LARETER

INSTRUCTIONS

U-PVC PIPES FOR CARRYING DRINKING WATER AND FOOD FLUIDS UNDER PRESSURE ACCORDING TO NORM UNI EN 1452

SUBJECT OF THE DELIVERY

UPVC pipes without plastizisers, for conveyance of drinking water, idoneous for the construction of burried water networks and irrigation plants, produced in conformità with norm UNI EN 1452, DM 06/04/2004 (ministerial decree n. 174 “Regulation concerning materials and objects which can be used within fixed plants of purification apparata, treatment, delivery and distribution of waters destinated to human consumption.

REQUIREMENTS OF RAW MATERIAL

The mixture used for the production of pipes of a delivery must be conform to UNI EN 1452-1 and made of inert charges of PVC, colour RAL 7011, stabilizers and other additives in a quantity necessary to facilitate the processes of extrusion, living, however, a guarantee of stability of the characteristcs of the polymer both during the working process and the life of the product.

The mixture used has to be accompanied by a documentation issed by a recognized laboratory certifying the value MRS (Minimum Required Strength) >/_25 MPa at 50 years.

REQUIREMENTS OF PIPES

Pipes have to be conform to UNI EN1452-2 and have to be idoneous for the tran sport of fluids under pressure, aqueducts, irrigation plants and the transport of food fluids.

The pipes are with sockets with rubber ring or solvent socket or plain ended and delivered in six meter lengths inclusive socket. They have to have a visible and indelible minimum marking according to the norm of reference, as follows:

- Name of the producer
- Quality mark of the product
- Number of the norm of reference UNI EN
- U-PVC material
- Outside diameter and wall thickness
- Nominal pressure PN
- Date of production, lot number, shift number, extruder number

- Guarantee of quality mark “TUBI PVC”

REQUIREMENTS OF SOCKET CONNECTION/RUBBER RING

Connections carried out by sockets/rubber ring must guarantee hydraulic tightness during the working process and tightness towards possible depressions which may happen on the line. Furthermore, they should allow maximum quickness and maximum security in laying. The gaskets must be conform to the norm UNI EN 681/1.

The producer of the pipes must document the positive result of the tests carried out on the system socket/gasket, as prescribed by the norm of reference. These tests have to be made according:

a) EN ISO 13844 elastomeric gaskets for socket connections to be used with U- PVC pipes – method of test for tightness of negative pressures;

b) EN ISO 13845 elastomeric gaskets for socket connection sto be used with U-PVC pipes – method of test for tightness of inside pressure with angular deflection of the joint.

QUALITY SYSTEM AND CERTIFICATES

a) The producing Company must have a certificate of conformity to the standards UNI EN ISO 9001 of its own Company’s Quality System, issued according to UNI CEI EN 45012 by Certifying Bodies, acknowledged and accredited Sincert.

b) The producing Company must have certificates of conformity of the product (quality marks) regarding the norm of reference, issued according to UNI CEI EN 45011 by Certifying Bodies, acknowledged and accredited Sincert.

c) Pipes have to be delivered with a documentation from the producer regarding the tests carried out on the connections socket/gasket, as described in the previous paragraph, certifying the positive result of these tests,

INSTRUCTIONS FOR LAYING AND TESTS

a) The Contractor must lay the pipes following the instructions of this document, respecting standards ENV 1452-6 working the best way possible.

b) The Contractor must test the pipelines on site under the supervision of the Direction of Work, in respect of the Ministerial Decree for Public Works dated 12/12/1985 and according to the methods forseen by UNI EN 805.