

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 that preserves the enzymatic properties which 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 than ionizing radiation 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. This rapid oscillation creates just enough thermal heat to kill mold and pathogens without harming the flower's molecular structure.

Ionizing Radiation – 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 flower and milled flower
- 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
- EU GMP Validated + Turnover Package
- No labeling requirements
- Lowest processing cost
- 24/7 uptime

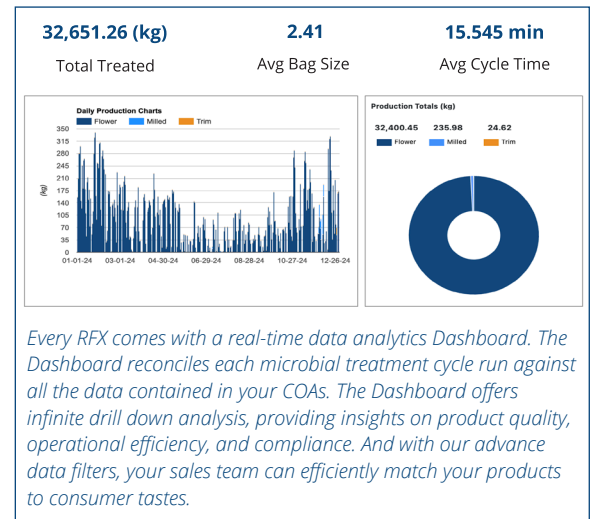
Easy To Operate

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, and there are no chemicals. The system has a low operating cost, consumes energy efficiently, and is safe to operate.

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 Flower, Milled & Trim Material
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 1300 mm (W) x 2633 mm (H) 4'10.7" (L) x 4'3.2" (W) x 8'7.7" (H)
Gross Weight	1,080 kg / 2,381 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
Thermal Output	~ 12,000 BTU / hr
Manufactured	Italy