



Shaping Energy Waves



www.leanfa.com



LEANFA is a start-up that develops Hardware and Software hi-tech solutions based on high-frequency and high-power electronics.

Our specialty is to accurately shape electromagnetic fields: the right amount of energy at the right place and at the right moment is the solution to most problems in the ISM world.

LEANFA designs and builds Microwave and Radiofrequency Generators for different applications in the Industrial, Scientific and Medical (ISM) fields. Our synchronized arrays of solid-state generators, supervised by a distributed-intelligence control system, allow to implement accurate self-adaptive processes capable to forge optimized and long-lasting applications with minimum maintenance level.



MISSION

Being a technological reference partner for international manufacturing Companies operating in the Industrial, Scientific and Medical (ISM) fields providing them a solid competitive advantage in the global markets thanks to our future-proof custom solutions.



VISION

We teach our generators to be accurate instrumentalists of a great electromagnetic orchestra and to play the perfect music in every event.

INDUSTRIAL



The dream of food processing without chemicals

As Mikolaj Kopernik revolutionized the solar system concept, the same way LEANFA's generators are revolutionizing the world of industrial microwave treatment.

In particular, ovens for the food industry can be built, in batch or tunnel mode, with a technique that automatically minimizes the energy consumption and produces an accurate thermal profile on the product with precise temporal and spatial coordinates, in total safety for the operator and for the end customer.

The system allows, without the use of chemical additives, to achieve aseptic processes extending the food shelf-life in a totally BIO mode.

kopernicook®

THE SOLID-STATE COOKING REVOLUTION

PRODUCTS AND SERVICES

Leanfa designs and produces Modules and Systems for:

Sanitation of fresh fruit and vegetables soon after the harvest phase

Microbiological remediation of food commodities before storage

Pasteurization and sterilization of ready food

Sanitation and shelf-life extension of fourth-range food products

Food (derived from cereals, milk, meat) and spices production

SCIENTIFIC

S



Microwave Chemistry for a healthier life

Our microwave solid-state generators applied to chemistry reveal a world of accuracy, efficiency and sustainability so far unimaginable. By wisely shaping geometries and energy, the Kopernicook system becomes a valuable tool for chemistry giving life to:

- ✓ *synthesis of new drugs and diet integrators*
- ✓ *extraction of nutraceuticals from food products*
- ✓ *creation of new functional food*
- ✓ *control of polymerization*
- ✓ *synthesis of nanomaterials*
- ✓ *reactions in gaseous plasmas and smart selective catalysis*
- ✓ *minimization or elimination of solvents*

Extraction of nutraceuticals for the pharmaceutical industry, for functional food production and for cosmetics

Production of drugs and fine chemicals

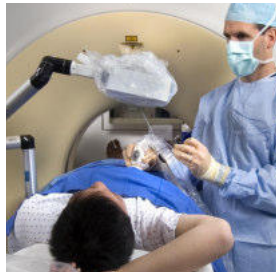
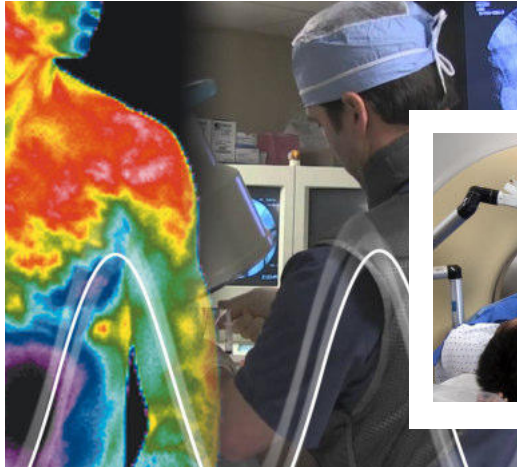
Production of textiles and paints

Waste treatment in the recycling phases

Rubber treatment and production of plastic materials

MEDICAL

M



The challenge of saving lives with microwaves

Clinical diagnosis and therapy based on Microwave and Radiofrequency allow minimally invasive or even contactless operation.

Our solid-state generators and power amplifiers are extremely accurate sources for life-saving treatments as hyperthermia, dermatological remediation and localized drugs activation. Fully automated and highly reliable companion control systems can be fully tailored to meet the most rigorous medical applications for tomorrow's innovation targets.

Drying of various material and of agricultural products

Sanitation of handicrafts attacked by insects and micro-organisms

Disinfestation of wood packages for international trade

Disinfestation of trees/plants attacked by parasites

Localized drugs activation and microwave hyperthermia



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