

TOTAL TECHNOLOGIES

TOTAL TALENT



TT ENGINEERING & MANUFACTURING SDN BHD

No 1, Jalan 6/1, Lot 3472, Kawasan Seri Kembangan
43300 Selangor Malaysia

+603-89421977 @ ttem@tte.com.my www.tte.com.my



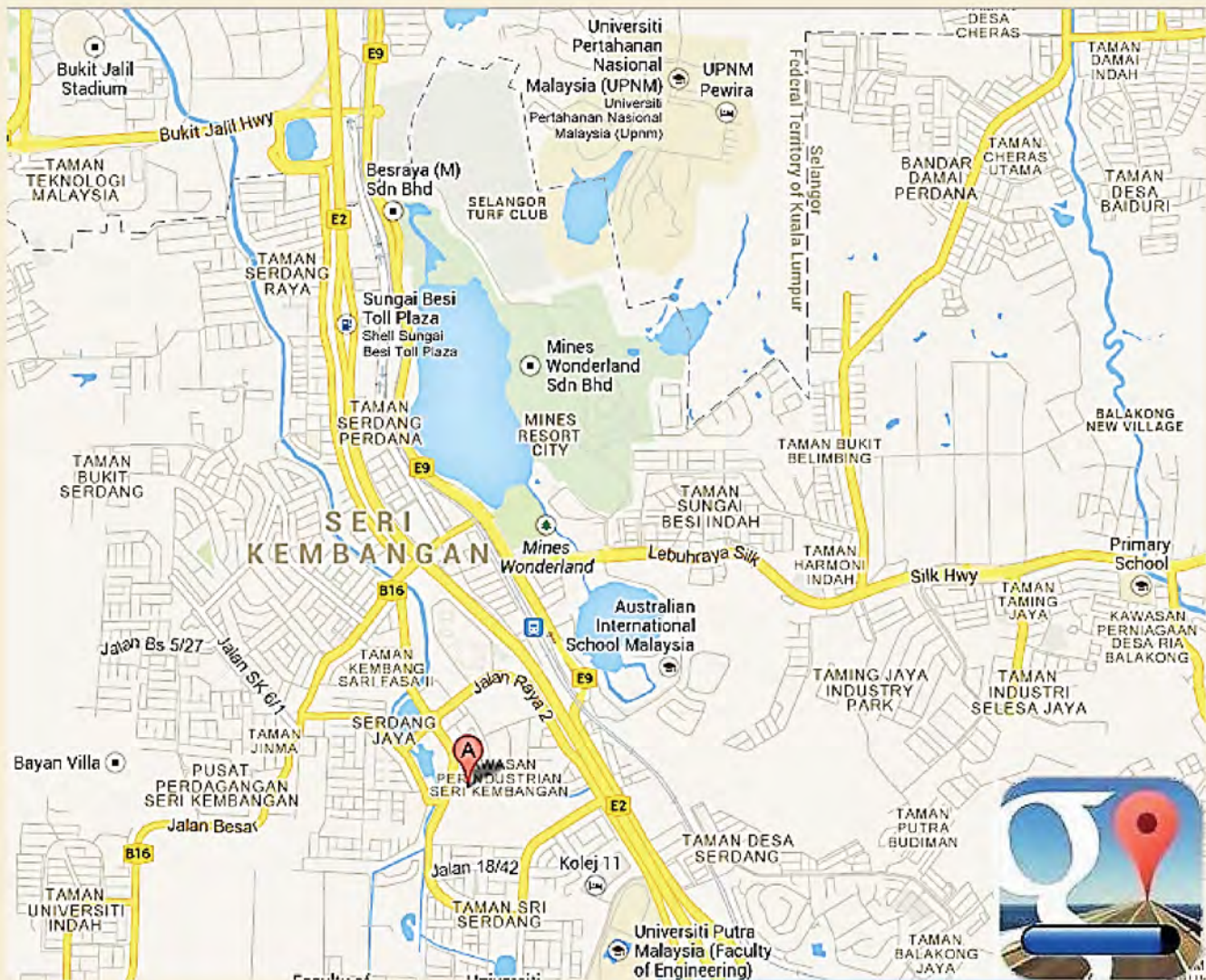
ISO 9001 Certified ✓

Small Steps Big Leaps



Crossing Over To A New Chapter

Gearing Up to Meet New Challenges



WE ARE AT CENTRAL REGION



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WE COMMIT
Total Talent
WE DELIVER
Total Technologies
TO YOUR DOOR STEP
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OUR VISION

To be a leading engineering products manufacturer and distinctive solutions provider to our end customers

OUR MISSION

We collaborate with our customers and suppliers to provide innovative solutions through teamwork and creative involvement

OUR CORE VALUES ...

