

### TRANSMITTER TYPE WAVEGEN 80

The latest design of transmitter from Thermo Wave with continuous 75 or 100 kW power output.

Built within a stainless-steel grade 1.4301 (AISI 304) cabinet rated to IP 66 (NEMA 4x) totally protected from dust and water ingress.

Allen-Bradley Ethernet or Remote PLC hardware and software.

PLC controlled, electronically driven filament transformer and electromagnet design provides state-of-the-art Magnetron Power Control

Recirculating primary cooling system for magnetron stabilization and stainless steel heat exchanger for secondary cooling of the system.

New magnetron fully tested and certified to operate up to 80KW. The magnetron is housed in an EMI enclosure that contains any RF Leakage to meet with code requirements

#### Electrical Requirements:

- 400 Volts, 3 Ph. + PE
- 150 Ampere Circuit Breaker per transmitter
- 24 volt
- Output 896 or 915 MHz 110 kVA per transmitter
- 12 Pulse HV transformer, internal
- Cooling Requirement: 20 KW per transmitter
- Ambient Environment: 20-100° F
- Protection IP 66 (NEMA 4x)

All Subject to continuous improvement

### POLARISED FEEDS

Thermo Wave Technology have enhanced the Polarized Feed concept to develop the "Circular Polarized Synthesizer Feeds".

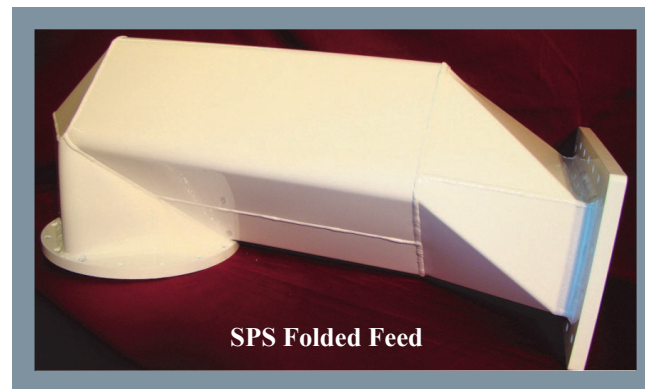
TWT's "Synthesized Polar Feed System" (SPS) provides a very uniform circular Microwave output, for improved uniformity.

Polarized Feeds have no moving parts, providing the user with little to no maintenance.

