



Real Tern
Industrial Co., Ltd.

- Heat Exchange Solutions
- New Energy Applications
- Custom Projecting & Service

- 熱交換解決方案
- 新能源解熱應用
- 客製化專案製造



瑞騰工業股份有限公司
Real Tern Industrial Co., Ltd.

Heat Exchanger Leadership



Speaker | William Liu



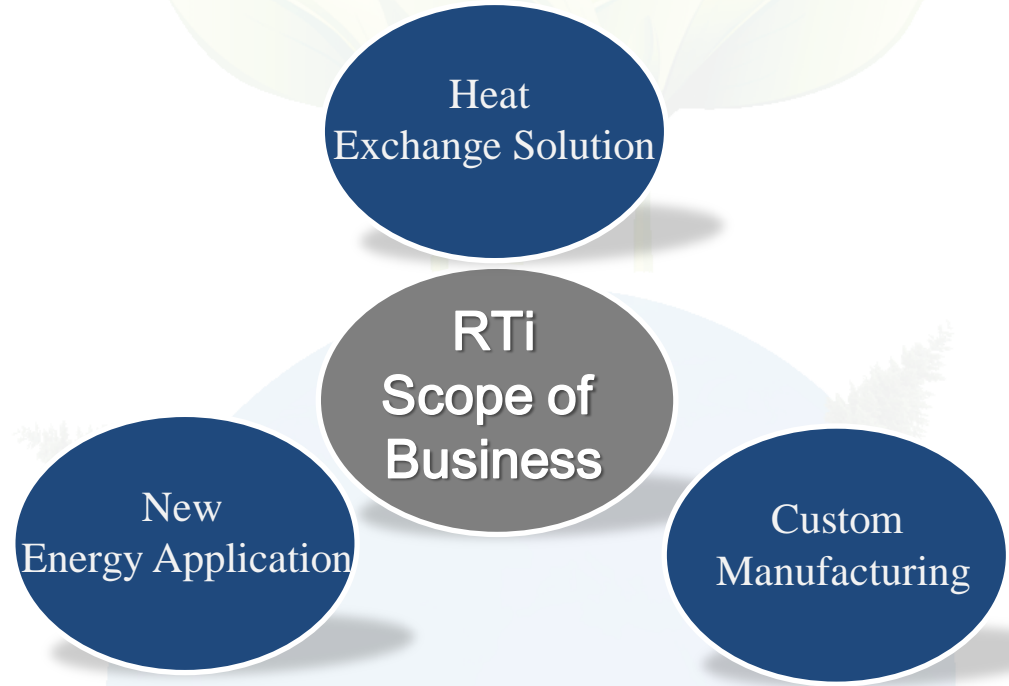
- 1 History
- 2 Product Overview
- 3 Quality Control
- 4 Welding Zone
- 5 Q & A

REAL TERN



About Real Tern

- ◆ Real Tern Industrial Co. was founded in 2012. From 2013 to 2015, we expanded into various cooling applications in different fields, such as air compressors, hydraulic systems, construction and engineering vehicles, agriculture, mining, and architecture
- ◆ In 2016, we ventured into semiconductor production and project manufacturing. We have cooperated with numerous government and private entities, such as CSC, CPC, LCY, and ITRI.
- ◆ Real Tern has expanded into the cooling systems for 5G servers and the cooling systems for electric vehicle batteries and motors after 2021. This includes the supply of cooling systems for cold storage and equipment for utilizing heat recovery. This has laid the foundation for the three major pillars and six major directions of Real Tern.



Real Tern Industrial Co. Ltd.

