



An Introduction to TR Fastenings

Introduction

Global Footprint, Local Support

TR is a fastener manufacturer and distributor, supplying both multinational companies globally and smaller OEMs regionally. We are able to assist in reducing the total cost of ownership for companies by working with them from early engineering and design stage, right through to specification, manufacturing, quality and logistics.

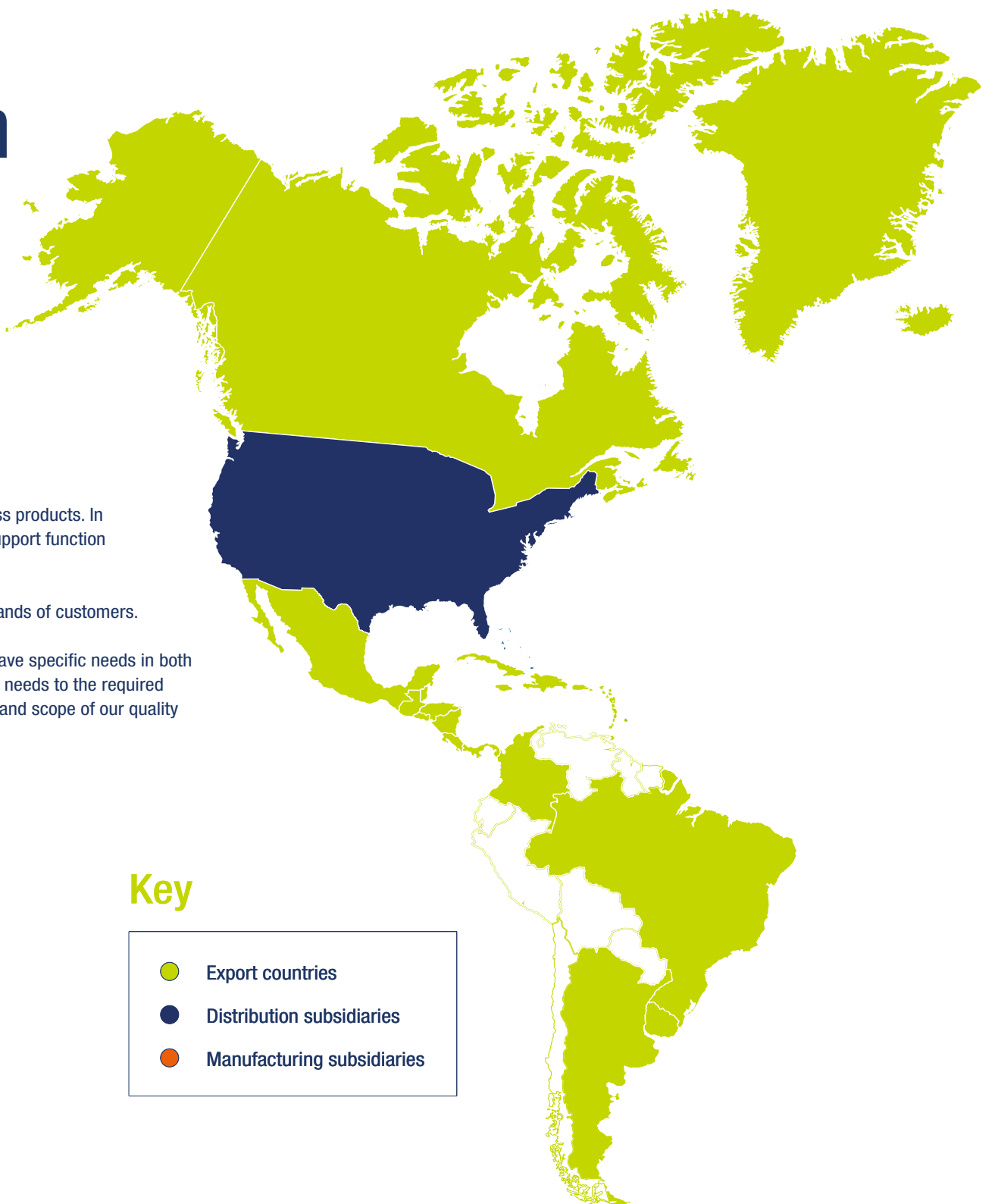
TR offers a wide range of high quality fasteners and C-class products. In addition, we have developed an application engineering support function and an advanced supply chain structure.

