CANNABIS

RFX

Microbial Control Step

The RFX is the result of Ziel's operational experience successfully processing hundreds of tons of customer flower using Radio Frequency technology. It consistently delivers a greater than 99% pass rate and offers the highest volume throughput in the industry with the capacity to process 160 lb of cannabis in an eight-hour shift. All at the lowest processing cost per pound.

The Ziel RFX is suitable for organic and GMP-certified operations.

The Ziel RFX was specifically developed for cultivators to effectively control a broad spectrum of microbial pathogens in cannabis without the use of chemicals, gas, or ionizing radiation (X-ray). This allows the RFX to confidently be incorporated into organic operation SOPs. While other technologies alter the molecular structure of the cannabis flower, Ziel's Radio Frequency technology is a targeted, yet gentle thermal process the preserves the enzymatic properties that make each cannabis strain unique.

Microbial Control

The ideal growing environment for cannabis and hemp is also the ideal environment for mold and other microbial pathogens to flourish. Cultivators with a microbial control step in their SOPs have higher revenues, eliminate the risk of recalls, and protect their brands.

Radio Frequency (RF)

Radio Frequency uses longer, lower energy wavelengths to penetrate the cannabis flower. These wavelengths create an oscillating electromagnetic field around and within the flower, causing its moisture molecules to vibrate in unison with it. This rapid oscillation creates just enough thermal heat to kill mold and pathogens without harming the flower's molecular structure.

Other Technologies – gamma, X-ray, and e-beam – use high energy wavelengths that kill mold and pathogen DNA as well as alter the flower's molecular structure. This molecular change essentially nullifies the natural integrity of the flower, eliminating the enzymatic properties of the plant that are responsible for its unique characteristics.

Benefits:

- > 99% pass rate; up to 3 log microbial reduction
- Treats dry trimmed / milled flower (8-12% moisture)
- Highest volume throughput in the industry
- Treats 1.3 - 2.5 kg / 2.8 - 5.5 lb per cycle
- 14-min average cycle time
- Proven to reduce microbial pathogens, such as TYMC, TAMC, BTGN, coliforms, aspergillus, e.coli, and salmonella
- No X-ray, gas, or chemicals
- Organic process compliant
- Preserves bag appeal
- No labeling requirements
- Lowest processing cost
- 24/7 equipment uptime

Easy To Operate
The HMI user interface on the RFX consists of easy-to-use menus of preprogrammed processing formulas. The system monitors the progress and temperature of each treatment cycle to provide real-time user feedback. Data logs are generated automatically to assist in quality control monitoring and reporting. Optional remote monitoring and software upgrades are available via a standard internet connection.

Since the RFX requires no additional supplies other than electricity and processing bags, there are no chemicals or waste products for disposal. The system has a low operating cost, consumes energy efficiently, is safe to operate, and is environmentally friendly.

Every RFX comes with a real-time data analytics Dashboard. The Dashboard reconciles each microbial treatment cycle run against all the data contained in your COAs. The Dashboard offers infinite drill down analysis, providing insights on product quality, operational efficiency, and compliance. And with our advance data filters, your sales team can efficiently match your products to consumer tastes.

Installation
Ziel provides a turnkey solution for your operation. Our in-house Installation and Commissioning teams coordinate directly with your facilities and QA teams to optimize treatment recipes and train your operators. Requiring just a 240 VAC single-phase electrical connection, Ziel RFX necessitates no additional siting or permitting requirements.

TECHNICAL SPECIFICATIONS

Product Applications	Cannabis & Hemp: Dried Trimmed/ Milled Flower (8-12% Moisture)
Processing Capacity	Treats 1.3 - 2.5 kg / batch (2.8 - 5.5 lb / batch)
Processing Time	14-min average cycle time
RF Power	4 kW
Electrical Requirements	240 VAC single-phase, 50/60 Hz, 70 Amps
Codes & Standards	CE mark; UL and CSA compliant FCC compliant
System Dimensions	1490 mm (L) x 1360 mm (W) x 2633 mm (H) 4'-11" (L) x 4'-6" (W) x 8'-8" (H)
Gross Weight	1,250 kg / 2,755 lbs
Material Construction	Food grade stainless steel
Operating Environment	Indoor location, well ventilated room 15° C to 40° C (59° F to 104° F) Relative humidity 10% to 90% non-condensing environment
Installation	1 Day
Noise	<60 dB
Life Expectancy	20+ year major structural equipment
Warranty	1 year limited parts & labor
Manufactured	Italy

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