REAL TERN



2012

Real Tern is founded



2013

Air Compressor Heat Exchanger



2014

Engineering Car



2015

Heat Exchanger for agriculture, mineral product, architecture, generator



2016

OEM Taiwan Largest chiller Heat Exchanger



2019

Supplier of CSC, Sinopec, FPC



2018

Certified and applied by numerous semi-conductor manufacturers



2017

Customize Coolant design and system integrity service



2020

ITRI assigned air cooler manufacturer (Green energy, mechanics, vehicle)

2021

5G server cooling, E-vehicle battery and motor cooling, cold chain supply, waste heat recovery



2022

Heat Exchange Solutions New Energy Applications Custom Projecting & Service



Real Tern Industrial Co. Ltd.

Business Partner



Domestic



Project Partner



International



International Certificate



ISO9001:2015

Safety

Identification



Product Overview

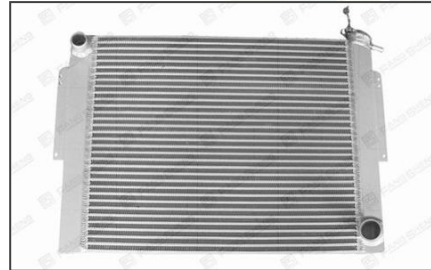


Product



Air Cooler

◆ Intercooler



◆ Charge Air Cooler



◆ Heat Recovery System

Product



Oil Cooler

- ◆ Mechanical, Hydraulic System
- ◆ European, American Radiator
- ◆ Engineering car, agricultural machine, mineral machine, architecture, generator, air compressor



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Product

Water Cooler

- ◆ Applications:
 1. Server
 2. CPU
 3. Chip
 4. Distribution box
 5. Radiator (Vehicle)



Product



Condenser

◆ Application:

1. Compressor type water cooler
2. Compressor type oil cooler
3. Distribution box
4. Radiator (Vehicle)

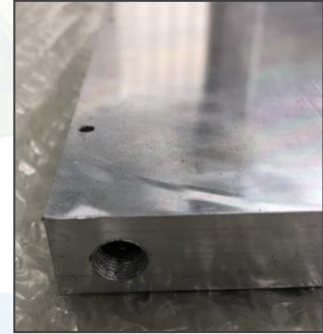
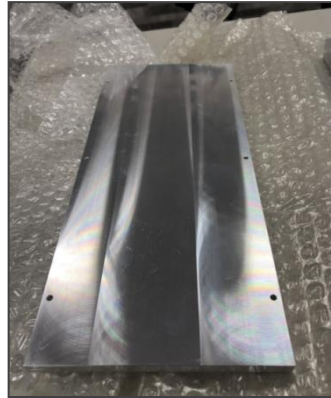


Product

Cold Plate

◆ Application:

1. CPU
2. Chip
3. Welding equipment
4. Contact heat exchanger



Product



Cooler System

◆ Application:

1. Chiller
2. Independent Circulation System



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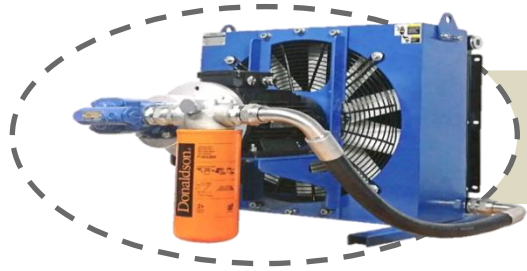
Product



Independent Circulation System

- **RTO** : Oil Cooler Independent Circulation System
 - RTO-A : Without oil tank
 - RTO-B : With oil tank
- **RTW** : Oil Cooler Independent Circulation System
 - RTW-A : Without radiator/water tank
 - RTW-B : With radiator/water tank

