A technology leader in microwaves and radio frequency
for the academic and industrial world

Solid State Microwave generators

200W -450W- 900 W at 2450 MHz
600W at 915 MHz

A specific range of ready-to-use products for R&D in the academic and institutional world

- Ready-to-use fully instrumented equipment to develop new batch & continuous processes
  - Miniflow
  - Labotron range
- From lab-scale to pilot, with easy scale-up
- Custom made product on demand

A complete range of MW & RF equipment

- Generators
  - Patented solid state technology up to 2kW in 915MHz and 2,45GHz (patent pending) with automatic tuning and impendance matching (patent # WO 2012/146870)
  - High powered industrial generators, up to 100kW
    - Radio-frequencies 13 – 27 – 40 Mhz
    - Microwaves 915Mz – 2,45 – 10 – 14 - 18 GHz
- All accessories
  - Waveguide, impedance adjustment , tuner, matching box, …
  - Measurement instruments

Food processing is the historical application of MW & RF

- MW **Tempering** of frozen food is the path to the future
  - Faster production cycle . High quality control
  - No more driploss to increase yield . Reduced contamination risk
- **Pasteurisation** preserves organoleptic properties
  - Instant heating . Continuous process
  - Increased shelf life for fresh food
- **Dehydratation** with full control
  - Total control of process thanks to volumetric heat
  - Reduces organoleptic impact . Can be combined with air
- **Cooking** fast with uniformity
  - Instant volumetric heat
  - Complementary to traditional ovens
  - Often better taste

Chemical & pharmaceutical processing enhancements

- Slurries can be **dried** into powders efficiently and quickly
- Solutions can be **pasteurized** or debacterised with perfect control
- Natural ingredients can be **extracted** with higher yields and lower processing time
- Chemical synthesis can be **accelerated** by bringing instant heat
- Natural **biomass** can be processed faster with higher conversion ratios

➢ Applications can be designed in batch or on-line with continuous flow

A unique expertise in designing continuous ovens for all industry applications

- A know-how combining MW & RF control with applications knowledge, with hundreds of processes running in the world
- An in-depth technology control of **drying**, including combinations with steam and hot air for better regulation and optimal energy efficiency
  - Bandages, polyamide, silica, honeycomb ceramics, timber, PU foam, pharmaceutical, core foundry, cigars, sugar cubes, …
- Machines for rubber vulcanization, PVC welding, …