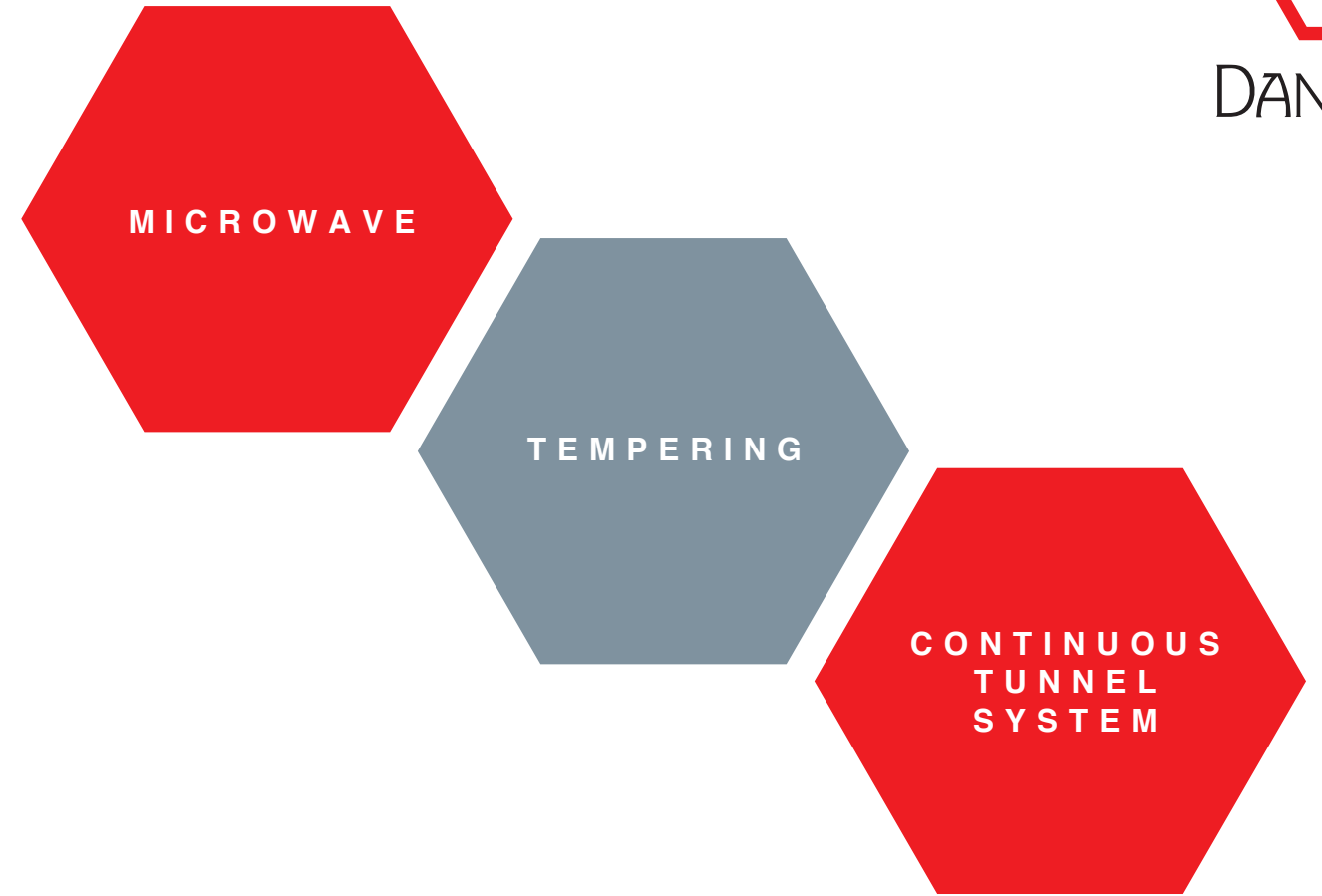
TWT has developed two options to allow maximum flexibility in applying this technology to our customers current or future requirements.



