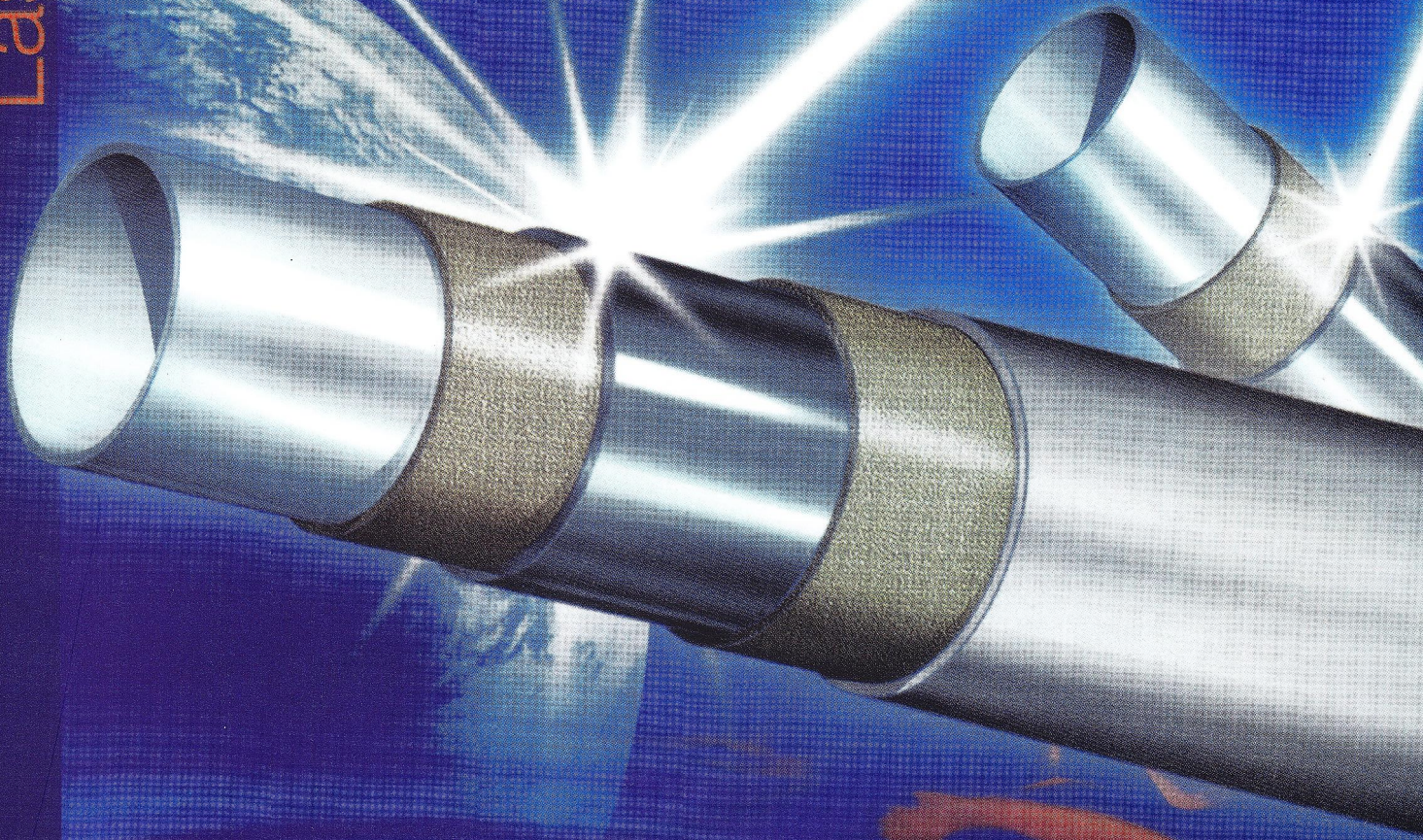


LaserMultiDalpex

laser welded multi-layer pipe



COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED  
ISO 9002



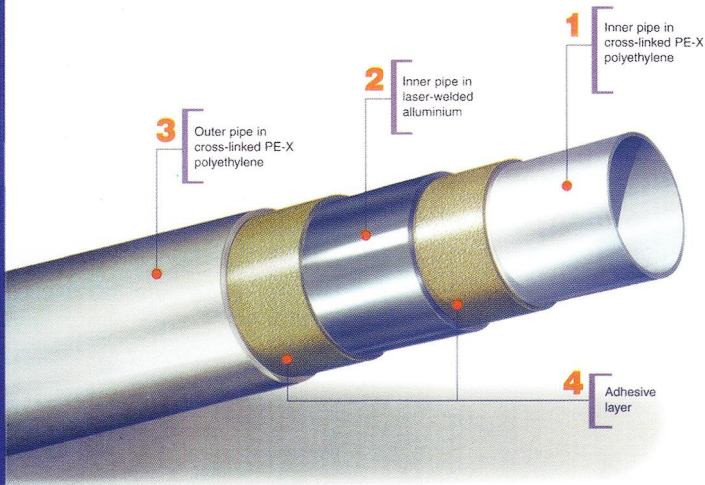
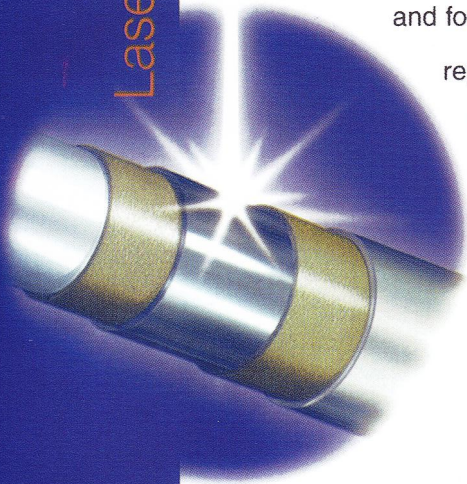
**Dalpex**

[www.dalpex.com](http://www.dalpex.com)



# The technology of laser to support reliability

**LaserMultiDalpex** is the outcome of some researches, whose aim is to combine in one single product the traditional features of reliability and solidity of metal pipes and the ease of installation of plastic pipes. The laser-welded multi-layer **Dalpex** pipe thoroughly meets these requirements and offers the opportunity to use a single kind of pipe both for heating systems and for sanitary fittings. The laser beam welding of the aluminium band (2) represents, in fact, an advanced technology which, because of the integrity that it ensures to the inner polyethylene pipe (1), grants the multi-layer **Dalpex** pipe a thorough consistency as to all waterproofing, resistance and solidity features.



The LaserMultiDalpex can be easily and quickly bent by hand pressure only.



The packaging of LaserMultiDalpex pipes is functional and safe, and has been designed for an easier transport and handling.





## The several features of multi-layer MultiDalpex pipe

**Ease of installation:** because of its optimum features of flexibility (it can be easily bent by hand pressure only), of geometrical stability (its aluminium core enables