

LATI Industria Termoplastici S.p.A.
Via F. Baracca, 7
I - 21040 VEDANO OLONA (VA)
Tel.: +39 - 0332 409111
Fax.: +39 - 0332 409307

HIGH
PERFORMANCE
THERMOPLASTICS



Hispack
2015

.....
21 - 24 Abril

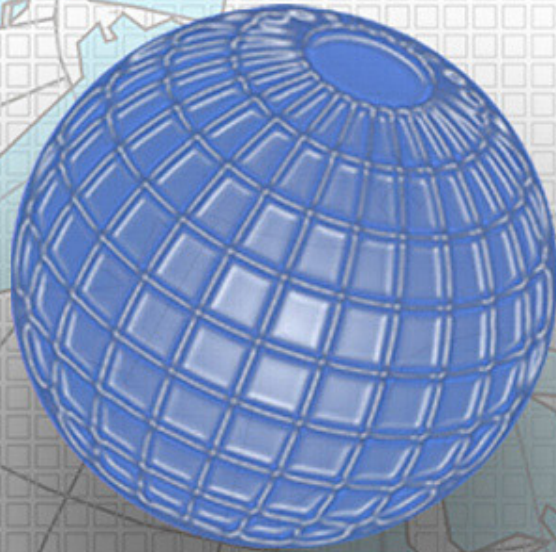