The few significant values we frequently carry in our work culture to continuously meet and / or exceed your expectations

- ♣ Customer 1st
- ♣ Team-work
- ♣ Sense of Urgency
- ♣ Customers / Suppliers Collaboration
- ♣ Continuous Learning & Improvement

FOREWORD

from our top management ...

**WE BELIEVE IN
COLLABORATION AND
PARTNERSHIP WITH OUR
CUSTOMERS AND SUPPLIERS TO ACHIEVE A WIN-WIN**

TT Engineering & Manufacturing Sdn Bhd is a leading aluminium manufacturer providing one-stop metal fabrication solution, with three decades of experience in the design and manufacture of metal parts and components for specific application in the semi-conductor, LED, electronic, automotive, furniture fittings and other value added contract manufacturing for OEM customers.

YEAR OF ESTABLISHMENT	: 1985
LOCATION	: Seri Kembangan, Selangor , central region of Malaysia
FACILITY BUILT-UP	: upto 60,000 square feet
MANUFACTURING SERVICES	: Extrusion press, CNC machining center, Anodising and ENP lines
CORE BUSINESS	: Metal fabrication, engineering works & metal finishing for aluminium, mild steel, stainless steel, carbon steel etc metals
KEY INDUSTRY SEGMENTS	: Semiconductor, LED, electronics, automotive, furniture, contract manufacturing for OEM

OUR FORTES AND UNIQUENESS

ONE-STOP
CENTRE

COST
EFFICIENT

CUSTOMER
FOCUS

GLOBAL
COVERAGE

INNOVATION

DIFFERENTIATION

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SEMICONDUCTOR DIVISION

SEMICONDUCTOR DIVISION



Three Decades

IN THE MAKING

CROSSING OVER TO A

New Episode

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LEAD FRAME MAGAZINE

We offer customisation for lead frame carrier or slot magazine in varying chip packages, capacity levels and pitching.

SERVICES :

- ★ Open toolings for standard lead frame packages
- ★ Design customisation for specific operating conditions
- ★ Engraving and barcoding services

APPLICATION : Lead frame handling media for semiconductor assembly FOL and EOL processes

- | | | | |
|--------------|----------------|-----------|---------------|
| ★ Die Attach | ★ Molding | ★ Plating | ★ Trim & Form |
| ★ Wire Bond | ★ Plasma Clean | ★ Marking | |

FINISHING :

- ★ Anodise / Electrolytic – Non Conductive, refer to finishing colour chart
- ★ Hard Anodise
- ★ Electroless Nickel Plating (ENP) – Conductive
- ★ Other finishing available upon request



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ENGINEERING & MANUFACTURING

SEMICONDUCTOR DIVISION

BOAT MAGAZINE / STAINLESS STEEL BOAT CARRIER

We assist in designing boat magazines and stainless steel boat carrier for your required packages and operating requirements. Our services includes :

SERVICES :

- ★ Open tooling for standard package sizes
- ★ Design customisation for specific operating requirement
- ★ Engraving and barcoding services

APPLICATION : Boat handling media for semiconductor assembly

FOL processes

- ★ Die Attach
- ★ Baking
- ★ Testing
- ★ Wire Bond
- ★ Trimming

FINISHING :

- ★ Anodise / Electrolytic – Non Conductive
- ★ Hard Anodise
- ★ Electroless Nickel Plating (ENP) – Conductive
- ★ Other finishing available upon request, refer to colour chart



WAFER CASSETTE / FRAME CARRIER

Wafer cassettes or wafer frame carriers are available in different wafer ring sizes, levels and pitching. Custom design available for various types of handles, protective (anti-static or non-antistatic) top cover, finger grip.

