD-B6 (L)

The FD-B6 (L) features a distinctive slim-arm design with built-in synchro-feed cables, purpose-built for high-density installations where multiple robots must operate in close proximity without interference.

MODEL

FD-V8 (L)

The FD-V8 (L) sets the industry benchmark for arc welding speed. Axis speeds have been increased by 15% compared to previous generations, directly minimizing production takt time and maximizing throughput in high-volume welding cells.





POWER SOURCES

Welbee Series II Power Sources

The Welbee Series II represents the pinnacle of digital inverter welding power technology. Designed for demanding arc welding applications, the M350LII and P500LII deliver a level of arc performance and weld quality that sets a new standard for the industry.



M350LII & P500LII

Digital inverter power sources delivering ultra-low spatter across all current ranges — reducing post-weld cleanup and improving overall production efficiency significantly.

INTEGRATED ENGINEERING

Built-in wrist motors and integrated cabling eliminate jig interference and maximize accessibility in tight, complex fixture environments — reducing downtime and simplifying maintenance.



SMART LOGISTICS Systems

TSM Robotics delivers smart factory logistics solutions through our ASRS and AGV product lines — helping manufacturers automate material flow, maximize warehouse efficiency, and achieve Industry 4.0-ready operations.

ASRS – Automated Storage & Retrieval

TSM Robotics' high-density automated storage and retrieval systems are designed for manufacturers seeking to maximize warehouse space, improve inventory accuracy, and ensure rapid material availability on the production floor.



SCAN FOR MORE
INFORMATION

AGV – Autonomous Guided Vehicles

Our autonomous guided vehicles are built to handle heavy loads and complex factory floor navigation — reducing manual handling, improving workplace safety, and keeping production lines running.



SCAN FOR MORE
INFORMATION

SERVICE & TECHNICAL SUPPORT

TSM Group's commitment to customers extends well beyond the point of sale. Our comprehensive service and technical support framework is designed to maximize uptime, build internal capability, and foster long-term collaborative partnerships with every client we serve.



Engineering Support

On-site installation, preventive maintenance, and expert technical consultation — ensuring every TSM system operates at peak performance throughout its full service life.



Training & Development

Comprehensive technical proposals, R&D collaboration, and interdisciplinary skill development programs — empowering our customers' teams to get the most from their TSM investment.



Office:

TSM WELDING TECHNOLOGY SDN.BHD. (716459-M)

No 1, Jln Sungai Kapar Indah 2/KU 7,
Tmn Sungai Kapar Indah
42200 Kapar, Selangor, Malaysia.
Tel :+603-3290 3311
Email: info@tsmwelding.com.my