

Flux®
SRL

INNOVATION NOT IMITATION

RADIO FREQUENCY
TEMPERING AND DEFROSTING
EQUIPMENTS

***THERE IS NO
BETTER WAY TO DEFROST***



1. ABOUT OUR COMPANY



FLUX SRL IS AN ITALIAN OEM MANUFACTURING COMPANY SPECIALIZING IN RADIO FREQUENCY (RF) EQUIPMENT FOR INDUSTRIAL APPLICATIONS. FOUNDED AND LED BY ENGINEER PATRIZIO GRANDO, CEO AND FOUNDER OF RF SYSTEMS SRL FROM 1990 TO 2019. MR. GRANDO RE-ENTERED THE BUSINESS IN 2023 TO CONTINUE HIS LEGACY OF INNOVATION AND WITH FLUX SRL HE CARRIES FORWARD HIS 40 YEARS OF EXPERTISE IN RF TECHNOLOGY.

OUR COMMITMENT IS "INNOVATION, NOT IMITATION," AS WE CONTINUALLY SEEK NEW APPLICATIONS IN EMERGING FIELDS. FLUX SRL FOCUSES ON DEVELOPING STATE-OF-THE-ART RF SOLUTIONS FOR INNOVATIVE MARKETS, WHERE COMPETITORS LACK THE NECESSARY EXPERIENCE AND DETAILED ENGINEERING EXPERTISE.

WE PROUDLY MANUFACTURE ALL OUR EQUIPMENT IN OUR FACTORY IN ROMANO D'EZZELINO, ITALY, USING COMPONENTS MADE ENTIRELY WITHIN THE EUROPEAN UNION AND CERTIFIED BY CE MANUFACTURES



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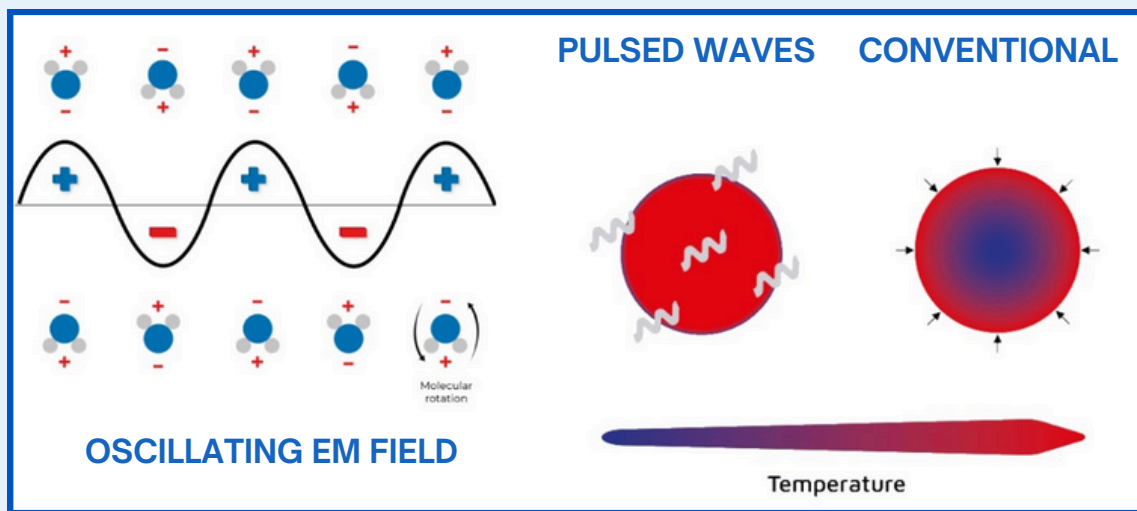
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2. ABOUT RADIOFREQUENCY

I. HOW DOES IT WORKS?

PULSED WAVES TECHNOLOGY IS BASED ON HIGH FREQUENCY ELECTROMAGNETIC FIELDS, TO HEAT THE WATER WITHIN THE PRODUCT. WHEN EXPOSED TO PULSED WAVES, WATER MOLECULES UNDERGO VIBRATION AND ROTATION AT A RATE OF MILLION TIMES PER SECOND, GENERATING HEAT AND RAISING THE WATER TEMPERATURE TO THE POINT OF EVAPORATION.



THE HEAT TRANSFER PROCESS IS INTRINSIC AND IMMEDIATE THROUGHOUT THE ENTIRE PRODUCT MASS, MAKING THE ENTIRE PROCESS SIGNIFICANTLY FASTER THAN CONVENTIONAL METHODS.