APPLICATION : Wafer handling media for semiconductor assembly FOL processes

- ★ In-line Wafer Handling
- ★ Wafer Back Grinding
- ★ Wafer Dicing
- ★ Wafer / Die Sorting
- ★ Wafer / Die Pick & Place
- ★ Wafer Shipping

FINISHING :

- ★ Anodise
- ★ Hard Anodise
- ★ Other finishing available upon request



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ENGINEERING & MANUFACTURING

SEMICONDUCTOR DIVISION

EOL CASSETTE (STACK MAGAZINE)

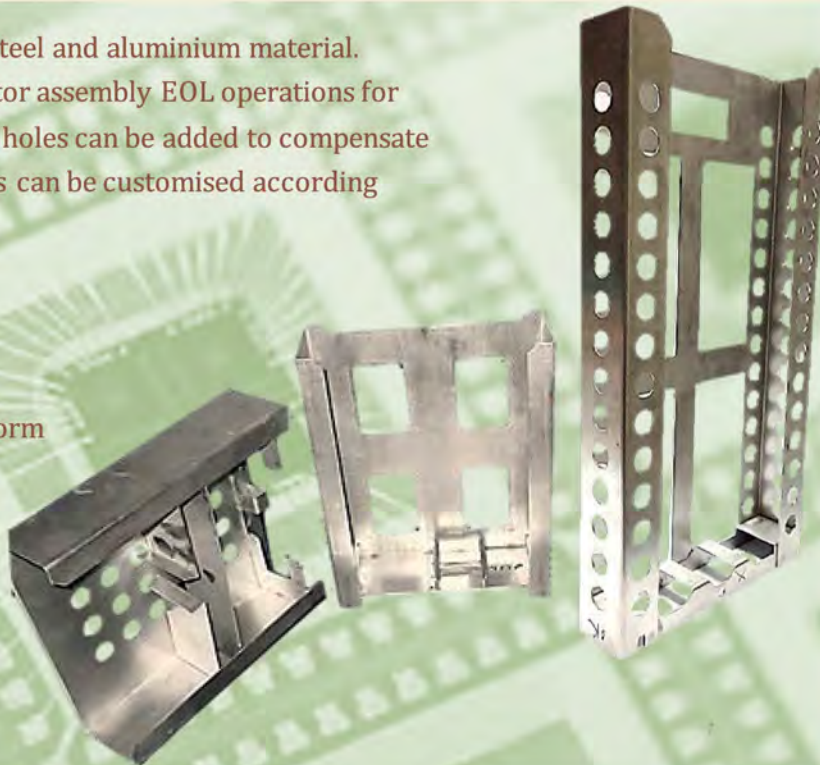
EOL cassette comes in both stainless steel and aluminium material. These are mainly used in semiconductor assembly EOL operations for lead frame strip handing. Perforation holes can be added to compensate the weight of the cassette. Dimensions can be customised according to lead frame or strip specification.

APPLICATION :

- ★ Molding
- ★ Baking
- ★ Marking
- ★ Trim & Form
- ★ Plating

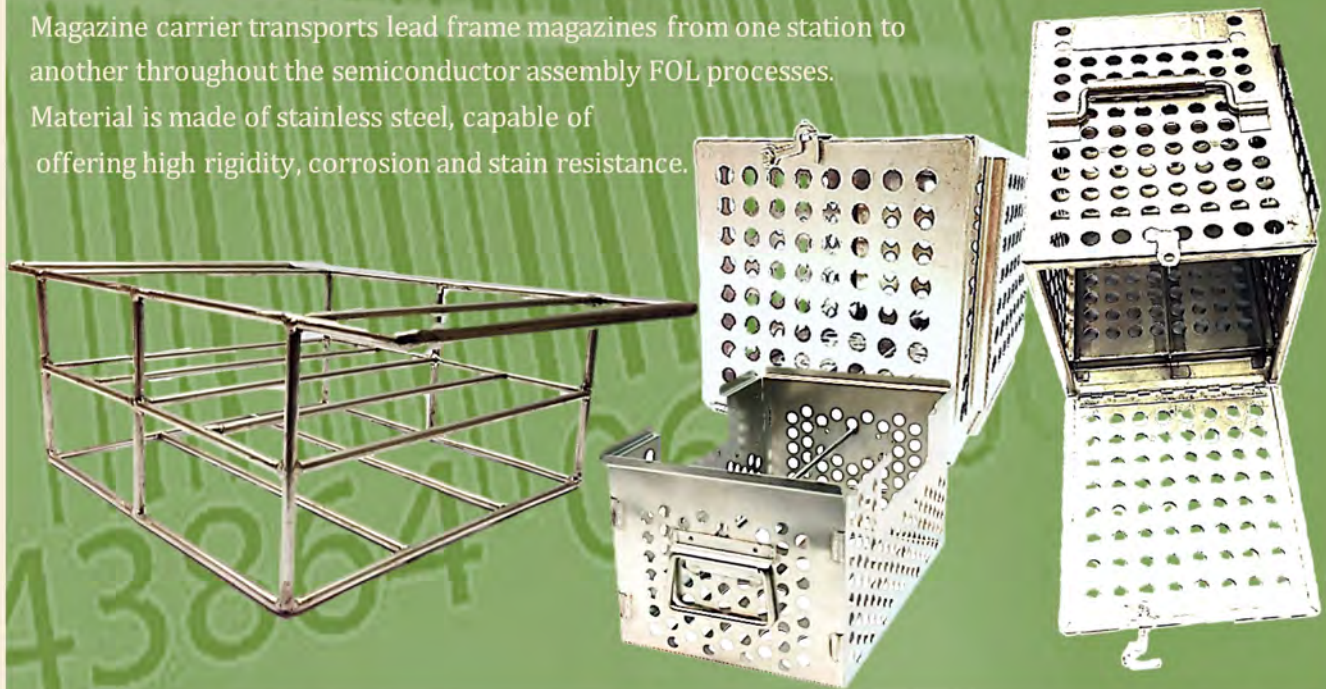
FINISHING :