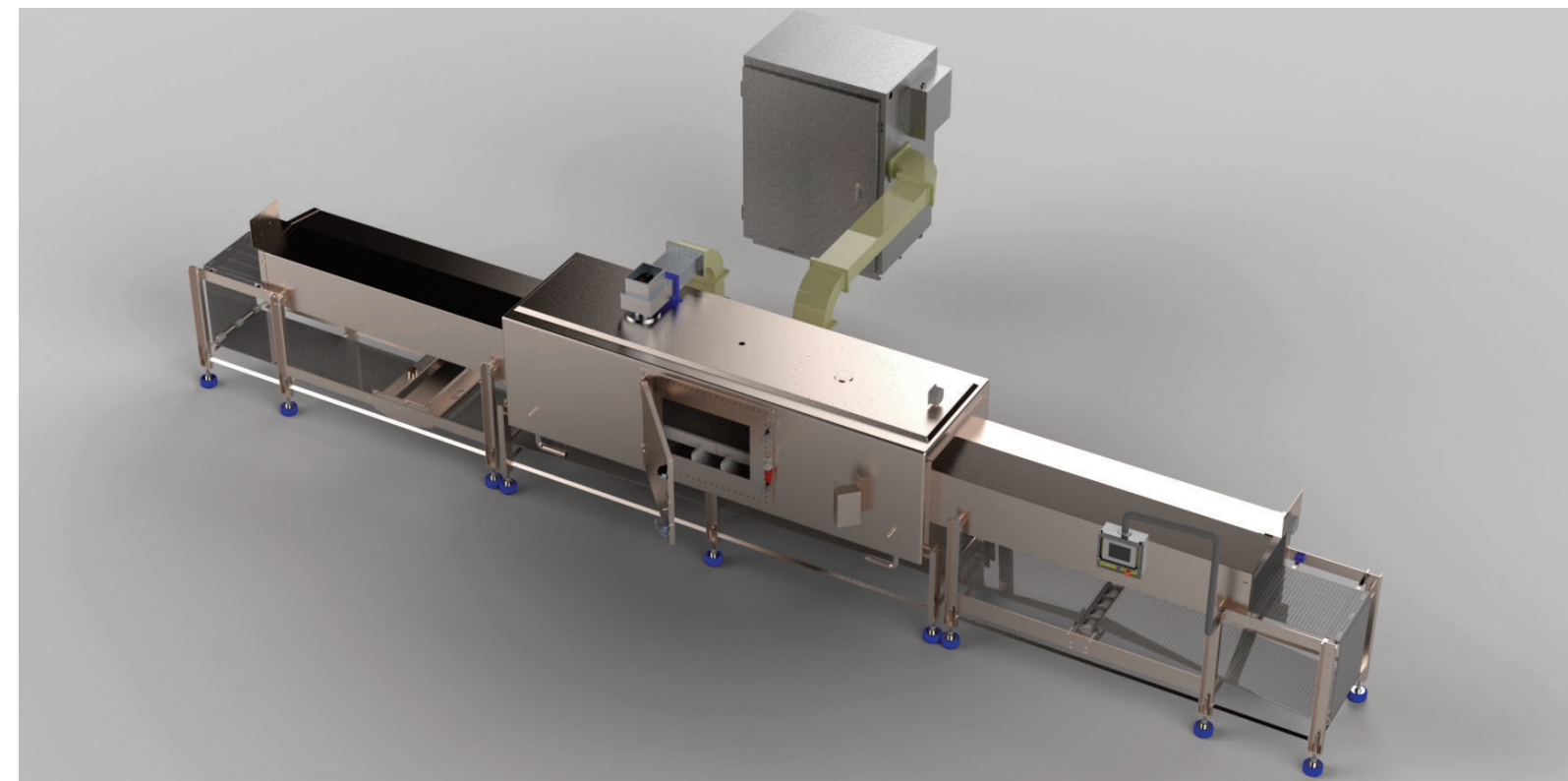
SPS Straight Feed



SPS Folded Feed



## INDUSTRIAL MICROWAVE TECHNOLOGY



**JUST IN TIME PRODUCTION**

**NO DRIP LOSSES**

**SMALL FOOTPRINT**

DanTech industrial microwave systems can efficiently heat and temper many different products in a matter of minutes.

**Typical uses include:**

- Tempering frozen meat, fish, fruit blocks and vegetables from -20° C to -3° C.
- Pre-heating liquids.
- Heating butter, caramel and other ingredients.
- Tempering, rubber, plastics, composites wood for further processing.

**Advantages:**

- Meat, fish, fruit, vegetables: no drip loss
- Liquids can be rapidly heated for pasteurisation
- Confectionery, ready for pumping, blending etc.
- Rubber, plastics, composites perfect temperatures for moulding.

**Benefits of microwave technology:**

- Precise temperature control from simple operator controlled interface.
- Production scheduling can be elevated to "Just in Time".
- No change to organoleptic properties of food products.
- Reduces the risk of bacteria growth.
- Small footprint, frees up space for production.
- Improves production flow.

**Know-How**

DanTech has designed, supplied and installed many microwave systems in the UK, Ireland, Europe and the Middle East. With more than 30 years expertise in microwave technology, DanTech has the skill to design, develop, deliver and support solutions that maximise productivity.

**OEM**

As an OEM we are able to custom design and build oven applicators to suit a client's needs whilst complying with the latest CENELEC and IEC legislation on industrial microwave installations.

**Safety**

DanTech was the first to introduce on all systems, automatic CO<sub>2</sub> fire suppression systems to protect operators and buildings in case of fire caused by overheating. All systems delivered by Dantech meet the IEC 60519-6, EN & BS safety standards.

**SERVICE & SUPPORT**

**CUSTOM SYSTEMS**

**SAFETY THE PRIORITY**

**TECHNICAL SPECIFICATIONS**

**TEMPERING TUNNEL:**

**SERIES: MIT 36**

Construction & Design: The MIT 36 tempering tunnel is constructed in stainless steel grade 1.4301/AISI 304. Built to comply with CE, AMI and following the EHEDG (European Hygiene Engineering and Design Group) principles for hygiene and best practice.