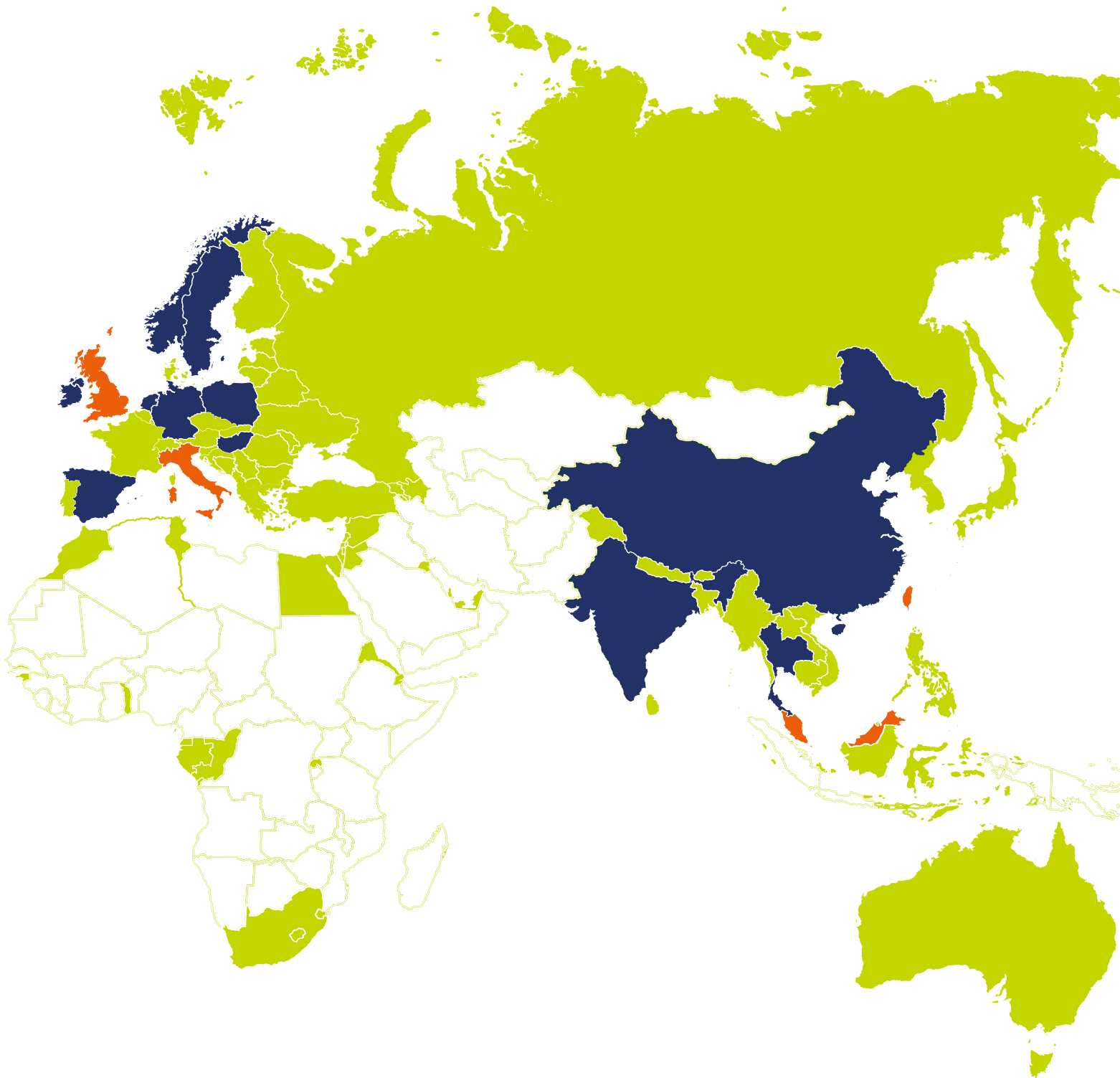
TR supplies over 8 billion components every year to thousands of customers.

We supply over 5000 companies globally. Many of these have specific needs in both product and quality requirements. Our job is to meet these needs to the required industry standard through the extent of our product range and scope of our quality certification.

Key

- Export countries
- Distribution subsidiaries
- Manufacturing subsidiaries





UK

TR Fastenings Head Office - Uckfield

TR Fastenings - Belfast

TR Fastenings - Birmingham

TR Fastenings - East Kilbride

TR Fastenings - Manchester

TR Fastenings - Newton Aycliffe

TR Fastenings - Poole

Lancaster Fastener - Lancaster

Europe

TR Fastenings - Holland

TR Fastenings - Hungary

TR Southern Fasteners - Ireland

TR VIC - Italy

TR Fastenings - Norway

TR Fastenings - Poland

TR Fastenings - Sweden

TR Kuhlmann - Germany

TR Fastenings España - Spain

USA

TR Fastenings - Houston

Asia

TR Formac Asia Headquarters - Singapore

TR Formac - China (Shanghai)

TR Formac - China (Beijing)

TR Formac - India (Bangalore)

TR Formac - India (Chennai)

TR PSEP - Malaysia

TR Formac - Malaysia

TR SFE - Taiwan

TR Formac - Thailand

Manufacturing

TR Manufacturing

Our factories are dedicated to producing high volume parts specifically to customer drawings. In addition, our strategic partnerships with other major manufacturers allows us to offer a wide range of special parts, including:

- Cold headed products
- Turned & machined parts

Our manufacturing network spans two continents and produces 33% of all the components we sell.