to keep the shape obtained from shaping unchanged) and of lightness (the metrical weight of these pipes is considerably reduced; for example, a 100-metres long pipe roll having a diameter of 16 mm and a 2-mm thickness only weights 12 kilos), it is easy to install.

**Oxygen and UV rays proofing:** its aluminium layer blocks the passage of oxygen, water vapour and other gases, thus avoiding the development of corrosive phenomena on the circuits. Moreover, aluminium is UV ray-tight.

**Low thermal expansion:** the linear expansion, which is due to temperature changes, is similar to the linear expansion of metallic pipes.

**Resistance to internal and external corrosion:** the inner PE-X layers preserve aluminium from any chemical, electrochemical and natural corrosive phenomenon.

**Decreased delivery losses:** The inner PE-X surface is so smooth that it can considerably decrease delivery losses and calcareous deposits, thus ensuring the stability of delivery features with time.

**Hygiene:** it is suitable for the transport of drinkable water and of food fluids, in compliance with the international rules in force.

**Safety and solidity with time:** the aluminium layer can withstand a 10-bar pressure at an operative temperature of 95°C and a peak temperature of 100°C. Laboratory tests ensure a life over 50 years. Moreover, the metallic core guarantees the sound resistance of the pipe at low temperatures and, at the same time, against footfalls and accidental shocks.

