





About Us

TR PSEP (Power Steel & Electro-Plating Works Sdn.) is a major supplier to OEM's across Asia. Acquired by TR Asia, part of the London listed Trifast Plc, TR PSEP specialises in the manufacture of 'under bonnet' components within the Automotive Industry.

TR PSEP also produces products from JIS wire and has a long history of supply to Japanese OEM's.

- **Date of Incorporation** - 01 September 1972
- **Began Operations** - 01 September 1973
- **Number of Employees** - 165; of which 130 are employed in manufacturing
- **Manufacturing Capacity** - 520 metric tons per month
- **5S** - Implemented across the manufacturing sites











ASSOCIATION
OF SOUTHEAST
ASIAN NATIONS

Product Range & Application

Customised precision ferrous and non-ferrous bolts, screws (including washer assembly), and other fasteners for the original equipment manufacturers of the Automotive, Air Conditioning, Electrical and other industries.

- **Manufacturing Range:** Diameter M3 to M20, Length to 200mm (*multi stage*)
- **Base Material:** Cold Heading Quality Steel, Alloy Steel, Brass, Stainless Steel, Aluminium



-  Braking Systems
-  Chassis
-  Lighting
-  Under Bonnet
-  Interior Trim
-  Seating
-  IP Console
-  Exterior

Product Flexibilities & Limitations

Specifications	Grade & Type	End Product	Material Grade	Nominal Size (mm)	Length (mm)	Mechanical Properties	
						Yield Strength	Tensile Strength
JIS B1051	4	Bolt, Screw, Rivet	JISG 3507-2	M3	4	23	40
	6					40	60
	7					50	70
	8					64	80
	9	Bolt, Screw, Stud	JISG-3508-2 OR JISG 3509-2	M20	200	70	90
	10					90	100
	11					100	110
	12					108	110

www.psep.com.my





Factory Details

Factory 1	Factory 2	Factory 3
Jln Pengapit 15/19, 40000 Shah Alam, Selangor, Malaysia	Jln Pahat 16/8A, 40400 Shah Alam, Selangor, Malaysia	No.14, Jln Pengapit 15/19, 40200 Shah Alam, Selangor, Malaysia
Manufacturing Site: 3,734 sq.m	Manufacturing Site: 5,759 sq.m	Manufacturing Site: 4,173 sq.m

Machinery & Equipment



Heading Machines

- 2 Die 2 Blows
- 2 Die 3 Blows
- 3 Die 3 Blows
- 4 Die 4 Blows
- 5 Die 5 Blows
- 6 Die 6 Blows

Secondary Processes *(Including Thread Rolling & Machining)*

- Auto Feed 2 Dies Hydraulic Rolling Machine
- Auto Feed 3 Dies Rolling Machine
- Cutting & Grooving Machine
- Hydraulic Rolling Machine
- Pointing Machine
- Shank Slotting Machine
- Shot Blast Machines
- Trimming Machines
- Washer Assembly Machine
- Thread Rolling Machines
- Milling Machines
- Sorting Machines

Outsourced Supporting Services

Service Category	Services Provided	Source of Support	Standard	Location
Heat Treatment	Continuous atmospheric controlled furnace	Japan	TS / ISO	Nilai, Klang
Machining Works	Cutting, drilling, grinding & tapping	Local	ISO	Klang
Surface Coating Finishing	Compliance with ELV and RoHS standards.	United States & Europe	TS / ISO	Klang
Self Lock Coating	Adhesive coating, Sealants, Locking Agents & others	Japan	ISO	Shah Alam

Application Engineering

TR understands that the development of applications can be a time consuming process which is why our team of specialists is on hand to support and guide you, from developing new products to adapting an existing range to suit your application.

TR follows a simple process that can be adapted for your individual application.

- **Function:** Confirm the performance requirements of the fastener and application, does the product need to screw, clinch, rivet, weld, glue or clip together?
- **Application Environment:** Our team will ascertain whether the product will require any specific design features for your application.
- **Assembly Method:** How the fastener is installed into the application is a key part of the process and will need to be considered in design or specification stage. Early involvement from our design engineers in your manufacturing planning process allows for systematic reductions in the cost of your assembly and production.
- **Manufacturing Process:** Once we have the product specifications clear we can then assess the best method of manufacturing.
- **Evaluation:** A prototype part is manufactured for you to test in application and any amendments to the specification can be assessed and applied to ensure the finished article is as required.

TR adopts a full service provider ethos, supporting your designers and engineers to ensure your finished part is as required for your application. TR's team of global specialists will work with you from design through to manufacturing and will be on hand to guide and advise where required.



Research & Development



CAD Design & Development



Prototype & Testing



Global Manufacturing & Logistics

www.psep.com.my





Licenses



TR has invested in a key number of manufacturing licenses.