Barcelona, 23-IV-2015

Smart Packaging: Magnetically Detectable Thermoplastics

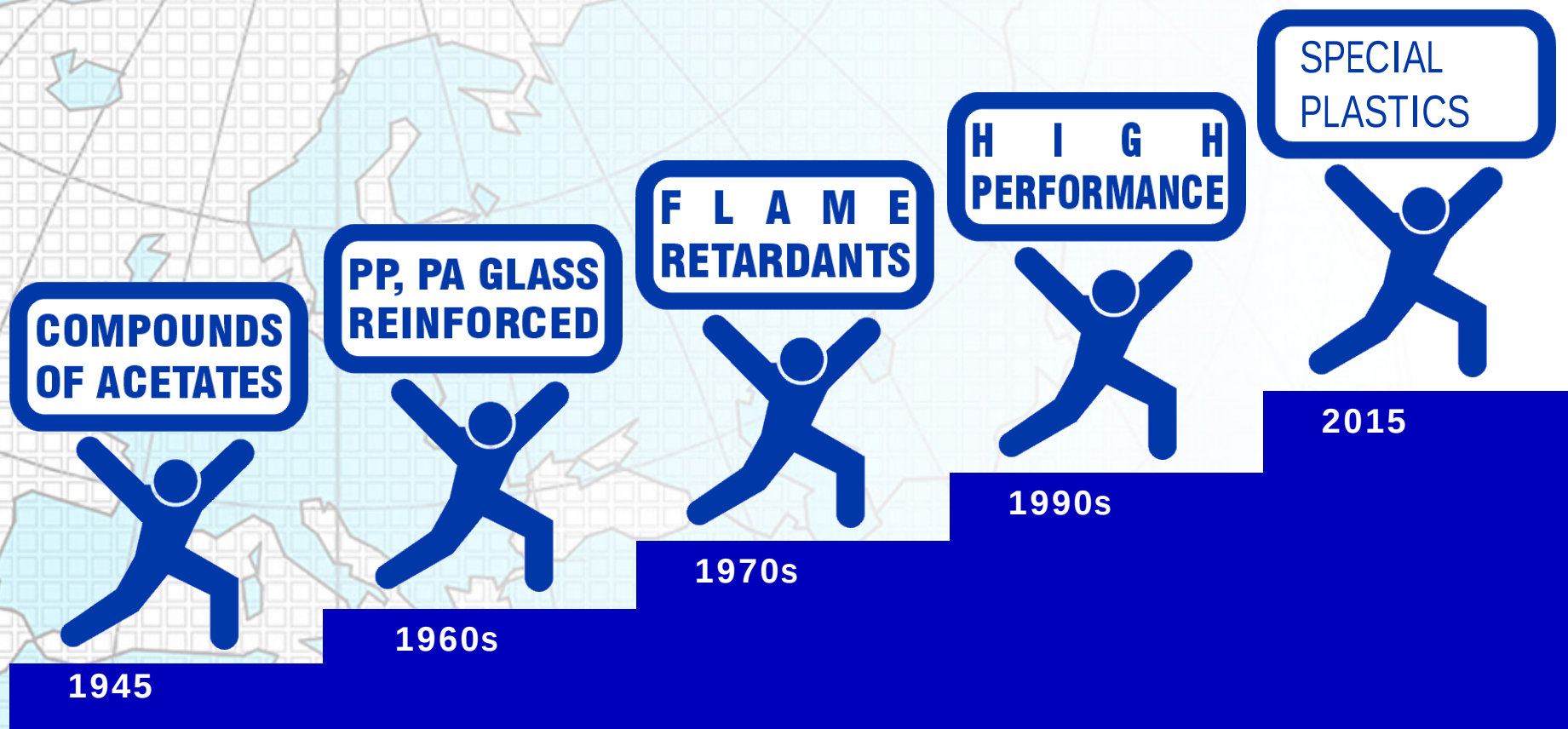
Marta Clotet

LATI Ibérica Sales Manager

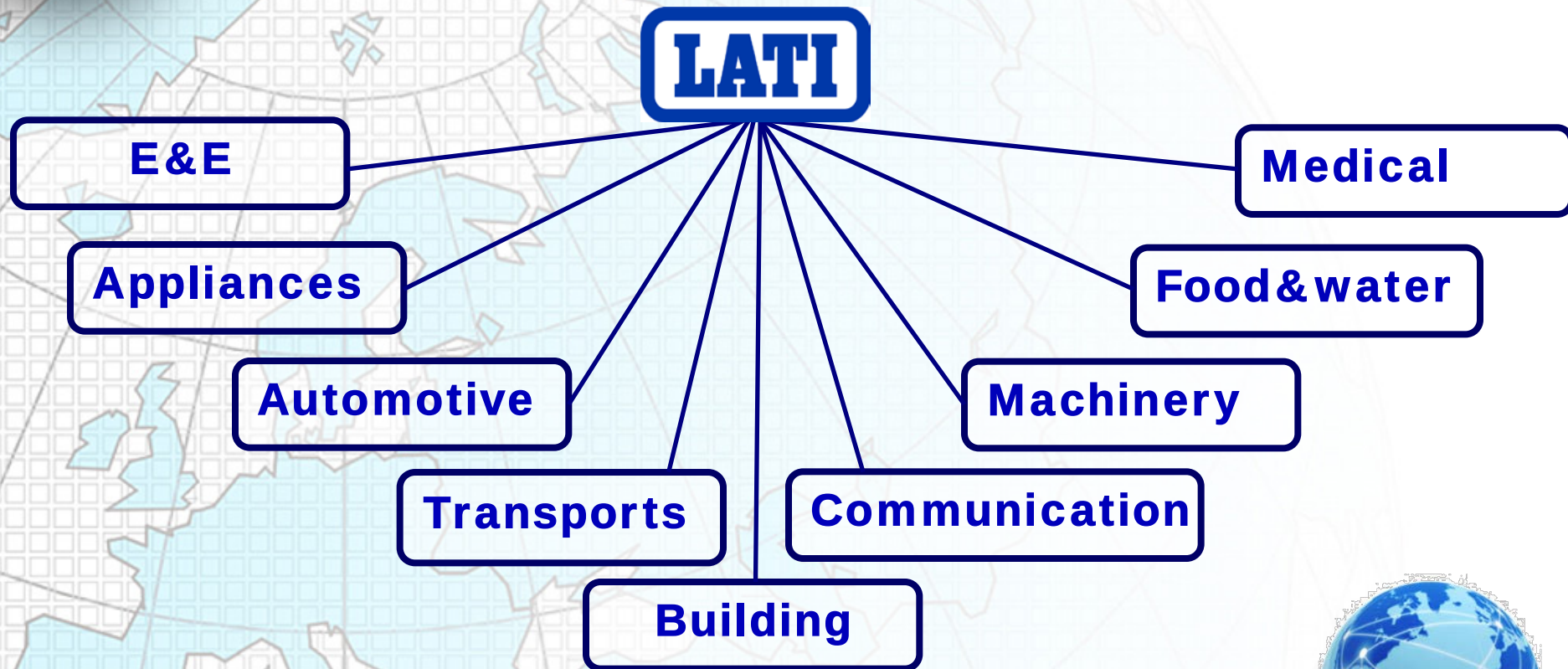


Who is LATI ?