OEM/ODM



◆ Type A : W/o water tank or oil tank



◆ Type B : W/ water tank or oil tank

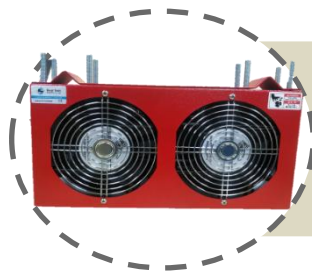


OEM/ODM



Custom Product

- ◆ OEM,ODM on customer's request
- ◆ Special procurement/project



- ◆ Different way of installation
- ◆ Sheet metal coloring



- ◆ Filter

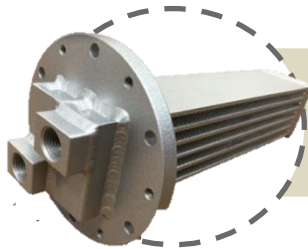


- ◆ Various Thread size

OEM/ODM



◆ Higher criteria for heat dissipation



◆ Applications of heat exchanger Among different medium

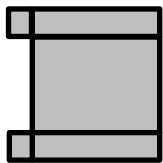


◆ Applications of composite heat exchanger

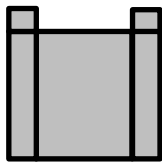
OEM/ODM



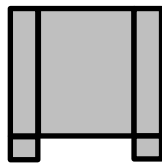
Single-cycle Circuit



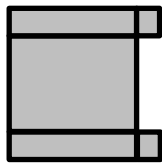
Left



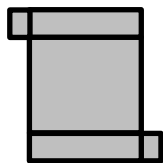
Standard



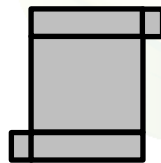
Inverted



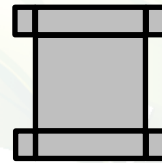
