

# Cross-Linked Polyethylene Materials Recycling by XLPE Power Cables Manufacturers



XLPE or cross linked polyethylene material is widely accepted material used by XLPE power cables manufacturers and other products like transformers. XLPE is recommended by experts to design high voltage resistant wire and cable, heat-shrinkable tube and film, corrosion resistant containers, and foam and other stuff.

At present, European and US markets are using XLPE pipes for hot and cold water pipes and heating systems. These plastic pipes are more durable and long-lasting and requiring less maintenance services.

Use of plastic pipe is booming across the globe. People are presently using galvanized pipe tubing for water pipes and gas pipes, PVC pipes for drainage pipes and casing, stainless steel pipe and brass are applied for water heating and advanced architecture.

Chemical industries are also installing XLPE piping solutions for running several processes.

Manufacturers are recycling the waste of XLPE waste by following these steps:

- Cleaning, drying, grinding
- Ground waste XLPE and additional accessories, coloring agents, fillers, or by specific ingredients percentage
- Kneaded ingredients extruded in an extruder machine.

It can operate under traditional conditions using a simple process with least investment, cost, and efficient advantages.

## Methods used by manufacturers

- XLPE recycling method Regeneration

The simple regeneration recycling technology involves the processing of XLPE waste in grinder. Grinding machine converts the waste into powder filler after sorting, cleaning, and directly molding with other blends of thermoplastic.

- Hot cutting plastics recycling technology

The heat substance recycling process is plasticized shearing thermal oxidation and mechanical shear force. The thermoplastic material is increased when the XLPE macromolecular major chain carbon-carbon bond damaged and molecular structure has a tendency to be non-body.

- Super critical fluid processing recycling

Manufacturers use continuous processing equipment with supercritical water or alcohol and process the waste to obtain thermoplastic mechanical and electrical properties.

- Ultrasound assisted recovery technology

You can learn about this technology while browsing online or approaching manufacturers.

Other than these technologies, there is one more innovative way that manufacturers use for recycling XLPE waste to produce distinct products including XLPE pipes, XLPE power cables etc. It is the solid phase cut milling recycling process that involves reactor. The reactor has a unique three shear structure and includes strong crushing, sheering, and hoop stress.

For more info about these technologies, you can anytime write to experts. You can even share your thoughts regarding recycling of XLPE waste and how it is good for environment.

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