# \*ExtraSolution

**Company Presentation** 







### **ExtraSolution Srl (Ltd.)**

**REA no. 150600** 

VAT no. IT01736200500



**Authorized capital: 81 K€** 

Assets: 240 K€

**Board members:** Dr. Gabriele Benedetti

**Dr. Ugo Benedetti** 

**Prof. Mauro Lucchesi** 

**Dr. Alessandro Piombini** 

**Prof. Pierangelo Rolla** 





## **By Polo Tecnologico Navacchio**

- 64 Companies
- 515 high qualified workers (average age 36)
- 56 M€ aggregate turnover

#### Close to Pisa, the heart of excellence centres:

- **University of Pisa** (11 faculties, 34 degree curricula, 2000 teachers, 6700 employees, 50000 students, 19 research institutes, 3000 graduates per year)
- Scuola Normale Superiore
- Scuola Sant'Anna
- Consiglio Nazionale delle Ricerche (CNR)

### Wide transport network

- **Airport** (Pisa International)
- **Seaport** (Livorno)
- Railways (Middle Italy hub)
- Roads (Motorways & Highways)





#### **Activities & Worldwide presence**



**Product Assembling** 



**Product Education** 



**Quality Control** 



Sales & Product guidance



Test & Service





# Gas permeability testing in packaging applications

- Oxygen (OTR)
- Carbon dioxide (CO2TR)
- Water Vapour (WVTR)

Scientific instruments development

Strong academic background





# **Testing laboratory**

Oxygen, Carbon Dioxide and Water Vapour permeability analyzers.

# **Department of Physics**

RF and microwave spectrometers.

Systems for dielectric measurements.

Systems for (non-)contact Atomic Force Microscopy.

Systems for scan near-field optical microscopy.

# **Department of Chemistry**

DSC, TGA, DMTA, DMA, Rheometer for Thermo-mechanical characterization. Spectrometers: UV-visible; FTIR; ATR; IR Microscopy; Fluorescence. GPC for the determination of molecular weights.

NMR 200 / 300 / 400 solid state / multi-nuclear.

**ESR Spectrometers for (non-)linear spectroscopy.** 

**Brabender mixers.** 

Spin coater; spray coater.

Contact angle measurement system.





Packaging industry



**Food industry** 



Beverage industry



**Electronics** industry

# We deal with a lot of different segments inside many industries



Health-care industry



Medical industry



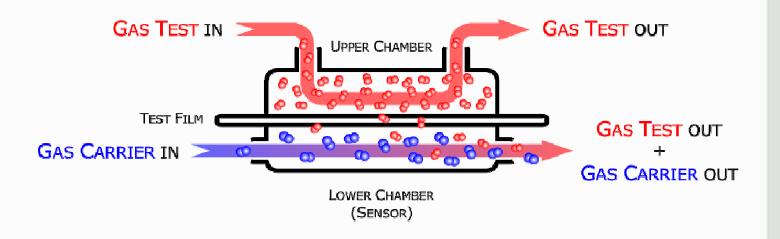
Pharmaceutical industry



Wine industry



ExtraSolution develops its instruments in cooperation with some leader sector industries, with constant and careful attention in matching needs of industrial R&D and quality control labs.







### **Permeability testers**

We can test every objects that makes barrier.













MultiPerm (patented) is the only instrument present on the market that allows simultaneous measurements of the barrier of two different gases on two different samples.

MultiPerm is offered with two sensors chosen among oxygen, water vapour or carbon dioxide and in different versions: single cell or double cell.









Last ExtraSolution's product for testing shelf-life of bottles or container filled with carbonated beverages. With CarboPack BT it's possible to perform non destructive test on a single bottle in a extremely short time to know the amount of loss of carbon dioxide in a day.



Pack line allows users to measure the gas permeation through everything that isn't a film. For testing PET bottles, pouches, packages, little containers, natural and synthetic corks, plastic turning caps and crowns.

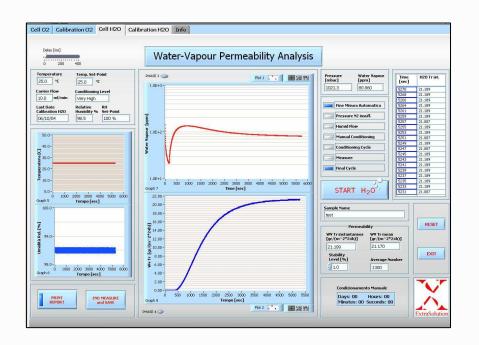


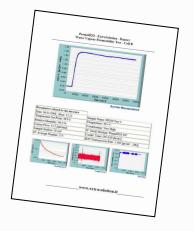






The software of our instruments is really userfriendly and it has been developed and improved in strict cooperation with our customers.







We are widening our international distributive network.

Marketing of two new products based on patented technologies that allow the reduction of the typical times of analysis to 4 times.





# If your problem is the barrier measurement,

we are the

ExtraSolution