Right



Z type

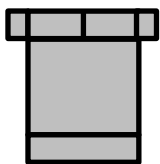


Reverse
Z

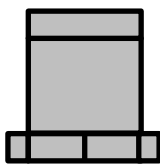


Multi-
entrance

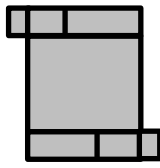
Multi-cycle Circuit



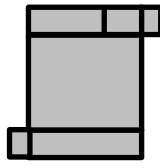
U type



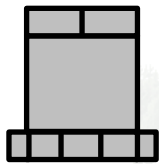
Reverse
U



|||



|||

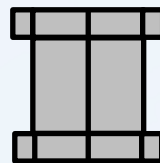


M type



W type

Composite Cycle Circuit



Dual-
entrance



Multi-
entrance

OEM/ODM



Waste Heat Recovery

- ◆ Lithium battery,
NMP recovery of coating machine,
Food manufacturing machine



Quality Control

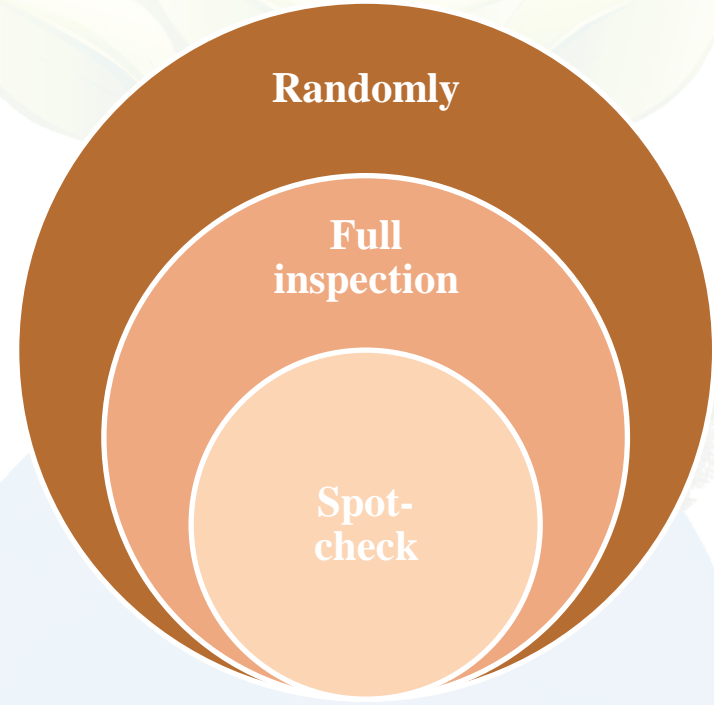


Raw Material
Inspection

Processing
Inspection

Product
Inspection

Stick to quality of
every single unit



Quality Check

Raw Material Inspection

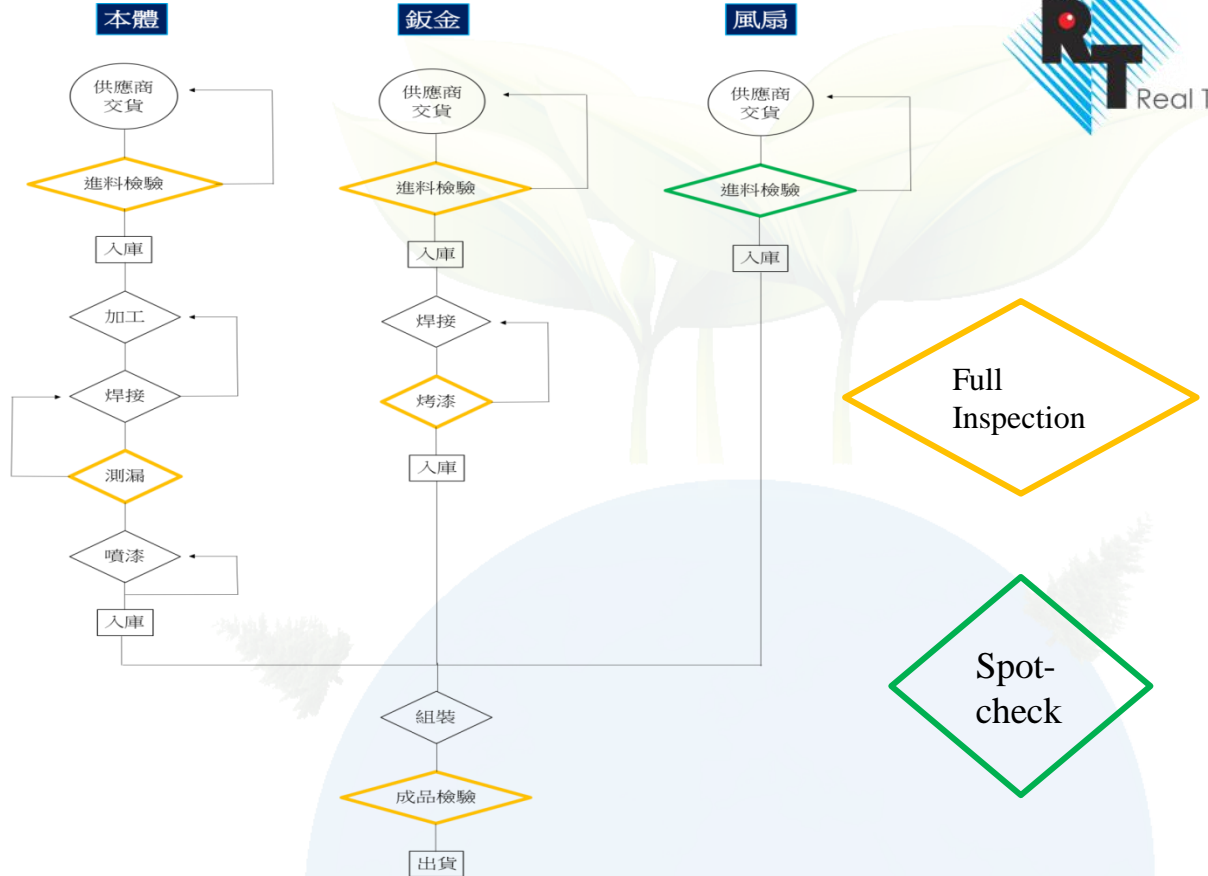
1. Size (position, pitch)
2. Exterior (as per drawing)
3. Power test