**Acoustic insulation:** the polyethylene layers considerably decrease the occurrence and the propagation of noises due to sound vibrations and water hammering.

**Low thermal conductivity:** it is characterized by a loss of heat that is considerably lower than metallic pipe one.

## Specifications

Outer diameter (mm)	14	16	18	20	25	26	32	40	50
Thickness (mm)	2	2.0/2.25	2	2.0/2.25/2.5	2.5	3	3	3.5	4
Roll length (m)	100/5	100/5	100/5	100/5	100/5	75/5	75/5	5	5
Roll outer diameter (cm)	70	70	80	80	80	80	120	—	—
Weight per linear meter (g)	90	110/115	130	150/160/170	250	300	370	430	500
Operative temperature (°C)	0÷95	0÷95	0÷95	0÷95	0÷95	0÷95	0÷95	0÷95	0÷95
Peak temperature (°C)	110	110	110	110	110	110	110	110	110
Running maximum pressure (bar)	10	10	10	10	10	10	10	10	10
Coefficient of thermal expansion (mm/m°C)	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
Inner roughness (n mm)	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Oxygen diffusion (ml)	0	0	0	0	0	0	0	0	0
Manual bending deviation (mm)	70	80	90	100	110	110	160	550	700
Bending deviation with tube bender (mm)	35	45	55	60	90	95	125	180	210

*For short time periods*

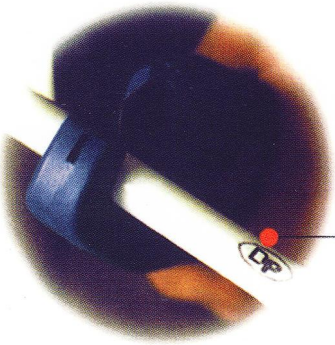
*Made to order*

*All pipes are also available in thermally insulated version, as established by the Law 10/91 and DPR (Decree of the President of the Republic) 412/93.*



# Assembly Instructions

To obtain a first-rate coupling, it is necessary to carry out the below described, simple but important, preliminary operations:



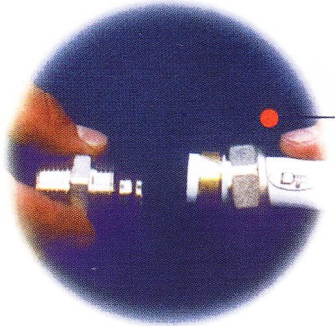
1

Cut the pipe perpendicularly to its axis to the wished length, using suitable tools (pipe-cutter or suitable shears).



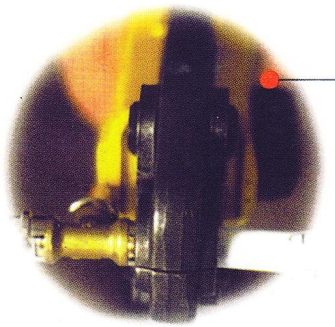
2

Trim and gauge the pipe by means of the suitable tool that is shown in Figure 2, inserting it into the pipe and rotating it in a clockwise and anticlockwise direction alternatively. Then assemble the fitting as below described.



3

In case of compression-type mechanical fittings, insert on the pipe first the nut, then the ogive and at the end the fitting body, caring that the pipe head stops against the dielectric ring in PTFE. Then screw the nut to the fitting body.



4

In case of press fittings, after having performed the above said preliminary operations insert the fitting on the pipe until it stops. For making sure that this operation is performed, check the suitable openings on the stainless steel external ring. Then place the fitting inside the pressing tool, so that the buckling of the stainless steel ring of the fitting lies in the corresponding jaw groove, then press.

*The quality and the tightness assurance of compression-type and press mechanical fittings are equivalent. Usually, the first ones are used whenever modifications and following actions are to be expected or when the plant is subject to inspection, since they can be disassembled. The press fittings allow a higher performance speed and decrease the operator's manual activity for the final positive result of the joint.*



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Certificato di Conformità SKZ - Germania



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RINA - CERTIFICATO DI OMOLOGAZIONE  
DI TIPO N° MAC/172100/1/TO/01

YOUR RELIABLE SELLER



**Dalpex**

COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED  
ISO 9002

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