THIS TECHNOLOGY REVOLUTIONIZES THE DEFROSTING PROCESS BY ENSURING RAPID AND CONSISTENT RESULTS, SIGNIFICANTLY REDUCING PRODUCT WASTE, AND MAINTAINING QUALITY. BUSINESSES CAN OPTIMIZE THEIR PROCESSES WITH RF'S PRECISE CONTROL, LEADING TO BETTER EFFICIENCY, HIGHER PRODUCT YIELDS, AND OVERALL COST SAVINGS

II. WHAT ARE THE BENEFITS?

RADIO FREQUENCY (RF) TECHNOLOGY OFFERS KEY ADVANTAGES IN REDUCING DRIP LOSSES AND PREVENTING PRODUCT DETERIORATION CAUSED BY BACTERIAL GROWTH. ITS SPEED, UNIFORMITY, AND PRECISION MAKE IT A HIGHLY FLEXIBLE SOLUTION FOR PRODUCTION SCHEDULING, IDEAL FOR TEMPERING, SOFTENING, AND DEFROSTING PROCESSES.



FASTER DEFROSTING

RADIO FREQUENCY (RF) TECHNOLOGY DRASTICALLY REDUCES DEFROSTING TIMES, EVEN FOR LARGE BLOCKS, ALLOWING FOR QUICK AND EFFICIENT THAWING.

PRODUCTS CAN BE DEFROSTED DIRECTLY INSIDE THEIR PACKAGING, PRESERVING BOTH CONVENIENCE AND PACKAGING INTEGRITY, MAKING IT IDEAL FOR STREAMLINED STORAGE AND DISTRIBUTION.



HIGHER YIELD, GREATER PROFITS

RF TECHNOLOGY ACHIEVES PRECISE TEMPERING WITHOUT DRIP LOSS, ELIMINATING UP TO 8% OF WEIGHT LOSSES COMMON IN CONVENTIONAL METHODS. THIS BOOST IN YIELD TRANSLATES INTO IMMEDIATE COST SAVINGS, REDUCING WASTE AND INCREASING PROFITS. BUSINESSES CAN SEE A RETURN ON INVESTMENT IN AS LITTLE AS 6 TO 12 MONTHS.

PRESERVED QUALITY

RF'S RAPID AND UNIFORM DEFROSTING PROCESS HELPS MAINTAIN PRODUCT QUALITY BY MINIMIZING EXPOSURE TO HARMFUL CONDITIONS LIKE TEMPERATURE FLUCTUATIONS AND MICROBES. THIS ENSURES THAT KEY CHARACTERISTICS—TASTE, TEXTURE, AROMA, COLOR, AND NUTRITIONAL VALUE—ARE FULLY PRESERVED, WHILE CONSISTENT HEAT DISTRIBUTION ELIMINATES ANY UNEVEN TREATMENT.



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3. DEFROSTING WITH RF

RADIO FREQUENCY (RF) TEMPERING AT 27.12 MHZ OFFERS A RAPID, UNIFORM, AND ENERGY-EFFICIENT SOLUTION FOR DEFROSTING A WIDE ARRAY OF FOOD PRODUCTS.

BY GENERATING HEAT VOLUMETRICALLY, RF TECHNOLOGY ENSURES MINIMAL MOISTURE LOSS, PRESERVES NUTRITIONAL INTEGRITY, AND ENHANCES PRODUCT QUALITY. ITS ADAPTABILITY MAKES IT IDEAL FOR VARIOUS FOOD PROCESSING APPLICATIONS, FROM MEAT AND SEAFOOD TO FRUITS, VEGETABLES, AND READY MEALS.

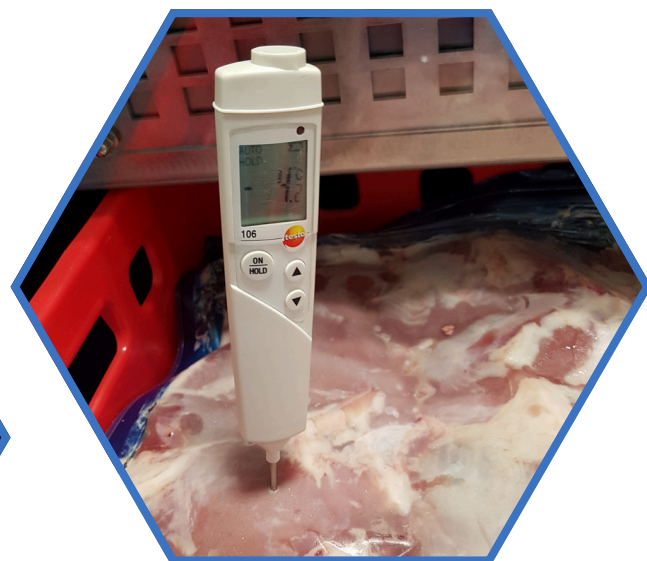
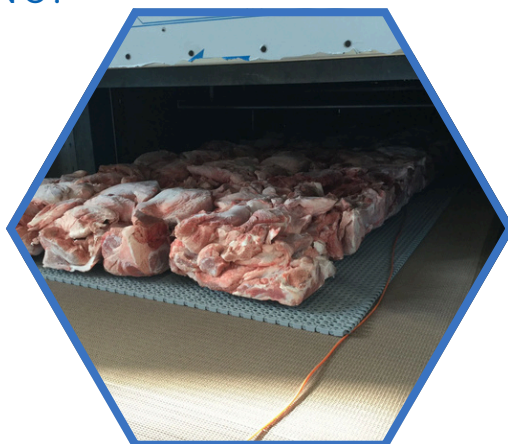
RF TEMPERING IS HIGHLY EFFECTIVE FOR ALL **MEAT** TYPES—BEEF, PORK, POULTRY, TURKEY, AND LAMB—REGARDLESS OF CUT SIZE OR COMPOSITION.

