Keeping people and businesses connected

In our global society, we know how important it is to stay connected. By protecting the wires, cables and fiber optics that are the heart of our telecommunications systems, conduit pipe plays a key role in keeping communication humming so we can continue doing the things we love: chatting with friends or family, searching for cooking tips online or closing an important business deal on the other side of the world. And, with the rapid, ongoing expansion of 5G networks and data centers, ensuring strong connections with excellent protection is becoming more important than ever.

Powerful protection, enhanced sustainability

Dow offers high density polyethylene (HDPE) solutions designed to meet the demands of telecommunications conduit and microduct applications. In fact, our most recent development – CONTINUUM™ DGDA-2488 Bimodal Polyethylene Resin – features a sophisticated molecular architecture that enables exceptional support of growing connectivity needs, even at extreme temperatures (-76 to 140°F [-60 to 60°C]).

Equally important, our durable HDPE materials offer conduit and telecom lines excellent resistance to impact, crushing, cracking, scratching and water absorption. Their excellent infiltration resistance and butt fusion capabilities help produce monolithic conduit with added protection against damage by groundwater and other potential threats.

The resins’ inherent toughness can also enable the use of thinner walls while maintaining performance requirements. This creates opportunities to use fewer raw materials, supporting sustainability efforts and potentially reducing overall costs.

Our solutions for telecommunications conduit and microduct applications are helping raise the bar for durability, performance and expected service life.
Speed you can rely on

Excellent processability means our bimodal PE resins can help improve productivity while maintaining uniform quality – run after run. For example, CONTINUUM™ DGDA-2488 Bimodal HDPE offers up to 10 percent faster production rates than conventional polyethylene on various commercial extruders. Not only is it faster, but it’s also extremely consistent, thanks to outstanding quality control in our manufacturing facility and supply chain.

Our strong understanding of bimodal pipe resin design and production allowed us to develop and commercialize this exciting breakthrough in less than six months. How did we do it? By thoroughly evaluating application needs; leveraging extensive in-house capabilities; and working closely with customers, industry experts and others throughout the value chain. And in spite of its rapid development, the resin was subjected to a rigorous battery of testing at our world-class analytical laboratory and pilot scale production facilities.

Tough, flexible conduit made with HDPE resins from Dow also supports trenchless installation techniques, which are typically less disruptive to communities and the environment.

Let’s get connected

We’re constantly working to develop next generation polyethylene solutions that combine improved performance, processability and sustainability. If you’re as excited as we are about helping friends, families and businesses across the world stay connected, we hope you’ll contact us to develop innovative, sustainable conduit solutions.

For more information about Dow, visit www.dow.com/about. To contact a Dow representative, visit, www.dow.com/contact.