

LATICONTHER

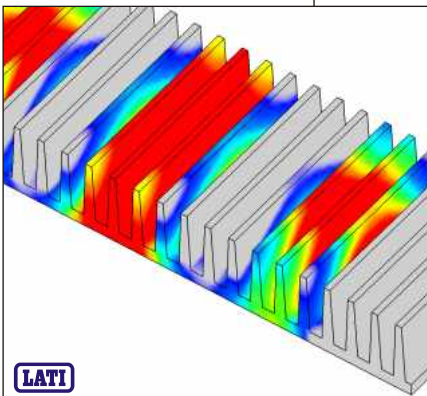


HIGH
PERFORMANCE
THERMOPLASTICS

Thermal Conductive Thermoplastics

Key Properties:

- High thermal conductivity when compared with ordinary polymers;
- Thermal expansion comparable to metals;
- Excellent dimensional stability at temperature;
- Chemical resistance;
- Available in electrically insulating or conductive versions.



The possibility to manufacture thermal conductive plastics becomes a reality with **LATICONTHER** products.

LATI is able today to propose a range of products in which the increased efficiency in transferring heat result in much higher thermal conductivity than ordinary technical thermoplastics.

The employment of these materials helps to remove heat produced for instance by electronic and electric equipment, thus favouring the transfer of heat both by conduction and promoting local natural convection phenomena. It is therefore possible to implement effective cooling systems for all those applications where thermoplastic and thermosetting polymers, virtually insulating, are currently employed. Also interesting as substitutes to metals whose high conductivity cannot be fully exploited due to the lack of environmental conditions for an effective thermal exchange.

The advantages offered by these materials are connected, as well as to their high thermal conductivity, to the limited weight when compared to metals, to the reduced cost, to chemical resistance and linear thermal expansion values similar to that of metals. **LATICONTHER** products allow integration of complicated shapes with inserts or components consisting of assembled parts in a single injection moulding operation.

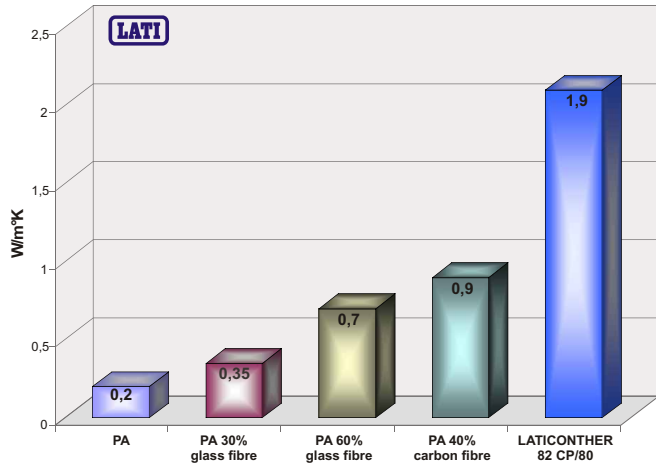
They are available both in electrically insulating and conductive versions manufactured starting from the typical LATI polymers: PP, PA, PPS, etc.

Thanks to its peculiar thermal properties, from conductivity to linear expansion, the **LATICONTHER** range represents a valid solution for:

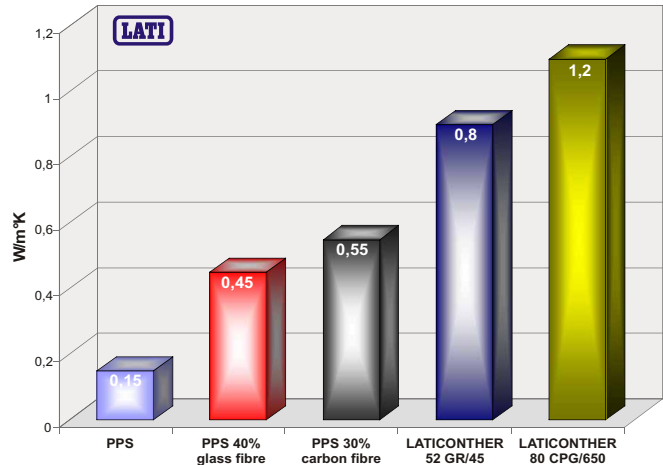
- Encapsulations, coil over-moulding, spools support and other applications in the electric and electronic sector;
- Manufacture of heat sinks for electric motors, circuits, processors, lamps;
- Manufacture of heat exchangers, especially in highly problematic working environments.

The thermal characteristics of **LATICONTHER** products are equivalent to the ones of the best specific products available on the market today.

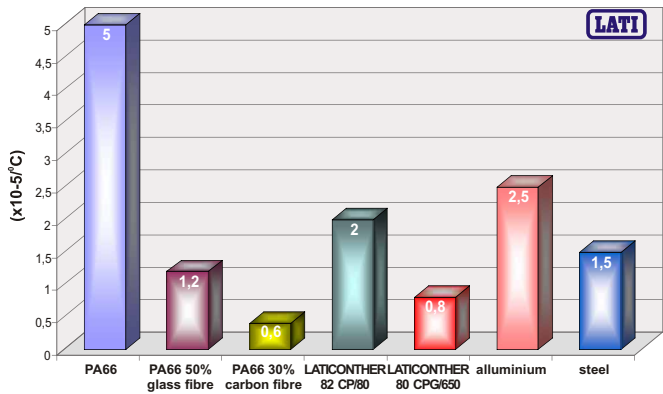
PA Thermal conductivity



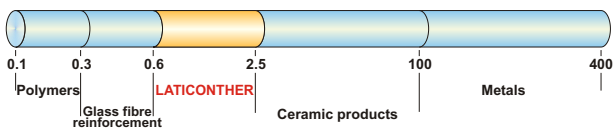
PP & PPS Thermal conductivity



Coefficient of linear thermal expansion



Thermal conductivity (W/m²K)



Industrial Sectors:

- Encapsulations, coil over-moulding, spools support and other applications in the electric and electronic sector.
- Manufacture of heat sinks for electric motors, circuits, processors, lamps.
- Manufacture of heat exchangers, especially in highly problematic working environments.



Note: The information contained in this document represent average values obtained as the result of laboratory tests and experiences carried out on our injection moulded materials characterized and conditioned in conformity with Standard ASTM D 618, procedure A (40 h -23°C -50% U.R.). Said values refer to our current best scientific and technological know how and are not used as a basis to develop applications. As a reciprocal guaranty we

suggest to contact our technical and sales department with the purpose to asses the right characteristics according to the various applications. LATI Industria Termoplastici S.p.A. declines all responsibilities for the misuse of products described in this document, in conformity with Presidential Decree n. 224 of May 24, 1988, issued in implementation of CEE 85/374 Standard.