- ★ Stainless steel
- ★ Natural Anodise



MAGAZINE CARRIER

Magazine carrier transports lead frame magazines from one station to another throughout the semiconductor assembly FOL processes. Material is made of stainless steel, capable of offering high rigidity, corrosion and stain resistance.





ENGINEERING & MANUFACTURING SEMICONDUCTOR DIVISION

ALUMINIUM TUBE AND TRAY

Tube and tray are single piece extrusions, extruded and cut into length as per required IC chip package specifications. We offer a variety of end stopper designs ranging from rivet, silicone plug, teflon and embossed type.

TUBE APPLICATION: IC chip handling and tube transfer in these processes

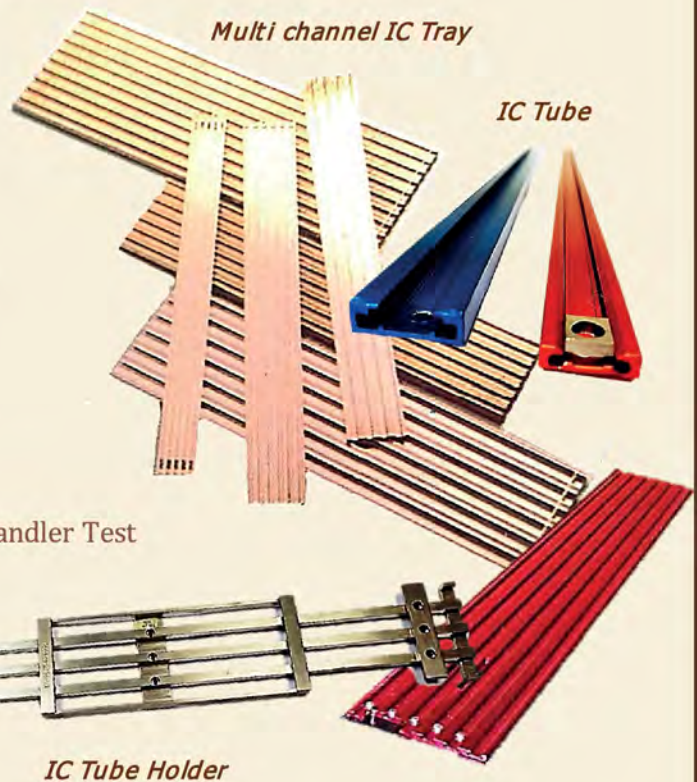
- ★ Bake
- ★ Burn-In
- ★ Gravity Feed Handler Test
- ★ Marking
- ★ Trim & Form

TRAY APPLICATION: IC chip handling and tray transfer in these processes

- ★ Bake
- ★ Burn-In
- ★ Gravity Feed Handler Test

FINISHING :