LATI is a 70 years old independent Italian compounder leading the history of thermoplastic specials since 1945.



Strategic Markets

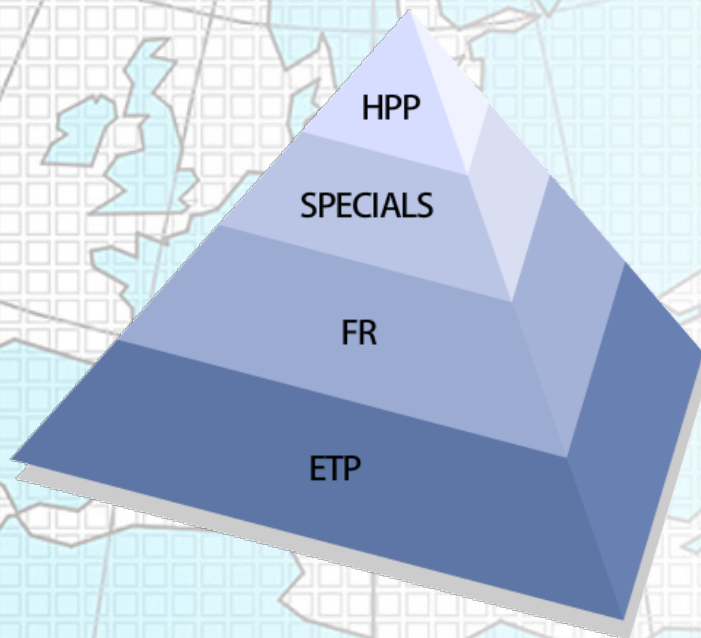


Customers, deliveries and support **worldwide**



Polymers and compounds

LATI transforms almost any
non-monopolistic
thermoplastic matrix, turning
base polymers...



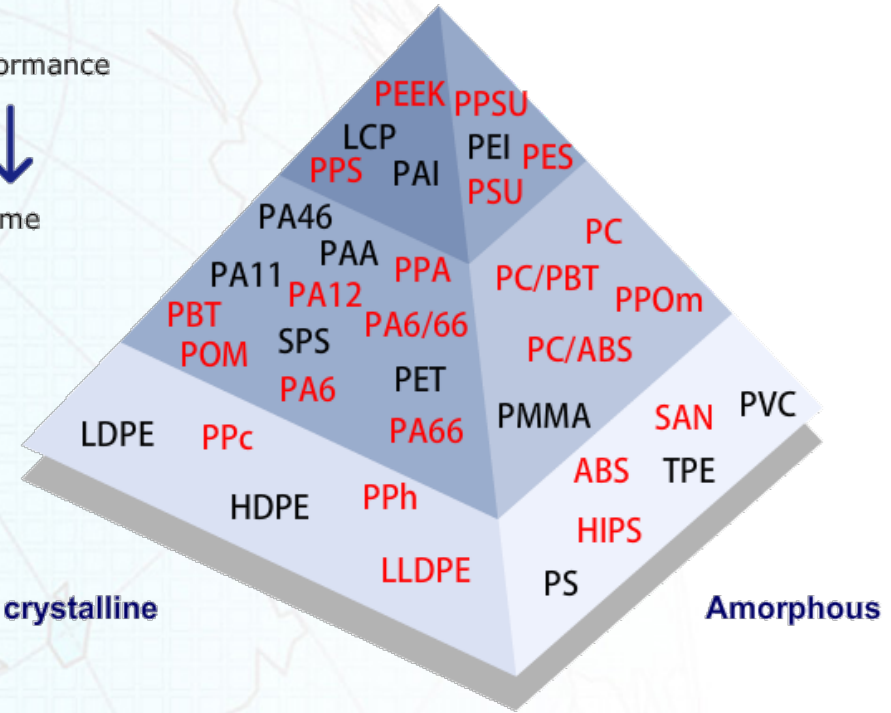
Price/Performance



Volume

Semi crystalline

Amorphous



...into compounds spanning from
reinforced to flame retardants
to **special purpose** grades.

