





Interplast S.A. Plastic Pipes & Fittings

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New products catalogue



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Innovation at home!



Echosilent

25 years at the top of your choices!

M HOUSE OF INNOVATION

In 2023, Interplast is celebrating its 25th anniversary and is introducing two brand new product series. For the next decades, those products will **become milestones** and will be part of the company's important products, which have been **hugely accepted** in both Greek and international market.

A. The new Polypropylene soundproof pipe system, under the **trade name "Atlas Plus Echo-silent"**, expresses the value and depth of the ancient Greek language, as the English word Echo, comes from the ancient Greek word "ēchō".

B. The new five-layer pipe, in which the intermediate layer, contains "made in Greece" Greek high-quality aluminium. The main raw material is PE-Xb which conforms with the Europeans and American regulations, and it has been approved for exports in U.S.A. and Canada under the trade name "ComoPex". The new pipe will be available under the trade name "Como PexALPex" complementing the already successful "Como Pex" series, honouring in this way, the factory headquarters, placed at Komotini in Thrace.

Celebrating our 25th anniversary we would like to remind the following: Interplast is a **Greek industry**, its factory is located in Komotini and it has offices in Athens and in Thessaloniki. The main characteristics of Interplast are **innovation**, extroversion and high level of technical support. The company's turnover concludes exports of approximately 40%, which until December 2022 were carried out in 65 countries and 5 continents.

In addition to the basic certification of ISO 9001, the company possesses ISO 14001, ISO 50001 as well as EPD (Environmental product declaration), which is an eco-labelling system well established in the international markets, especially in Europe and the United States. EPD is considered as the "International Gold Standard", and is a prerequisite for the classification of buildings according to the requirements of LEED V4, for three categories of its products.

Interplast possesses numerous certifications (over 50) including the certification for PE-X pipes, for PP-RCT, PP-R pipes and fittings as well as for the **Aqua-Plus Prins** (pre-insulated system) based on **ASTM and NSF from the ICC organization of America**. Interplast owns more than 25 patents filed in the Industrial Property Organization which, among others, refer to **Aqua-Plus Prins pre-insulated system, the FireFighter fire-resist-ant piping system and the low-profile EcoFloor dry radiant system.**

The Managing Director of Interplast

5–layer strength and durability

Como PexALPex is an innovative pipe able to respond mainly to the distribution of hot and cold drinking water, heating and cooling systems, compressed air installations, industrial installations and various other applications, whose conditions are harmonized with the corresponding European and Greek regulations such as EN 21003 and EN 15875.

Como PexALPex five-layer pipes combine the advantages of synthetic materials and especially cross-linked polyethylene, such as resistance to high temperatures, reduced friction, resistance to oxidizing effects, resistance to various corrosive chemicals and suitability for sanitary applications, together with the advantages of aluminium, such as retention of the desired shape after bending, imperm-eability to oxygen and low thermal expansion.

The result is a product consisting of different layers of materials that, when connected together, acquire improved properties compared to classic metal pipes.

Interplast's experience in PE-X pipes, the stability of the respective suppliers and its choice of premium raw materials, its long-term specialization in multilayer pipes of large cross-sections combined with the know-how of the subsidiary ELVIOM brass industry, guarantee a product that will contributes to the upgrading of constructions.







PRODUCT

Specifications

	Material	Inner layer cross Inner adhesive la Aluminum layer Outer adhesive I Outer layer cross
	Colour	White
	Dimensions	16 ÷ 32mm
	Field of applications	Hot and cold drin heating systems fan coils, compre- industrial installm
	Fittings	Mechanical wedg
	Thermal operating condition	+95°C / +100°C
	Maximum pressure	+10bar
	Density	> 0,948g/cm ³ (PE
	Softening temperature	135°C
	Coefficient of linear expansion	0,026mm/m·K
	Thermal conductivity	0,42 ÷ 0,52 W/m
	Internal roughness	0,007mm
	Oxygen transmittance	Omg/l
	UV Protection	Yes, 5-years
	Halogen level	Halogen free

5

cross-linked Polyethylene ive layer

sive layer cross-linked Polyethylene

d drinking water distribution, ems with classic heating elements, mpressed air distribution systems, stallments

wedging fittings, Mechanical compressing fittings

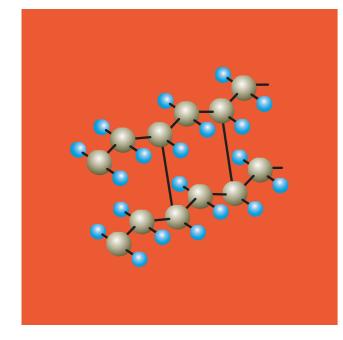
³ (PE-Xb)

W/m·K

Pipe Layers

Outer layer

Made of PE-Xb which provides mechanical, electrical and chemical protection of the aluminium layer from impacts, abrasions, cement and other substances contained in the ground.