- ★ Anodise – Non Conductive
- ★ ENP - Conductive

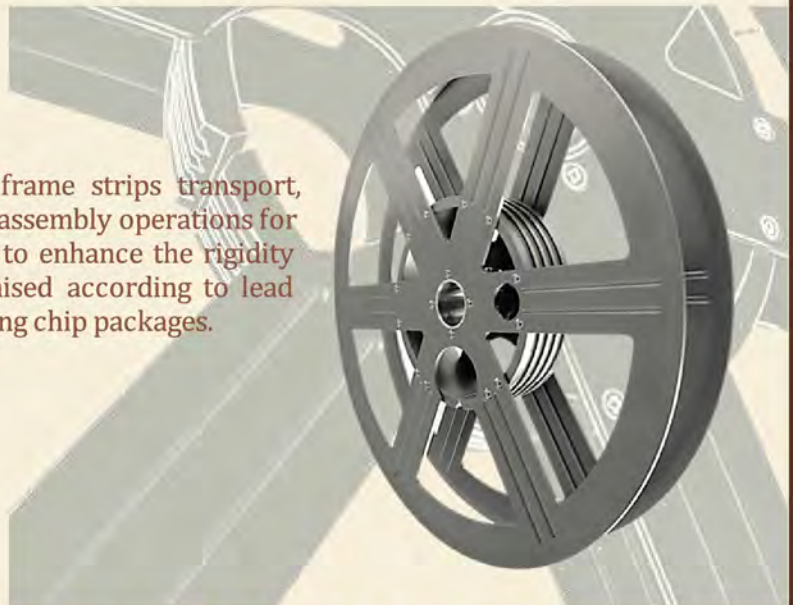


METAL REEL

Metal reel supports reel to reel lead frame strips transport, transfer and packaging in semiconductor assembly operations for reel-to-reel packages. Ribs can be added to enhance the rigidity of the reel. Dimensions can be customised according to lead frame strip specification to cater for varying chip packages.

FINISHING :

- ★ Hard Anodise



TT helps BOOST your COMPETITIVE ADVANTAGE

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SEMICONDUCTOR DIVISION

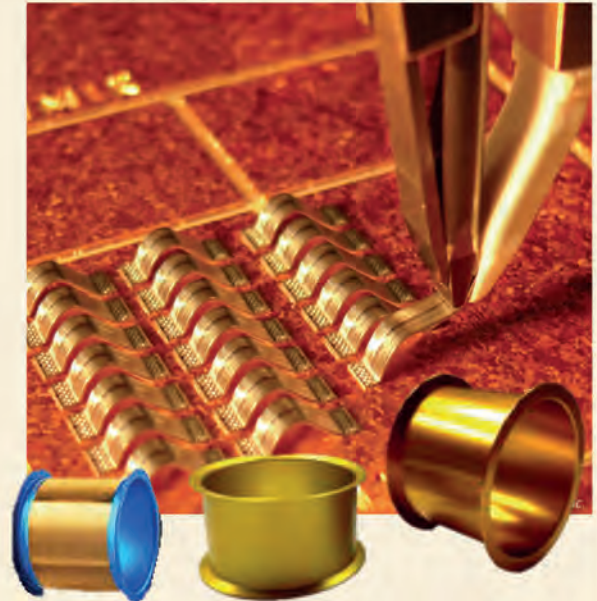
WIRE SPOOL

Spool is a single piece aluminium extrusion aided with precision machining according to customer specification.

APPLICATION : Wire bonding process for gold, silver and copper wires

FINISHING :

- ★ Anodise – Non Conductive, refer to colour chart
- ★ ENP – Conductive
- ★ Other finishing available upon request



ALUMINIUM MOULD BASE

Aluminium mould base is used in the LED frame production

FINISHING :

- ★ Natural Anodise
- ★ Other finishing available upon request



ALUMINIUM END COVER

End covers are used together with lead frame magazine as a safety measure to prevent lead frame from sliding out of the magazine during application and / or handling processes. End covers are designed to fit the magazine dimensions, designs can be tailored to your specific needs.



TT ENRICHES your GOALS

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VALUE ADD DIVISION

AUTOMOTIVE PROJECTS

★ *Aluminium Side Step*

Constructed from aluminium extrusion, natural anodise finishing and assembled with end cap to enhance its appearance, mainly installed on four wheel drive vehicles.

★ *Air-conditioning pipe / tube*

Aluminium extruded tubes drawn with precision to desired thickness while maintaining tube concentricity.