As a manufacturer we appreciate the importance of quality, cost and consistency. We can ensure parts are made in the right part of the world to meet your cost and delivery needs.

- 7 factories
- In-house heat treatment facilities
- Automated optical sorting facilities to strive towards a zero defect policy
- Specialised packing capability

Annual output over **8 billion parts**



TR SFE
(Taiwan)



TR Formac
(Singapore)



TR VIC
(Italy)



TR PSEP
(Malaysia)



TR Formac
(Malaysia)



TR Hank
(UK)







Our Global Footprint

TR is a 'full service provider' giving end-2-end support to our customers. We are able to assist in reducing the total cost of ownership for companies by working with them from early engineering and design stage, right through to specification, manufacturing, quality and logistics.

As a full service provider TR needs to be able to give a quality service from design through to VAVE initiatives. TR's application engineers regularly work side by side with product designers at the early stages of a design and then provide technical assistance on site.

TR are pioneers in effectively developing the global delivery model, utilising a three-tier approach that includes local, national and international teams. TR understands that a global solution creates some challenges, including communication, culture and security.

TR's global delivery model has been designed from the ground up to address these challenges. Most importantly, TR's global delivery operations provide our customers with both the quality and economic advantages that they require.

Locations in **16** countries

Supply into **61** countries





Full Service Provider

Receiving high-volume, low-cost components from the supplier to the production line involves administration. This can add considerably to the total in-house cost of the parts.

Our logistical supply systems can practically eliminate these administration processes and reduce the customer's overall costs.

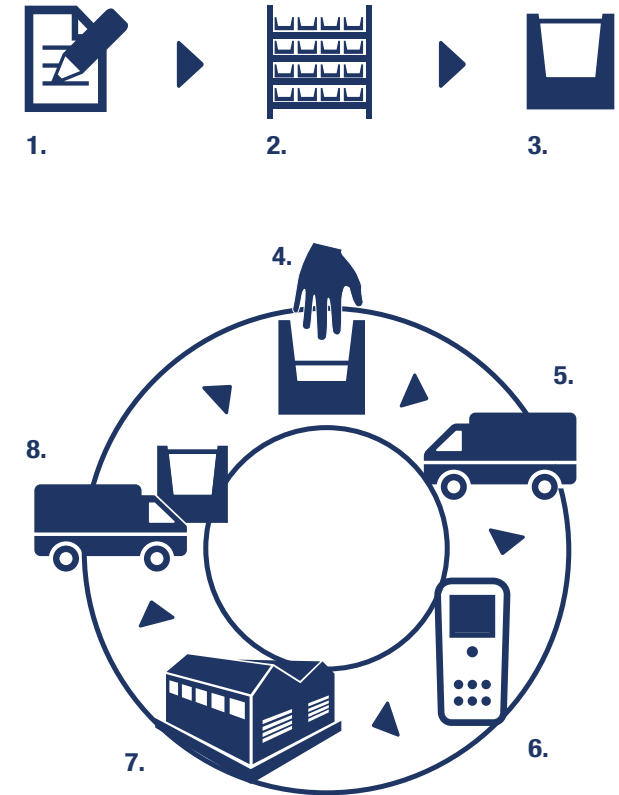
Each system we install is tailored to the customer's individual needs and can range from a simple KanFax system to full Direct Line Feed for very high volume users.

Vendor Managed Inventory Benefits

- Dramatically reduced vendor base and associated administration costs
- TCO - Total Cost of Ownership visible
- Inspection costs reduced as quality approved parts can be shipped direct to the production line
- Reduced cost of stockholding and storage as only a few day's stock is held on the production line
- Production is allowed to focus on its core function as parts are always available at the point of use

Diagram 1.1 depicts how the average Direct Line Feed (DLF) system works, although all TR DLF systems are tailored to individual customer requirements. The first 3 points show the initial set up procedure, thereafter the system operates in a cyclical manner.

If you would like us to recommend the best system for you, please call your nearest location to organise a full production line survey.