ENHANCED YIELD: MINIMIZES DRIP LOSS, RETAINING MOISTURE AND WEIGHT, LEADING TO HIGHER PROFITABILITY.

CONSISTENT QUALITY: UNIFORM TEMPERATURE DISTRIBUTION ENSURES OPTIMAL TEXTURE AND TASTE.

PROCESSING EFFICIENCY: REDUCES TEMPERING TIME SIGNIFICANTLY, FACILITATING SEAMLESS INTEGRATION INTO PRODUCTION LINES.

VERSATILITY: SUITABLE FOR VARIOUS PROCESSING STAGES, INCLUDING GRINDING, SLICING, MARINATING, AND DEBONING.



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BESIDES MEAT, RF TECHNOLOGY CAN PROVIDE FAST AND GENTLE TEMPERING ALSO FOR ALL TYPES OF **FISH** AND SEAFOOD, INCLUDING SHELLFISH AND MOLLUSKS TOO. IT HANDLES IQF PRODUCTS, BLOCKS, WHOLE FISH, FILLETS, AND PORTIONS—WHETHER PACKAGED OR UNPACKAGED—WHILE PRESERVING THEIR PHYSICAL, BIOLOGICAL, AND NUTRITIONAL PROPERTIES.

QUALITY PRESERVATION: MAINTAINS DELICATE TEXTURES AND NATURAL FLAVORS, CRUCIAL FOR PREMIUM SEAFOOD PRODUCTS.

UNIFORM TEMPERING: PREVENTS OVERCOOKING OF EDGES WHILE ENSURING THOROUGH DEFROSTING.

EXTENDED SHELF LIFE: REDUCES MICROBIAL GROWTH BY MINIMIZING TIME IN THE TEMPERATURE DANGER ZONE.

OPERATIONAL FLEXIBILITY: ACCOMMODATES VARIOUS PACKAGING FORMATS AND PRODUCT SIZES.

RF TECHNOLOGY OFFERS AN EFFECTIVE SOLUTION ALSO FOR DEFROSTING A WIDE RANGE OF **VEGETABLES, FRUITS, AND MUSHROOMS**, INCLUDING BUTTER, MARGARINE, AND READY MEALS. THIS METHOD SIGNIFICANTLY REDUCES DRIP LOSS DURING THAWING, PRESERVING THE TEXTURE, FLAVOR, AND FRESHNESS OF THE PRODUCTS.





6. OUR UNIT

HF POWER: 1-5 Kw

HF DEFROSTING CAPACITY: 100 kg /hr

TYPICAL TEMPERATURES: FROM -20° TO -2°

MAX DIMENSION OF PRODUCTS:
650x600x350 mm

Ideal for frozen food
block or fully loaded
creates.



FLXDFS5

BATCH UNIT - up to 100 kg/hr

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6. OUR UNIT

RF POWER: 30-85 Kw

RF DEFROSTING CAPACITY:
5000 kg /hr

TYPICAL TEMPERATURES:
FROM -20° TO -2°

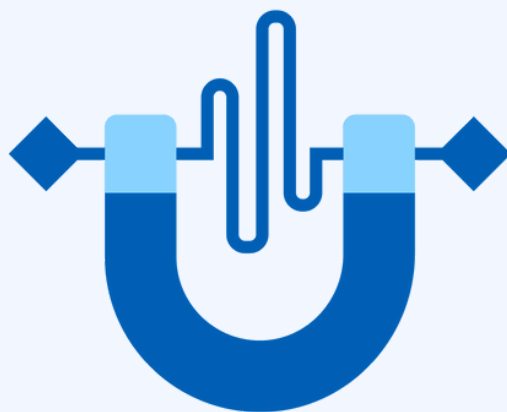


FLXDF85

CONTINUOUS LINE - up to 5000 kg/ hr



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