WE COMMIT

Total Talent

WE DELIVER

Total Technologies

TO YOUR DOOR STEP

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ENCOUNTER ENRICH ENHANCE

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VALUE ADD DIVISION



TT EMBARKS ON A
CHANGE
TO MEET YOUR
CHALLENGES

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VALUE ADDED CONTRACT MANUFACTURING

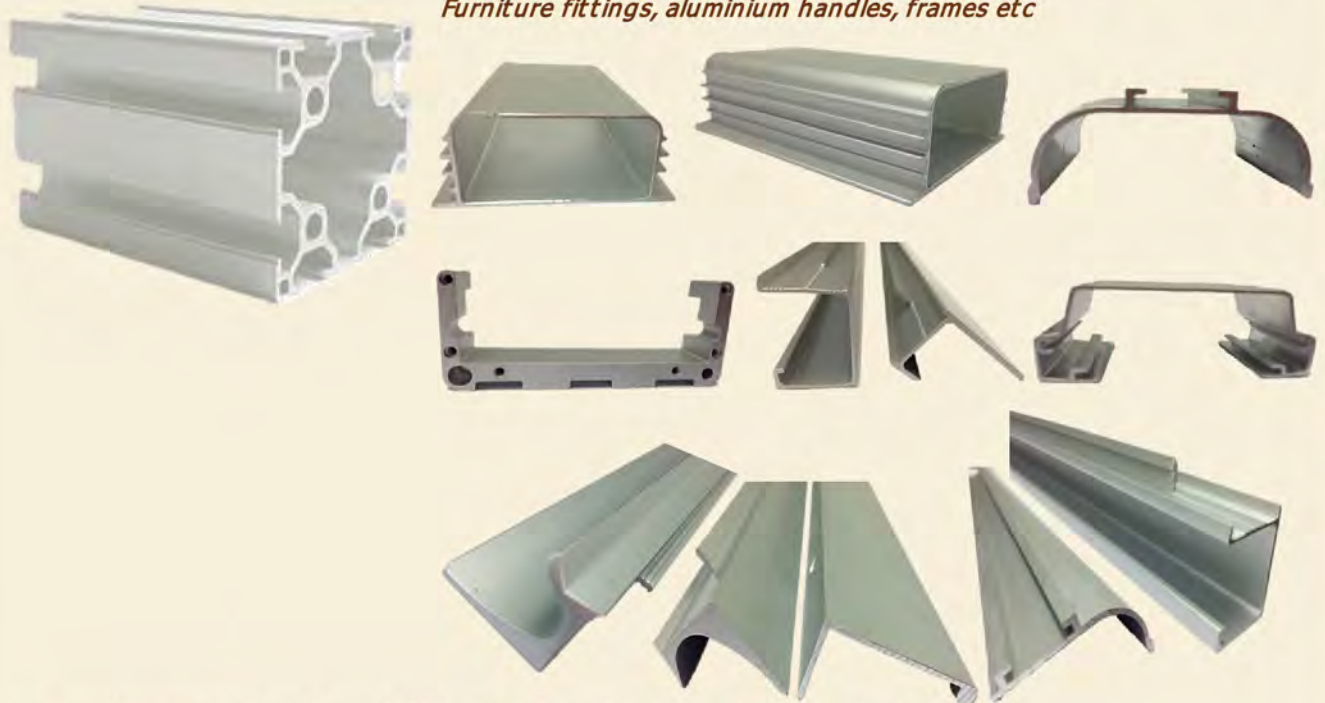
Our extrusion profile designs can be tailored to your customised needs. We are capable of delivering extruded products with high value add activities and design complexities. We continuously supply value added products such as road pavement marker, reflective light, computer electronics metal casing and furniture fittings for structural and decorative purposes.



Pavement Marker, Reflective Light



Furniture fittings, aluminium handles, frames etc



Our other strength and capabilities in value added manufacturing includes :

- ★ Aluminium jigs and fixtures for various types of equipment
- ★ Medical instrument and aircraft accessories
- ★ Aluminium LED lighting parts and components such as heat sink, light holder, casing
- ★ Aluminium solar panel, frame