Special compounds range



Structural

**Special purpose
structural**



Self lubricants

Flame retardant

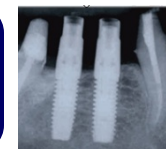


**Magnetically
Detectable**



**Electrically
conductive**

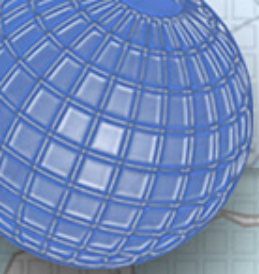
X-ray opaque



**Thermally
conductive**

Controlled density



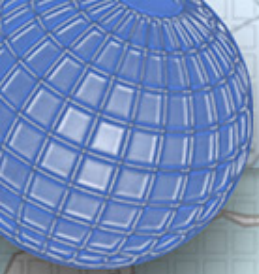


Why MDTs?

Many modern industrial sectors must rely on extremely **clean and safe** processing environments. **No pollution or contamination** can be accepted when it comes to:

- **Food and beverage;**
- **Medical;**
- **Pharma;**
- **Packaging (smart, general purpose).**

In case of accidental breakage of plastic equipment, even **smallest particles have to be detected.**



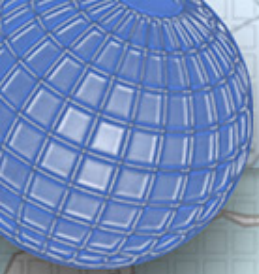
Selecting base resins

MDT compounds are available on almost **any thermoplastic base resin** to meet different possible Customers' requirement:

- **ABS**: dimensional stability and cost;
- **PP**: price, processability, impact resistance;
- **PA6 and 66**: mechanical properties and mouldability;
- **PPS**: chemical and thermal performances;
- **PEEK**: top temperature and environmental resistance.

All LATI MDT compounds can be injection moulded, handled and processed on **ordinary equipment**, no special gear is required





Fillers and Detectability

LATI MDTs feature **metallic composites** which **do not release dusts or fibres** of any kind during operation.



Please note that magnetic detectability is strictly connected to:

- Filler **type**;
- Filler **concentration**;
- **Particle** size, weight and geometry / aspect ratio.

Standard detectability MDT05 will work on **more than 90 % of known detecting devices**, but **higher detectability is available** modifying existing formulas.

Fillers and Detectability

LASTILAC MR MDT05 01 NAT.:0199 F1

Detectability level

MDT05: std grade

MDT04: lower detectability grade

MDT06: high detectability grade

Kind of Filler

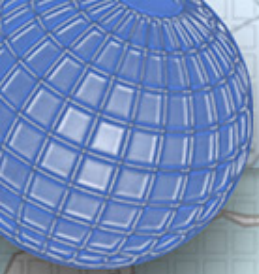
Food contact

LATI MDT Fillers can achieve **different detectability levels**, allowing even **smallest particles** to be correctly tracked.



MDT thermoplastics can be engineered to offer **food contact compatibility**



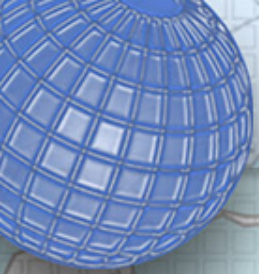


Available compounds

LATENE EP 4 UV MDT05-01 BLU:7564F1

- PP-PE copo;
- can be coloured;
- **impact resistant** even at low temperatures;
- very **high flowability** to fill thin and complicate shapes;
- UV stabilized for outdoor applications;
- FDA and EU **food contact approved**.
- Standard detectability;
- Excellent price/performance ratio
- Available on industrial scale.





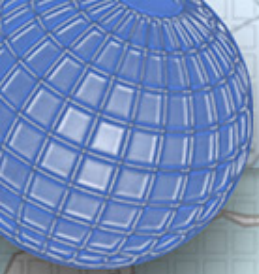
Available compounds

LASTILAC MR MDT03-01 NAT.:0205F1

LASTILAC MR MDT05-01 NAT.:0199F1

- **ABS** amorphous base resin;
- Very high **dimensional stability**, recommended for precision mouldings;
- FDA and EU **food contact approved**;
- Moisture, mould and fungi resistant;
- Suitable to manufacture **bins, trays, buckets, housings** etc.