PE-X naturally has excellent behaviour at high temperatures pressures, improved impact and chemical resistance as well as a very long-life cycle.

In high-density polyethylene, double bonds are created, so that a large number of them are joined with silane molecules to form a homogeneous three-dimensional lattice structure of high molecular weight.

Intermediate layer

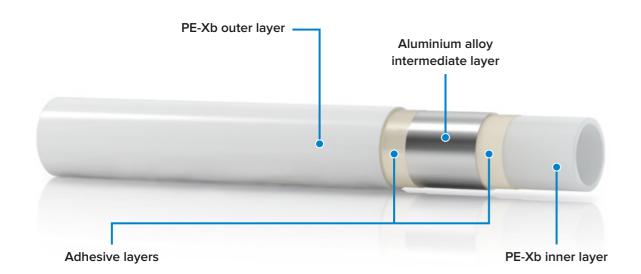
It is made of an aluminium alloy, a complete oxygen barrier providing excellent mechanical strength and flexibility during installation.

Adhesive layers

An additive layer which contributes to the connection of the intermediate aluminium layer with the inner and outer PE-Xb layers.

Inner laver

The inner pipe layer made of PE-Xb (NSF-approved raw material), is approved for drinking water according to European and American regulations, which is binding with Interplast in the exports of Como Pex in the United States of America and Canada. PE-Xb material is characterized by an extremely smooth surface that reduces hydraulic resistance.



Excellent thermal properties

They are designed for a lifetime of more than 50 years, The thermal linear expansion is about 8 times lower at temperatures up to 95°C and operating pressures than plastic pipes and is completely comparable to that from 6 to 10bar. Temperature peaks of 110°C at an operof metal pipes. ating pressure of 4bar.

Corrosion resistant

Como PexALPex pipes show excellent resistance to corrosion, even in areas where the water is in high mineral content, remaining unchanged over time. Unlike metal pipes, they do not show any electrochemical corrosion. Also, the high velocity of the water does not cause damage to the inner surface.

Chemical resistance

The material is resistant to most chemicals, even at high temperatures. Chemicals that can cause deterioration, rupture of ordinary plastic pipes do not affect Como PexALPex.

Mechanical strength

Como PexALPex pipes shows high mechanical impact resistance. For example, cross-linked polyethylene is used as a protective cover in bearings for transporting very sharp objects in hard metal industries.

Low coefficient of friction

Como PexALPex does not contain toxic substances. The material's structure and the smooth texture of the surface, ensure low hydraulic resistances resulting in Sanitary and toxic analyses, approved that it can be low resistance, and small pressure drop in the used for drinking water use. The pipes passed tests of pipelines. For this reason, water pumps of lower power official institutes (General State Chemistry, WRAS-NSF and energy consumption can be used, compared to Great Britain) regarding taste, smell, growth of microormetal pipes. ganisms, extraction of substances and metals of public

Flexibility and shape stability

The combination of cross-linked polyethylene and aluminium, guarantees excellent bending behaviour, so that the pipe maintains the desired configuration after bending.

Thermal expansion

Low weight

The pipes are extremely light compared to metal pipes: their weight is 1/3 of copper pipe and 1/10 steel pipe.

Soundproofing

ComoPexAlPex system works silently. The properties of the plastic and the adhesive layers, prevent the transmission of waves and hydraulic hammer unlike metal pipes.

Oxygen barrier

- The aluminium layer is a permanent oxygen barrier,
- hence corrosion of the metal parts in closed heating and cooling systems is avoiding.

Thermal conductivity

- The thermal conductivity of the tube is 0.42-0.52 W/m·K,
- about 900 times lower than the copper. This is extreme-
- ly important to ensure temperature losses. In addition, the insulation ensures water flow speed, up to 1m/sec.

Clean and non-toxic

- health concern (cadmium, arsenic, etc.).