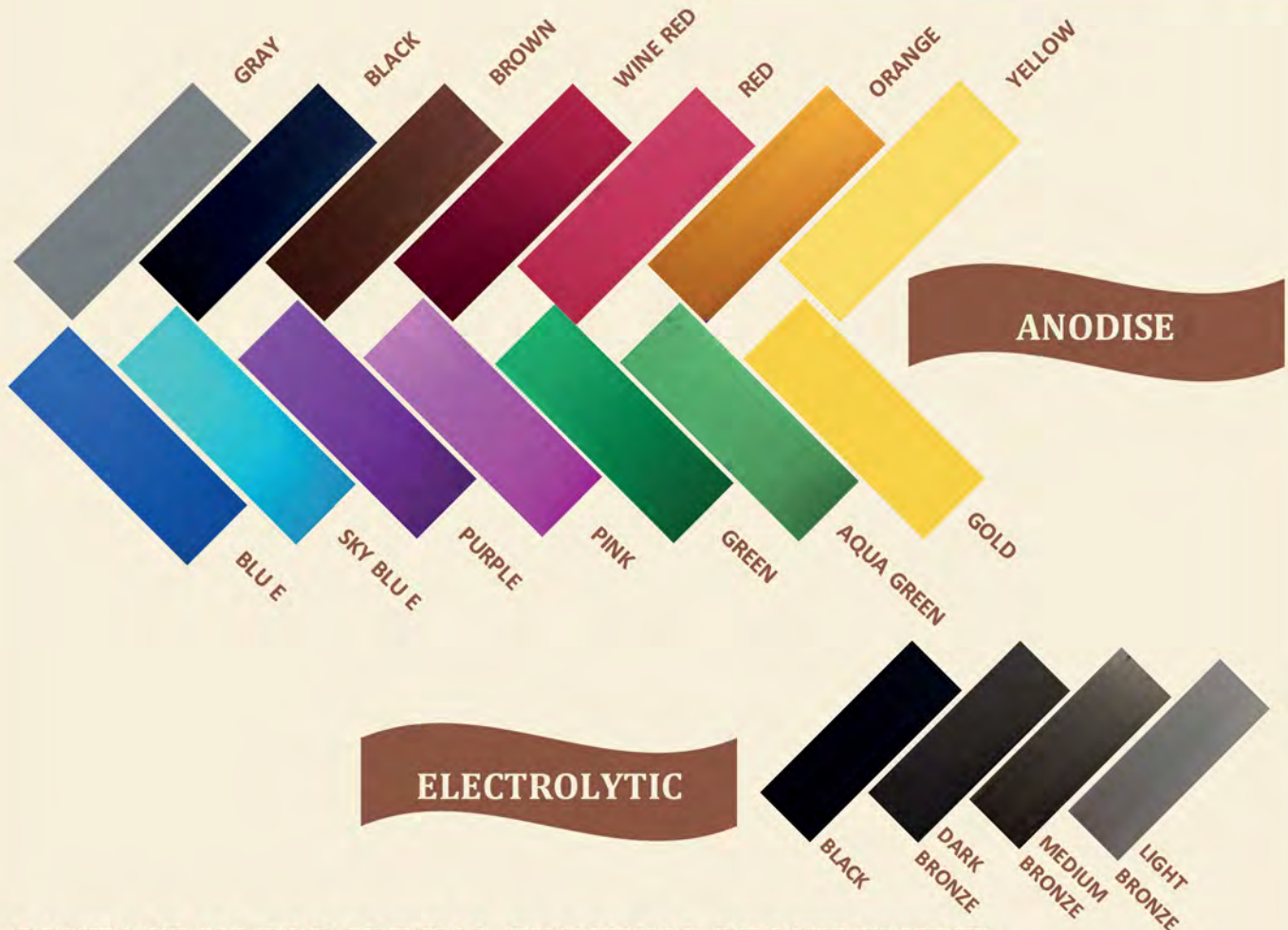
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COLOUR CHART



TT EMBARKS ON A
CHANGE
TO MEET YOUR
CHALLENGES
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CONTACT US FOR SPECIAL FINISHING REQUIREMENT

- ★ ELECTROLYTIC
- ★ NICKEL PLATING
- ★ POWDER COAT (RAL Classic)
- ★ NATURAL ANODISE
- ★ HARD ANODISE
- ★ CHEMICAL BRIGHTENING
- ★ CHROMATE



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A TOTAL
Transformation
WITH YOU
In Mind
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OUR SALES NETWORK

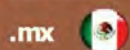


OUR VALUED CUSTOMERS

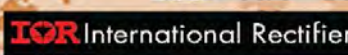
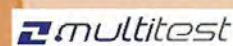
ASIA



AMERICA



EUROPE



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