MATHREAD®

A patented system to prevent cross threading - the unique first threads align with the bolts accurately ensuring optimum assembly time. This feature has been incorporated in the design of the engine sump plug for a newly developed model. The clear advantage is that at both original assembly and subsequent servicing thread damage is avoided. The principal usage is in the automotive industry.

MORTORQ® SUPER

A design that provides an enhanced drive capability and up to 25% material reduction to the head. This shallow head fastener has a good appearance and provides customers with the opportunity to reduce weight in vehicles. This drive is also available in a tamper resistant style.

STRUX®

A self clinching fastener used in automotive structures, often used in conjunction with Mathread®



End-2-End global support

The TR Group of companies work as a global network organised to provide supply solutions wherever our customers need us.

A unique combination of knowledge, communication and collective objectives enables proactivity on a global level.

TR Quality

TR operate in a highly quality focused environment to ensure customer requirements are fully integrated in our processes.

- **Quality Management Systems** - TS16949, ISO9001 and ISO14001 form the backbone of our management system and are supported by processes that ensure we meet our customers' expectations.
- **Product Quality** - TR use a fully integrated PPAP package that captures product requirements and enables realisation of product approval based on an agreed timeline. Feasibility review is carried out by TR Engineers with both design and application knowledge. We adopt a team approach to product development – by providing input to our customers' design verification programs, we ensure that product quality requirements are understood and appropriately managed to reduce unnecessary inspection costs.
- **Supply Chain Quality** - TR recognise the importance of every stage of the supply chain in delivering quality product to the customer. From the supplier of raw materials to in-house processes and outside service providers, the team work to ensure quality is fundamental in every process.
- **Quality Targets** - At TR everyone is responsible for quality and, by focusing on customers' requirements we are able to drive home our "zero defect" philosophy with quality ingrained in our processes.
- **Quality Deliverables** - Accuracy of information and customer response are key to achieving results and on-time delivery within our customer projects.
- **Quality Equipment** - Our feasibility teams ensure that the quality equipment we select provides the most efficient path to demonstrating product compliance. Where possible we use inspection equipment that links to computer software, enabling focused review and analysis of trends that feed into product development processes.

Quality Control / Assurance

Inspection Equipment	Testing Equipment	Stereo Microscope	Static Tensile Testing
Digimatic Indicator	Salt Spray Testing	First Scan Inspection Machine	Torque / Axial Tension Testing
3-D Microscope	Hardness Testing	Profile Projector	Plating Thickness Testing





Power Steel

Part of The TR Global Network

UK
t: +44 (0)8454 811 800 f: +44 (0)870 458 7851
e-mail: uk@trfastenings.com

Ireland
t: +353 (0)22 22301 f: +353 (0)22 22056
e-mail: ireland@trfastenings.com

Netherlands
t: +31 (0)541 511515 f: +31 (0)541 517134
e-mail: netherlands@trfastenings.com

Norway
t: +47 67 06 70 00 f: +47 67 06 70 10
e-mail: norway@trfastenings.com

Sweden
t: +46 (0)8 578 44 900 f: +46 (0)8 578 44 950
e-mail: sweden@trfastenings.com

Spain
t: +34 93 647 22 45
e-mail: spain@trfastenings.com

Hungary
t: +36 (06)24 516 972 f: +36 (06)24 516 961
e-mail: hungary@trfastenings.com

Poland
t: +48 (22)402 36 14 f: +48 (22)402 36 24
e-mail: poland@trfastenings.com

VIC Italy
t: +39 (0)75 914 9015 f: +39 (0)75 9190165
e-mail: info@vic.it

TR Kuhlmann Germany
t: +49 (0)5246 / 50320-0 f: +49 (0)5246 / 50320-70
e-mail: info@trkuhlmann.com

Singapore
t: +65 6759 6033 f: +65 6759 6022
e-mail: singapore@trfastenings.com

China
t: +86 21 5032 5696 f: +86 21 5032 5775
e-mail: china@trfastenings.com

Taiwan
t: +866 7 552 5577 f: +886 7 552 7033
e-mail: taiwan@trfastenings.com

PSEP Malaysia
t: +603 5519 1444 f: +603 5510 8505
e-mail: psep@psep.com.my

Malaysia
t: +604 508 3931/2 f: +604 508 3942
e-mail: malaysia@trfastenings.com

India
t: +91 967707 1807 m: +65 9684 1763
e-mail: india@trfastenings.com

Thailand
t: +66(0)20413 340 f: +66(0) 20413 340
e-mail: thailand@trfastenings.com

USA
t: +1 800 280 2181 f: +1 281 807 0620
e-mail: usa@trfastenings.com