# Heat Exchangers for Dryer Manufacturers





# Our customers' dryers are integral to the manufacture of products for everyday life...



Extraction of plant oils



Curing of building materials



Drying of carpets and tiles



Making of paper, films and foils



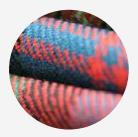
Drying of sand and gravels



Baking of foods and snacks



Production of aluminium cans



Fabrication of clothes and textiles



Malting of grains

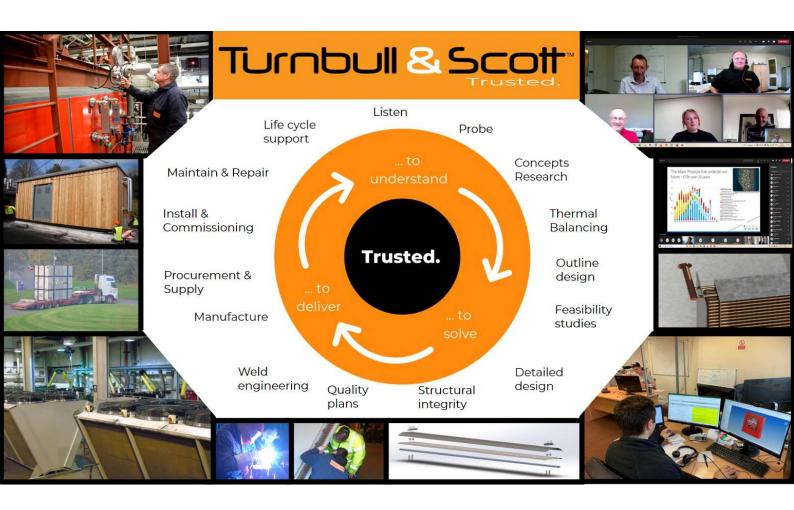


Manufacture of pharmaceuticals

## **Our Promise**

Our customers **trust** us to **understand**, **solve and deliver** the solution to their comfort or process heating, drying, cooling and energy saving challenges and opportunities.

Trusted.



to Understand	to Solve	to Deliver
<ul> <li>Partnership approach to building long standing relationships</li> <li>Initial enquiry and discovery calls - in person or MS Teams</li> <li>Iterative design process from heat balance to detailed design</li> <li>Site Surveys</li> </ul>	<ul> <li>Time-tested design philosophies</li> <li>Proprietary research backed software 'S-Calc'</li> <li>Dedicated design centre</li> <li>AutoCAD Inventor - 3D modelling &amp; manufacturing drawings</li> <li>Wide range of heat transfer media - steam, water, thermal oils, exhaust gases &amp; wide range of liquid,</li> </ul>	<ul> <li>60,000 sq. ft Manufacturing facility</li> <li>5t lifting capability</li> <li>ISO 9000, ISO 14000 &amp; ISO 45001</li> <li>Weld procedures to BS EN ISO 15614</li> <li>Welders to BS EN ISO 9606</li> </ul>

gaseous & vaporous

chemicals

# **Turnbull & Scott**

The Trusted Heat Exchanger Design & Manufacturing Partner



Our customers have built up trust in us to custom design and manufacture robust and highly reliable heating and cooling coils over many decades.

We specialise in extended surface, finned tube heat exchangers – spiralfin, plate-fin and plain tube crossflow type heat exchangers. These are used across the broadest range of industrial heating, drying, dry cooling and heat recovery applications.

# **Custom Design Capabilities**

- Time-tested design philosophies
- Proprietary research backed software S-Calc
- Wide range of heat transfer media including steam, water, thermal oils, exhaust gases & wide range of liquid, gaseous & vaporous chemicals
- Broad range of geometries for finned tube & bare tube crossflow type heat exchangers



#### » Materials

- Stainless steels
- Carbon Steels
- Copper
- Aluminium

#### >> Heat Transfer Media

- Steam
- HPHW/LPHW/water-glycol
- Thermal oils
- Air, nitrogen & other gases
   & liquids

#### » Heat Transfer Flows

- Gas/Air to Liquid
- Liquid to Gas/Air
- Gas/Air to Gas/Air

### » Coil Operating Paramaters

- Temperatures to 560°C
- Steam pressure to 40 bar
- HPHW pressure to 75 bar
- LPHW pressure to 15 bar

#### Surface Treatments

- Hot dip galvanised
- Polyurethane coated
- Zinc plated

### » Qualifications & Certifications

- ISO 9000, ISO 14000 & ISO 45001
- Weld procedures to BS EN ISO 15614
- Welders to BS EN ISO 9606

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#### www.turnbull-scott.co.uk



Robust, Reliable, Heavy Duty Coils for OEMs & End Users

Our robust heat exchanger coils, or batteries, are renowned for their thermal performance, reliability and longevity. They can be found in the most challenging environments.

We supply end-user clients for both new installation and refurbishment projects and also OEM clients who integrate our high-grade coils into their heating, drying, cooling & heat recovery equipment.

Also known as 'coils' our steam, water and thermal oil heat exchanger coils are used across a broad range of industrial heating, drying, cooling and heat recovery applications.



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## **Our Industries**

- Nuclear
- Chemicals
- Oil & Gas
- Power generation
- Low carbon energy CHP plants

- Paper & Pulp
- Timber
- Food processing
- Brewing & distilling
- Pharmaceutical
- Agriculture
- Textiles

# **Customer Applications**

### » Process Heating & Drying

- Air pre-heating
- Liquid pre-heating
- Combustion air preheating
- Boiler feed water preheating
- Process drying
- OEM dryer equipment

#### » Waste Heat Recovery

- Process air/gas streams
- Process waste water/fluids
- Process steam condensate
- Cooling water from high temp. applications
- Steam boiler exhaust
- Gas turbine exhaust
- Reciprocating gas engines

### » Plant, Equipment & Process Liquid Cooling

- Process liquid cooling
- Process steam condensing
- Charge air cooling
- Generator cooling
- ORC cooling loops
- Thermal oil cooling
- Gas Engine cooling
- OEM cooling equipment

### » HVAC

- Plant controlled
   ventilation systems
- OEM Air Handling Units
- Industrial space heating

The dryer industry is responding to the transition to a low carbon economy by increasing the use of steam, lphw and thermal oil heater coils in their dryer systems.

