

MICROTEK UV[®]

PURETOUCH[™]

UV TUNNEL

CONTINUOUS UV-C SURFACE DISINFECTION

For food, beverage, packaging
and production surfaces



CHEMICAL-FREE

No chemical residues
and no rinsing.



DRY PROCESS

Adds no water
or moisture.



NON-THERMAL

No heat treatment
of the product.



INLINE SOLUTION

Continuous treatment
within the production line.

CLEANER SURFACES. SAFER PRODUCTS. BETTER RESULTS.

Surface Contamination Doesn't Stop at the Production Line

Products, primary packaging and production components can acquire microorganisms during handling, conveying, filling and packing. For processors, the challenge is to reduce contamination at critical points without adding chemicals, moisture or unnecessary heat.



Poultry & Meat



Bottles & Containers



Fresh Produce

THE CHALLENGE

Bacteria, yeasts, moulds and other microorganisms can remain on exposed surfaces and can be transferred between products, packaging and conveyor components.

THE UV-C RESPONSE

PureTouch™ UV Tunnel delivers controlled germicidal UV-C exposure inside an enclosed treatment zone as products move continuously through the production line.



Continuous Disinfection — Built Into Your Process

UV-C light at germicidal wavelengths inactivates microorganisms by damaging their genetic material and preventing replication. The process is dry, non-thermal and leaves no chemical residue. Lamp arrangement, exposure time and conveyor configuration are selected around the application.

PRODUCT IN

**CONTROLLED UV-C
EXPOSURE**

SURFACE TREATMENT

PRODUCT OUT

Key Advantages

CHEMICAL-FREE

No chemical residues and no post-treatment rinsing stage.

NON-THERMAL

Avoids a conventional heat-treatment step for the surface.

TARGETED

UV-C is directed onto exposed product or packaging surfaces.

DRY PROCESS

Adds no water or moisture to the treated surface.

INLINE

Continuous treatment can be integrated with production flow.

CONFIGURABLE

Tunnel size, lamp layout and conveyor arrangement can be engineered to suit the line.

Performance note: Achievable microbial reduction depends on organism, UV dose, exposure time, surface geometry, cleanliness and shadowing. Applications should be validated against the required process objective.



Bakery — Bread, Rolls & Buns

PureTouch™ can be applied to exposed bakery surfaces — bread, rolls, buns, cakes, tortillas and other suitable products — as they move along the production line, providing a defined UV-C control point without adding moisture or applying a conventional heat-treatment step.



One Platform. Multiple Surface Disinfection Applications.

PureTouch™ UV Tunnel can be configured for a wide range of food, beverage and packaging operations. The best results are achieved where UV-C has direct line-of-sight to the surface being treated.



UV Tunnel System

MEAT PROCESSING

Exposed meat surfaces, cuts, portions and suitable processed products before packing.

EGGS

Shell surface treatment on roller or purpose-designed conveyor systems.

FRUIT & VEGETABLES

Whole produce and suitable cut-product applications where exposed surfaces can receive UV-C.

BOTTLES & JARS

External surface treatment before filling, labelling or entry to higher-hygiene zones.

LIDS, CAPS & CLOSURES

Treatment of lids, caps, closures and components before they contact filled product.

CONVEYOR COMPONENTS

Continuous exposure can also help control microbial build-up on accessible belts, rollers and guides.

POULTRY

Suitable poultry surfaces and products at defined hygiene points before packaging.

BAKERY

Bread, rolls, buns, cakes, tortillas and other suitable exposed bakery surfaces.

SEAFOOD

Fish and seafood surfaces before downstream packing or handling.

CANS & CONTAINERS

Metal, plastic and other suitable containers before filling or packing.

PACKAGING MATERIALS

Trays, tubs, cups, films, foils, cartons and other exposed packaging surfaces.

PRODUCTION COMPONENTS

Suitable small parts, utensils or process components where controlled surface exposure can be achieved.

Where Can It Fit?

- Before primary packaging — reduce surface microbial load before the product is enclosed.
- Before filling — treat containers, lids, caps or closures entering the filling area.
- Between hygiene zones — provide a dry treatment step as products or packaging move into controlled areas.
- After handling or cooling — introduce a defined UV-C control point before the next process stage.
- On dedicated conveyor lines — configure the tunnel as a stand-alone or integrated treatment module.

Designed Around the Product — Not the Other Way Around

UV surface treatment is application-specific. MicroTekUV evaluates the product, line and microbial objective so that the tunnel can be configured around the real production requirement.

PRODUCT & SURFACE

Dimensions, shape, material, surface texture and whether the product can rotate or reposition.

MICROBIAL OBJECTIVE

Target organism(s), starting load and required validated reduction.

CONVEYOR DESIGN

Belt, mesh, roller or custom transport arrangement to maximise exposed surface area.

PRODUCTION RATE

Conveyor speed, throughput, spacing and available treatment time.

UV EXPOSURE

Required dose, lamp arrangement, distance, line-of-sight and potential shadowing.

INTEGRATION

Available footprint, line height, controls, guarding, access and upstream/downstream equipment.

Engineering Features Can Include

- Food-production compatible stainless-steel construction.
- Enclosed UV-C treatment chamber with operator shielding and safety interlocks.
- Multiple lamp positions for improved surface coverage.
- Roller, mesh-belt or application-specific conveyor arrangements.
- Adjustable conveyor speed to control residence time and UV exposure.
- Easy-access panels for lamp inspection, cleaning and maintenance.
- Integration with existing conveyors, fillers, packers and production controls.
- Custom tunnel dimensions and treatment zones for product-specific applications.

TELL US ABOUT YOUR APPLICATION

What are you treating? • Product dimensions? • Line speed / throughput? • Target microorganism? • Required log reduction? • Existing conveyor dimensions?

MicroTekUV can then assess the treatment concept and recommend an appropriate PureTouch™ UV Tunnel configuration.

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