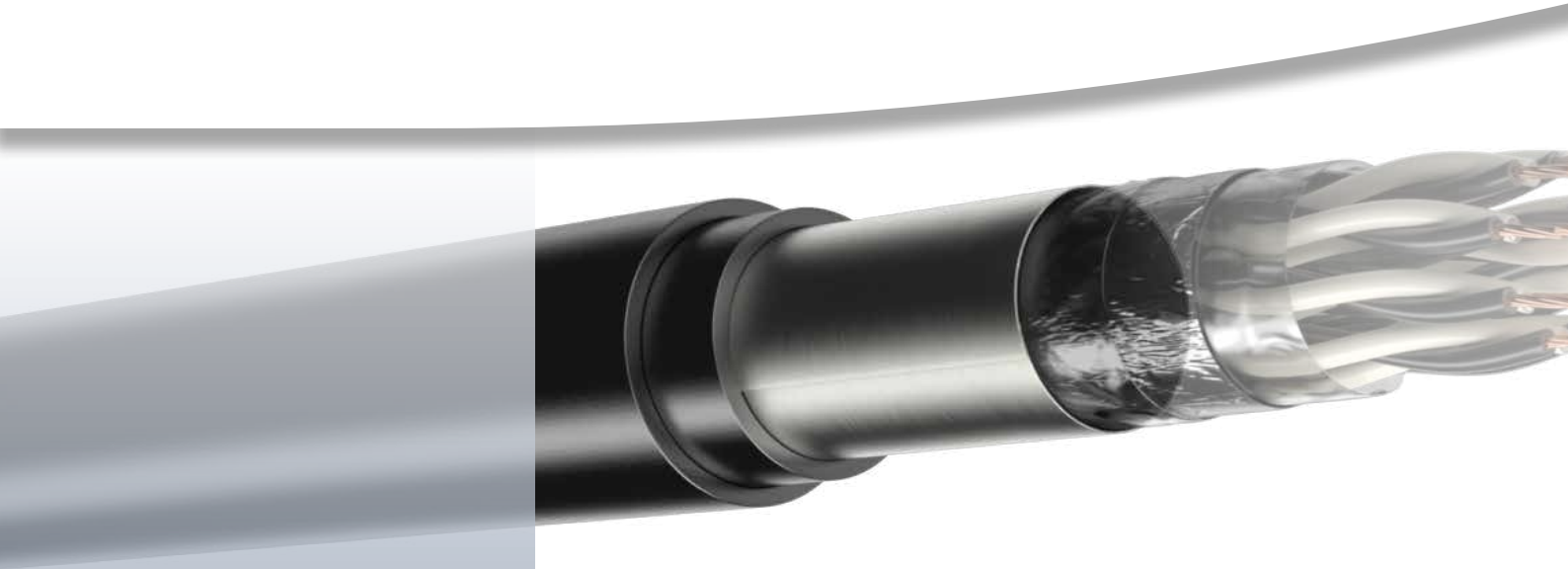


LEONI *technical report*

Industrial Projects technology 03/2017



Multilayer Sheath – alternative chemical protection

Multilayer Sheaths consist of a longitudinal plastic coated aluminium foil, an extruded layer of high-density polyethylene and an additional covering of polyamide. The aluminium foil is bonded to the high-density polyethylene sheath.

The alu/PE layer acts as a barrier against water and aqueous solutions. The HDPE sheath provides the resistance to inorganic chemicals such as acids, bases, inorganic salts and the PA sheath acts as a barrier against organic materials such as aliphatic and aromatic hydrocarbons, petrol, oil etc.

The combination of these three sheaths are an adequate alternative to lead sheaths for a large number of applications. Compared to cables with lead sheaths, those with multilayer sheaths are smaller and lighter. A further advantage of multilayer sheath constructions are that they are very cost-effective due to less weight, smaller dimensions and easy transportation and installation.

As proof the multilayer sheath has been tested by the KEMA test institute in the Netherlands. Short and long time test have been performed against different chemicals of the range of aliphatic and aromatic hydrocarbons, engine oils and oxidizing acids. Result was that the multilayer sheath construction is suitable as chemical protection in chemically hazardous areas, in industrial environments, refineries, oil and gas facilities where incidentally chemicals can enter the environment of the cables and can be used as replacement of the commonly used lead sheath.

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