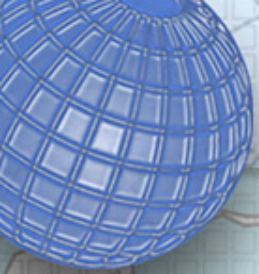


Why MDTs?

LATAMID 66 MDT

- **PA66, toughened;**
- Very high glow, fills thin walls;
- Excellent **toughness** and strain at break even at **low temperatures;**
- Food contact approved;
- Suitable for **seals and ties** for the food and pharma industry.

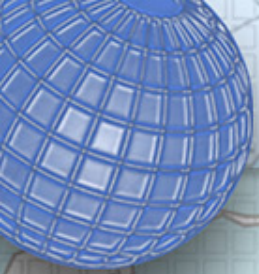




Available compounds

LATAMID 63 MDT05-01 G/40 BLU.F1

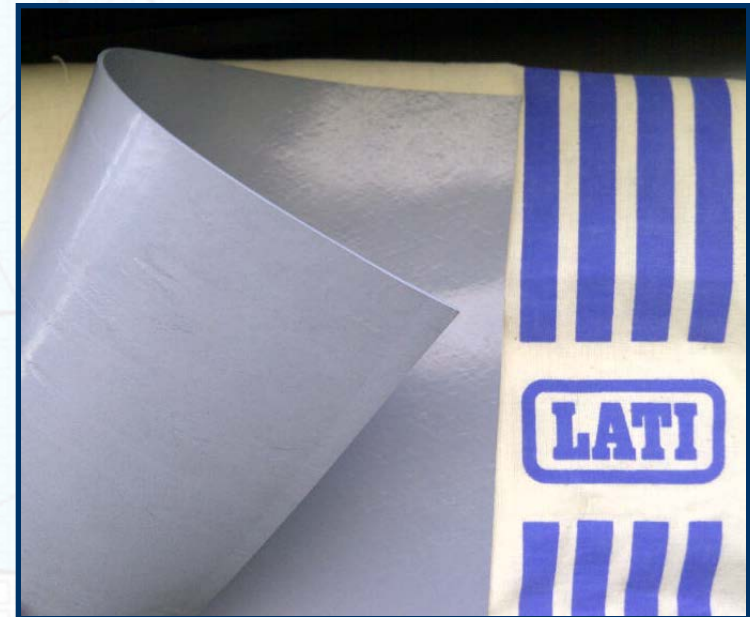
- **PA6, elastomer modified;**
- **40% glass fibre reinforced;**
- **Very high mechanical performances** (impact and stress);
- **Suitable for applications undergoing shocks, e.g. packing and handling of frozen goods;**
- **FDA and EU food contact approved.**

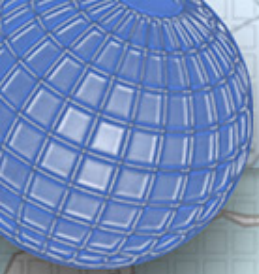


Available compounds

LASTANE 50 MDT05-01
NAT.:0199F1

- **PUR** elastomer base;
- Very **flexible** and impact resistant
- FDA and EU **food contact approved**;
- Suitable for **calendering** of sheets, e.g. for detectable **conveyor belts** for the most demanding packaging industry.





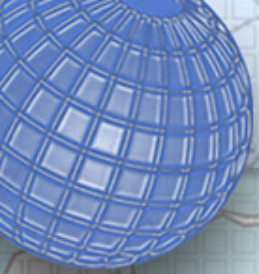
Available compounds

LARTON MDT03-01 G/40 BLU:F1

- **PPS** semicrystalline base resin;
- FDA and EU **food contact approved**;
- Top thermal performances up to **200°C**;
- Top **chemical inertia**;
- High dimensional stability;
- Suitable for harsh environment applications.

LARPEEK 10 MDT05-01 NERO:3425F1

- High end PEEK semicrystalline resin;
- Top thermal performances up to 300°C;
- High chemical resistance.



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Thank you for your attention