*Dia 1.1
A typical Direct Line Feed (DLF) system*

How it works:

1

Service Level Agreement (SLA)

2

TR installs racks and bins directly into production area

3

Initial stock supplied

4

Production takes stock from bins

5

On agreed day TR DLF operator visits customer

6

TR DLF operator scans all bins that need replenishing

7

TR DLF operator downloads information to TR location

8

TR DLF operator delivers stock and replenishes bins







Engineering & Quality

Engineering

Our research and engineering capabilities encompass specific engineering disciplines, supporting both our own network and customer application solutions. Our fastener testing capabilities are summarised into four categories:

- Mechanical
- Dimensional
- Installation
- Plating & finishes

Desktop engineering in 2D & 3D industry standard CAD software:

- CAD system
- 3D Mechanical design solutions
- 3D Modelling
- Analysis tools
- Data management solutions
- Drawing and specification, creation and control

Quality

It is the aim of TR to provide a level of product quality that prevents the production of non-conforming fasteners, with the objective of approaching zero defects for specified characteristics.

Customer specific quality standards can also be provided as required. The means of achieving these higher quality standards include: electronic PPAP, supplier development, strategic sourcing as well as camera, laser and roller sorting.

TR Quality

Automotive standards

ISO/TS 16949

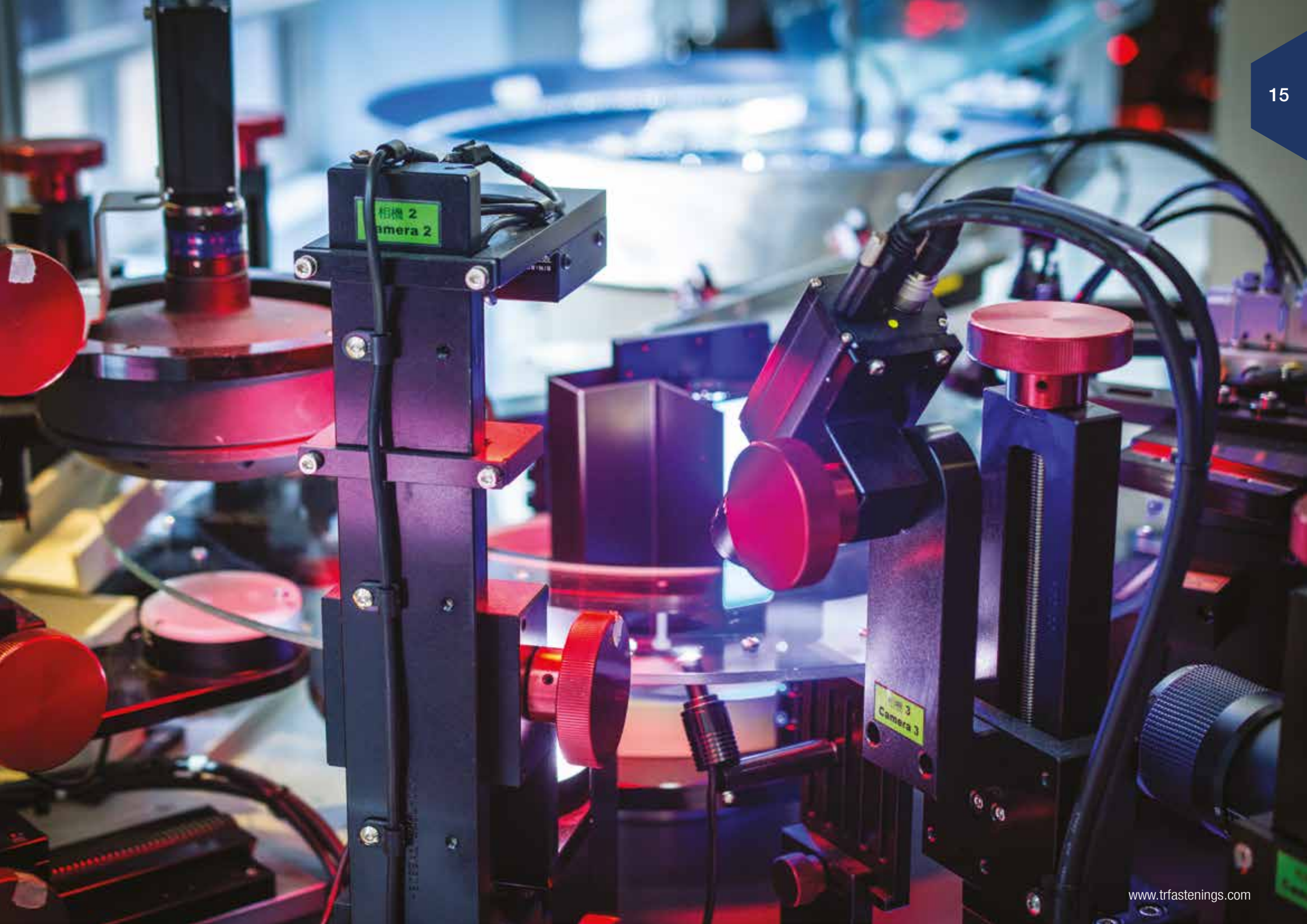
ISO 9001

Health & safety standards

OHSAS 18001

Environmental standards

ISO 14001





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