

NEWSLETTER 002 MARCH 2011

COMPANY

LATI in numbers

From the financial crisis in 2009 to the dramatic shortage problems with raw materials in 2010: LATI too had to ...

MATERIALS

LATIGRAY x-ray shielding compounds

The exclusion of lead from the list of materials allowed for the construction of x-ray shielding walls is now ...

APPLICATIONS

More and more LEDs!

The spread of applications using LEDs to provide viable solutions in the field of ...

LATI in numbers

From the financial crisis in 2009 to the dramatic shortage problems with raw materials in 2010: like all the enterprises in this sector, LATI too had to deal with rather serious difficulties to provide the best possible service to its partners, while maintaining product quality.

So it is fair to share with the customers the situation in which the company is preparing to face a 2011 full of challenges both in terms of the market - domestic and export - and projects and developments.

Turnover:

From the first results of 2010, turnover rose from 77 million Euros in 2009 to 104 million Euros in 2010, with a net increase of 35%.

Compared to 2010, turnover is expected to further grow by 15% in 2011. The significant improvement in EBITDA (+18%) and EBIT (+40%) is also worth mentioning.

Employees:

Production growth and expansion of markets also called for more effort in terms of Human Resources.

The number of employees rose by more than 20 units compared to 2008, reaching a record hiring in 2010 (12 new employees).

This figure is even more important when compared with the general trend of the labor market.

New hires resulted in the consequent investment in training: more than 6000 hours were allocated by LATI in 2010 to create skills in-house.



More and more LEDs!

The spread of applications using LEDs to provide viable solutions in the lighting field continues.

Thanks to the low consumption and improved quality of light produced, the LED is an ideal replacement for conventional incandescent bulbs.

LATI's contribution to this industrial field is represented, among others, by the thermally conductive compound range, which is widening day by day.

LATICONTHER products, in fact, allow manufacturing plastic elements featuring a thermal conductivity up to 100 times that of base resins, thus allowing the cooling of live components such as LEDs, coils, and other electronic parts.

Masks, housings, and radiators used in the manufacture of LED lamps of different powers, from one to several tens of watts, are among the new applications.



Nanopolytox project

The future of thermoplastic polymers will have nanofillers among the main players of the new solutions in the field of technical compounds. However, the safety aspects of products filled with nanoparticles still have to be clarified.

To shed light on these issues and lay guidelines on legislation to protect public health, a special project at European level was organized: the Nanopolytox, to which LATI takes actively part in the field of research.



The aim of this working group is to study the behavior of nanoclays, nanotubes, and nanofibers embedded in a polymer matrix, both during the product life cycle and in the later stages of recycling or destruction. In addition, the effect of resin aging and degradation over time will also be evaluated in order to assess the amount and danger of nanoparticles that may be released into the atmosphere.

From the LCA analysis made on the data collected, a descriptive model of the behavior of these particles once released from the matrix will be obtained, as well as a framework for assessing the biological risks associated with their release into the environment. Details of Nanopolytox project are available at www.nanopolytox.eu

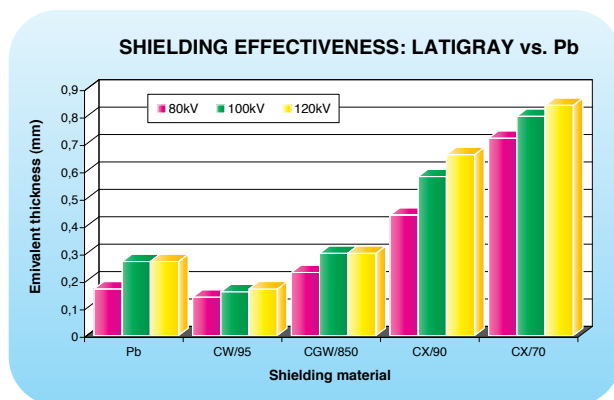
LATIGRAY - x-ray shielding compounds

The exclusion of lead from the list of materials allowed for the construction of x-ray shielding walls is now an established fact in many industrial sectors.

This exclusion will be soon extended to medical devices, a factor that could create difficulties in the construction of safety elements that are traditionally made with this metal.

To this end, LATI has long since developed a family of molding compounds filled with different kinds of powders providing a certain opacity to X-rays.

In fact, LATIGRAY products are added with metal and ceramic powders of various kinds in order to provide a wide range of shielding features.



Thickness being equal, simply X-ray opaque or perfectly shielding materials can be obtained, featuring the same efficiency of lead, but without its drawbacks in terms of safety and protection of health and environment.

The LATIGRAY family is described in the materials database on LATI'S website.

For any further information, LATI's technical staff is at your complete disposal.