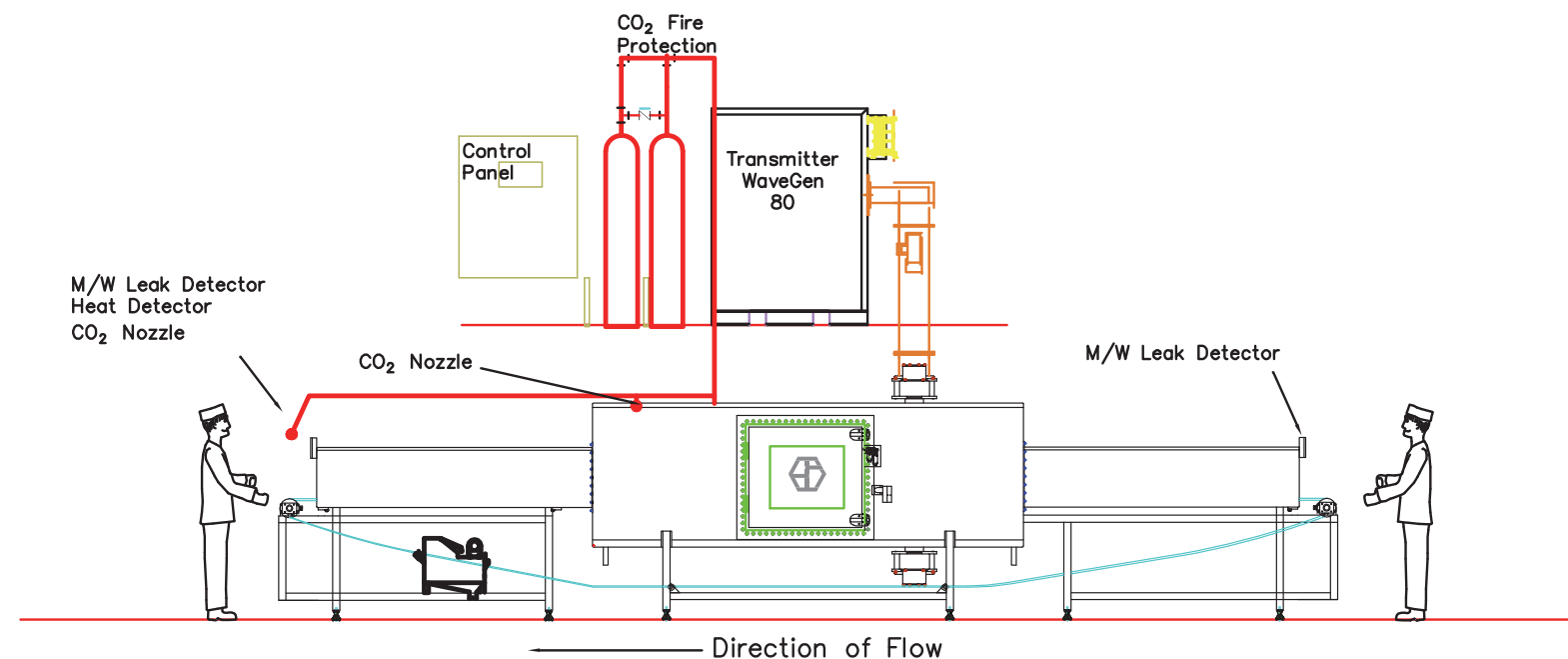
The tunnel is made in 3 sections, easy site assembly:

- Overall length = 8830 mm
- Height Overall = 2154 mm

Both attenuation tunnels have jacketed tunnel liners with 3 stainless steel reflection flaps to prevent microwave leakage.

For further protection, the tunnels have calibrated RF leak detection monitoring. Standard opening: W x H = 610 x 250 mm.

Polypropylene modular transport conveyor belt.



**Control:**

The Allen-Bradley control panel, PLC and HMI controls are housed within an IP 66 (NEMA 4x) enclosure controls the total process, power, dwell and conveyor speed.

**Safety:**

Operators are protected by the risk of microwave exposure by electro and mechanical interlocks. Compliance with IEC regulation 60519-6 for fire risk within the oven cavity and exit.

**Modular:**

The tunnel is modular construction and therefore can be extended in 3650 mm sections connected by a septum.

**Upgrades:**

Additional transmitters can be added to the tunnel up to 300 kW per module in 75 Kw increments.