Processing Inspection

1. 25bar airtight test
2. Size, position
3. Painted face, color

Product Inspection

1. Metal assemble tightness
2. Power test
3. Packing, serial number confirmation





設備名稱	廠牌	年分	數量
機械手臂自動焊接機	國際牌Panasonic	2018	1
氬焊機500型	國際牌Panasonic	2015	1
氬焊機300型	國際牌Panasonic	2016	6
CO ₂ 焊接機	國際牌Panasonic	2020	3
CO ₂ 焊接機	國際牌Panasonic	2018	3
CO ₂ 焊接機	國際牌Panasonic	2016	2
CO ₂ 焊接機	國際牌Panasonic	2016	2
焊道處理機	煜陽	2022	1
研磨機	煜陽	2015	3
折床	YH	2022	1
雷射切割機	YH	2022	1
立式帶鋸機	慶祥	2018	2
立式帶鋸機	慶祥	2016	2
鑽孔攻牙機	全祥	2016	2
鑽孔攻牙機	全祥	2014	3
氣動鑽孔攻牙機	全祥	2016	1
真空焊接爐	日本製	2018	1
冷卻器組立機	台製	2013	2
冷卻器組立機	台製	2018	2
鱗片成型機輪型	台製	2013	2
鱗片成型機連續式	台製	2019	1
滾圓機3M	台製	2013	1
滾圓機1M	台製	2015	1
空壓機100HP	復盛	2015	1
空壓機20HP	神鋼KOBELCO	2012	1
空壓機10HP	復盛	2018	1
氣密測漏機	台製	2021	1
氣密測漏機	台製	2016	1
噪音及風量計	TECPEL	2016	1
溫濕度計	台製	2012	2

以上不包含量測工具、包裝設備、堆高機及其他移動車輛設備



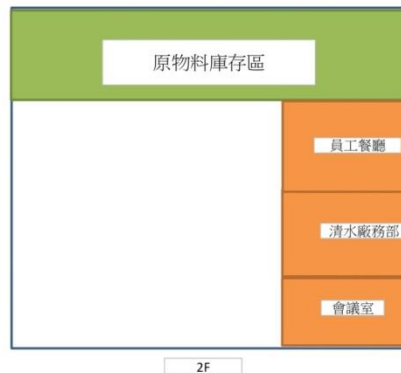
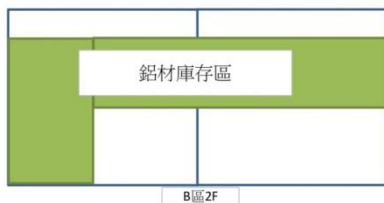
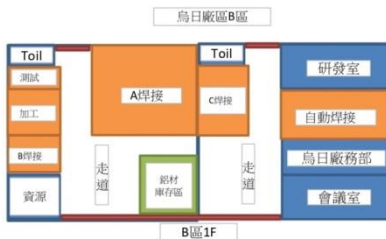
Facility Layout



瑞騰工業股份有限公司
廠區示意圖

2022.01.01

總計面積：3809M²(1152坪)
鳥日廠區：1164M²(352坪)
清水廠區：2645M²(800坪)





Welding furnace



Assembly



Fixture zone





Stamping machine



Assembly workstation





Bending rolls



Bending machine



Laser cutting



panorama



什麼是ESG?

E

環境保護

- 氣候變遷
- 汙染處理
- 永續環境
- 能源效率
- 碳排放量

S

社會責任

- 員工福利
- 社區計畫
- 勞工權利
- 資訊安全
- 人權多樣

G

公司治理

- 資訊透明
- 股東權利
- 職業道德
- 薪酬制度
- 董事制度

投資在ESG良好的企業

投資人

ESG
企業

不注重ESG的企業因籌資困難，
遭市場淘汰，或轉型為ESG企業

地球

企業發起或資助ESG主題專案，
改善地球環境

ESG
投資

Go beyond better and
strive to the best

**Real Tern
Industry**

History

**Product
Overview**

**Quality
Control**



Since 2012.