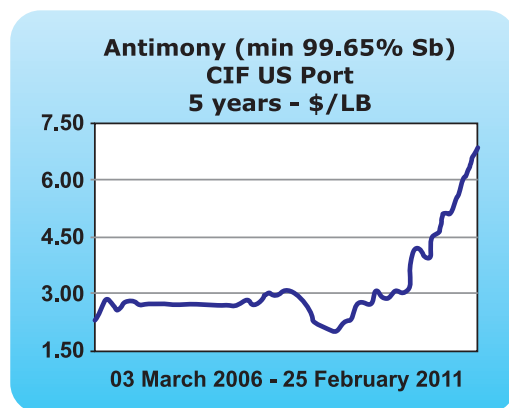
Antimony, a too... precious synergistic element!

Following a growing trend common to many other metals, the price of antimony almost doubled over the last year.

This price leap contributed to cost increase of several self-extinguishing compounds - already burdened with base resin price increase - in which antimony oxides fulfill the function of synergistic element in the primary self-extinguishing additive.

To address this issue and eliminate an already suspect component from the standpoint of toxicology, LATI's engineers have developed a family of flame retardant compounds, in which antimony trioxide has been replaced by other more cost-efficient synergistic elements, which are also safer for health and the environment.

Antimony Free products currently manufactured on an industrial scale are formulated on PA6 and 66 base, and are available in various colors. Last but not least, they also feature excellent laser marking behavior.



Self-extinguishing, structural, environmentally friendly!

The new LATAMID 66 H2 G/50-V0HF1 represents an interesting properties combination.

It is, in fact, LATI's response to the projects in which self-extinguishing properties necessarily require excellent structural performance, as for example in the manufacture of levers, bearings, and housings for the electrical and electronic sector.

In view of the highest level of protection of health and environment, the compound formulation does not even use brominated or chlorinated flame retardants, red phosphorus, and harmful synergistic elements.

Nearly as robust as a traditional 50% glass fiber reinforced PA66, this material ensures amazing performance in terms of processability and especially flame behavior, as well as glow wire test and comparative tracking index:

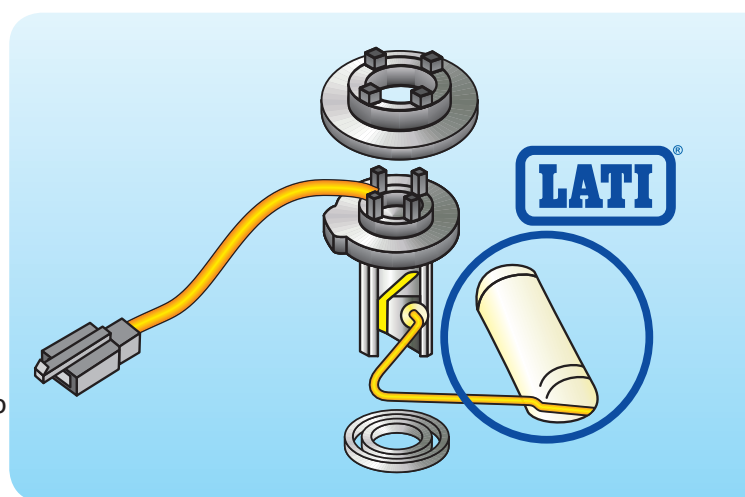
FLAMMABILITY - Typical values			
Index Oxygen Index		ASTM D 2863	32 %
Flammability rating	3.00 mm thickness	UL 94	V-0 rating
	1.50 mm thickness	UL 94	V-0 rating
	0.75 mm thickness	UL 94	V-0 rating
GWFI - Glow Wire Flammability Index		IEC 695-2-12	GWFI: 960/1.0mm
		IEC 695-2-12	GWFI: 960/2.0mm
GWIT - Glow Wire Ignition Test		IEC 695-2-13	GWIT: 775/1.0mm
		IEC 695-2-13	GWIT: 775/2.0mm
ELECTRICAL PROPERTIES - Typical values			
CTI - Comparative Tracking Index	solution A (without surfactant)	IEC 112	600V

Floating LATIMASS

As known, the use of chemical blowing agents in the injection molding process can result in dimensional problems that are often difficult to manage. To overcome this problem, LATI has introduced in the market grades belonging to the LATIMASS family, featuring a density that can even be lower than 0.8 g/cc.

These materials, made by filling the base resin with special glass beads, were recently selected for the manufacture of level gauges to be used in special hydrocarbon tanks. No pure resin, in fact, offers a density that is low enough to allow it to float in gasoline and Diesel fuel. Besides, the accuracy of this product does not allow to use blowing agents.

Low-density LATIMASS are also available on flexible matrix for the manufacturing, for example, of items intended for the sport sector, and especially for floating in water.



EVENTS	DATE	PLACE
Eurostampi 2011	2011-03-24	Parma - Italy
Chinaplast 2011	2011-05-17	Canton - China
Plastpol 2011	2011-05-24	Kielce - Poland
Fakuma 2011	2011-10-18	Friedrichshafen - Germany

