

PRACTICAL AND CLEVER SOLUTIONS FOR EVERYDAY LIFE

**EXTRASOLUTION IS A YOUNG
ENTREPRENEURIAL ACTIVITY, CONSTANTLY
GROWING ON INTERNATIONAL MARKETS,
BORN IN TUSCANY IN THE HEARTLAND
OF EXCELLENCE. LOCATED AT THE POLO
TECNOLOGICO OF NAVACCHIO, JUST A FEW
STEPS FROM PISA, RESIDENCE OF THE MOST
IMPORTANT CENTRES OF ITALIAN ACADEMIC
EXCELLENCE (UNIVERSITY OF PISA, SCUOLA
NORMALE SUPERIORE OF PISA, SANT'ANNA
SCHOOL OF ADVANCED STUDIES) AND
RESEARCH C.N.R. (ITALIAN NATIONAL RESEARCH
COUNCIL) AREA OF PISA.**

ExtraSolution has its origins in a territory where innovation can express itself at its best, also because it is supported by network systems such as the Innovative Enterprises Club and by financial tools such as the Revolving Fund for Innovative Enterprises, promoted by the Chamber of Commerce of Pisa.

Born as a spin-off of the University of Pisa's Department of Physics, ExtraSolution Srl started off officially in 2005, to enhance, on the market, the results of research activeness, in collaboration with a major packaging industry from the North-East of Italy. In 2006, it settled in the Incubator of the Polo Tecnologico of Navacchio.

The company is one of the few firms in the world providing tools for gauging the permeability to gasses through food and

pharmaceutical packaging. Those produced by ExtraSolution are between the most innovative. This led ExtraSolution to become, at first, finalist in the National Innovation Award in 2004 and later to obtain the authorization for 4 international patents.

Thanks to the ability of its researchers to innovate, Extrasolution offers today a wide range of versatile and customizable tools, able to gauge the permeability of gasses through any kind of manufactured article, to which is important to retain such a quality. Essential to this purpose was the collaboration with the University of Pisa that allowed the use of its structures, laboratories and tools, which costs usually are prohibitive for any start-up. The University demonstrated to be a qualified



Oxygen Permeability tester. Packperm is a tester of permeability to oxygen (O₂TR) for plastic bags, small containers, PET bottles, taps in bag-in-boxes, natural and synthetic crown or bottle corks and other products for packaging applications

structure with competent people, for the development of the technical activities of ExtraSolution.

As well, the support and management education, provided by the Incubator of the Polo Tecnologico of Navacchio, helped the entrepreneurs to choose the right path for the growth of ExtraSolution, so as the Revolving Fund of the Chamber of Commerce of Pisa proved to be a flexible and suitable resource for satisfying the initial financial requirements of the company.

Today ExtraSolution has a stable financial situation, the result of its ability to sell its solutions in Italy and abroad.

And it was right from abroad that, in 2009, a new challenge came, and ExtraSolution took it up with enthusiasm: inventing, planning and making a tool for gauging the

diffusional properties of carbon dioxide through a special lower ignition propensity paper, used in new fire-preventing cigarettes. As a matter of fact, these cigarettes are produced by a cigarette paper able to slacken the passage of air and to induce the extinguishment of the cigarette if not inhaled, avoiding therefore the danger of accidental fires.

The scientific skills for the making of such a product were not easily available on the market and ExtraSolution, thanks to its experience in a very similar field, was spotted by Cerulean, leader company in the production of laboratory instruments for the tobacco manufactory, as a possible partner for the development of the system of interest. The tool produced by ExtraSolution is used exactly to validate the actual effectiveness of these fire-preventing cigarette

papers, which introduction will be prescribed, by regulations of the European Union, by the end of 2011.

The cigarettes' trade is a traditionalist economic field, extremely difficult to join and where to introduce innovations. But thanks to a tight collaboration with Cerulean that boasts numerous and lasting commercial relationships with tobacco's colossuses, the Tuscan tools managed to enter and to win praises in the R&D and QC laboratories of the major multinationals in the world. The devices are then commercialized under Cerulean trademark, with Extrasolution, "made in Tuscany", retaining production and intellectual property right.

As for intellectual property, ExtraSolution has recently had a great satisfaction because the research report for the demand of PCT was, in slang, perfectly "clean".

This means that the patent's examiner did not have any objections on any point of the PCT patent request of authorization submitted by ExtraSolution, acknowledging Novelty, Inventiveness and Industrial Applicability to all of the 13 submitted demands. Exceptional case but not for ExtraSolution that already in 2007 received another "clean" report for a previous PCT patent submission. A further confirmation, as if it was needed, of the innovation quality ExtraSolution is able to provide!



Interview to Gabriele Benedetti

COULD YOU TELL US THE CHARACTERISTICS OF YOUR COMPANY AND IN WHICH PRODUCTS YOU MADE USE OF TECHNOLOGIES AND PRODUCTS BY EXTRASOLUTION?

Cerulean is a metrology company operating in regulated industries and applies many technologies in its range of instruments, using both internal and external expertise. Recently the EU introduced a draft legislation for "Low Ignition Propensity" cigarettes which have to be supplied throughout the EU in 2012. We needed to add a measurement of gas diffusion through paper to support our customers in the paper and pulp industry. We decided that to do this we needed to find the required technology expertise for measuring gas diffusion and we were delighted to discover ExtraSolution's range of products for measuring gas diffusion through packaging materials. It was natural to approach ExtraSolution to see if the existing technology could be adapted to measure diffusion through paper. It could, and the CDX101 Paper Diffusivity Tester is the result.

COULD YOU DESCRIBE YOUR CONTACT WITH EXTRASOLUTION AND THE REASONS THAT LED YOU TO SELECT IT IN COMPARISON WITH OTHER COMPANIES?

Our contact with ExtraSolution has combined the best aspects of a personal and business relationship. ExtraSolution are highly professional and also highly flexible

and responsive to working with a new partner to jointly develop a new product. ExtraSolution's technical level is world-class, reflecting perfectly the reputation of the University of Pisa in science and engineering. The past and present link with the University gave us total confidence in the technical capability of ExtraSolution and was a significant factor in developing our business relationship.

TO WHAT EXTENT QUALITY AND UNIQUENESS OF "MADE IN ITALY" WAS SIGNIFICANT IN YOUR CHOICE?

We weren't after a Ferrari, but that's what "Made in Italy" means to many people! However, we did need the design and engineering integrity that "made in Italy" translates to at its very best. We got great style and great engineering.

ARE YOU FAMILIAR WITH TUSCANY? WHAT IS YOUR OPINION OF THIS TERRITORY AND HOW MUCH DO YOU CONSIDER IT AS "ADVANCED AND CONTEMPORARY"?

It's probably fair to say that Tuscany's historical towns and cities, along with its landscape are most widely known in the UK. But in the science and engineering communities the reputations of its Universities and companies are equally high and they are seen at the forefront of many world-leading developments. "Advanced and contemporary" is absolutely right!