

Solutions for **Energy** Applications

High-performance insulation, sensing, and encapsulation protection.



Critical Applications

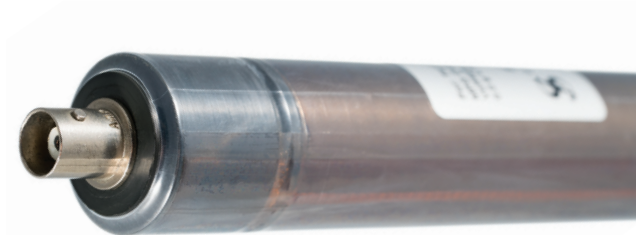
Diverse products for use when materials are exposed to difficult working conditions and environmental extremes.

Exploration:

CORE SAMPLING: We have a number of heat shrinks that allow customers to insulate core samples and apply a durable skin/jacket that is chemically inert. Available options include FEP, PEEKShrink™, and PFA heat shrinkable solutions to keep core samples encapsulated for later analysis.



BATTERY PACK ENCAPSULATION: Our FEP heat shrink is often the solution of choice, but we offer other heat shrink options including PFA, PEEKShrink™, and PET. These heat shrinks help protect the battery pack from moisture and chemicals while providing an additional thermal barrier.



SENSOR ENCAPSULATION: A step beyond conventional heat shrink, our Dual-Shrink™ is a bilayer heat shrink that offers superior encapsulation and protection. Zeus Dual-Shrink™ is available in two variations: a PTFE/FEP Dual-Shrink™ and a low temperature FEP/EFEP Dual-Shrink™.



Production:

OPTICAL FIBER COATINGS AND SHEATHING: We offer thermally stable PEEK coated optical fiber that can reach temperature levels of 260 °C / 500 °F. These coated fibers minimize attenuation and provide the protection from abrasion that PEEK is known for.

We hold machine grade tolerances ($\sim 0.001''$ / 0.025 mm) on plastic tubing used as sheathings in fiber optics. Our Engineered Surface options can reduce friction and drag on tubing used for sheathing. Fillers such as glass can be introduced to reduce elongation and promote bondability of the tubing.



PEEK BRAIDED FIBER: Our PEEK braided fiber shields against heat and abrasion from rough handling and component deployment. This highly durable material offers excellent mechanical strength and stiffness and can be used in temperatures up to 260 °C / 500 °F. PEEK is highly resistant to hydrolysis and exhibits broad spectrum chemical resistance for use in almost any energy environment. Size, profile customization, and colors are available for our PEEK fiber.



High Temperature Insulated Wire

PEEK INSULATED WIRE: PEEK offers an excellent dielectric strength of up to 3,000 V/mil*. It also offers a continuous service temperature of 260 °C / 500 °F, superior abrasion resistance, and the ability to withstand moisture and radiation.

PEEK Insulated Wire is utilized in electric motors, generators, transformers, solenoids, and other electromechanical equipment as an ideal magnet wire that drives equipment performance in harsh environments. We can insulate many different wire types with PEEK including: solid copper; plated (tin, silver, or nickel); stranded, square or rectangular profile wires; stainless steel and other custom types.

Additional wire coatings such as PTFE, PFA, ETFE or FEP are also available.

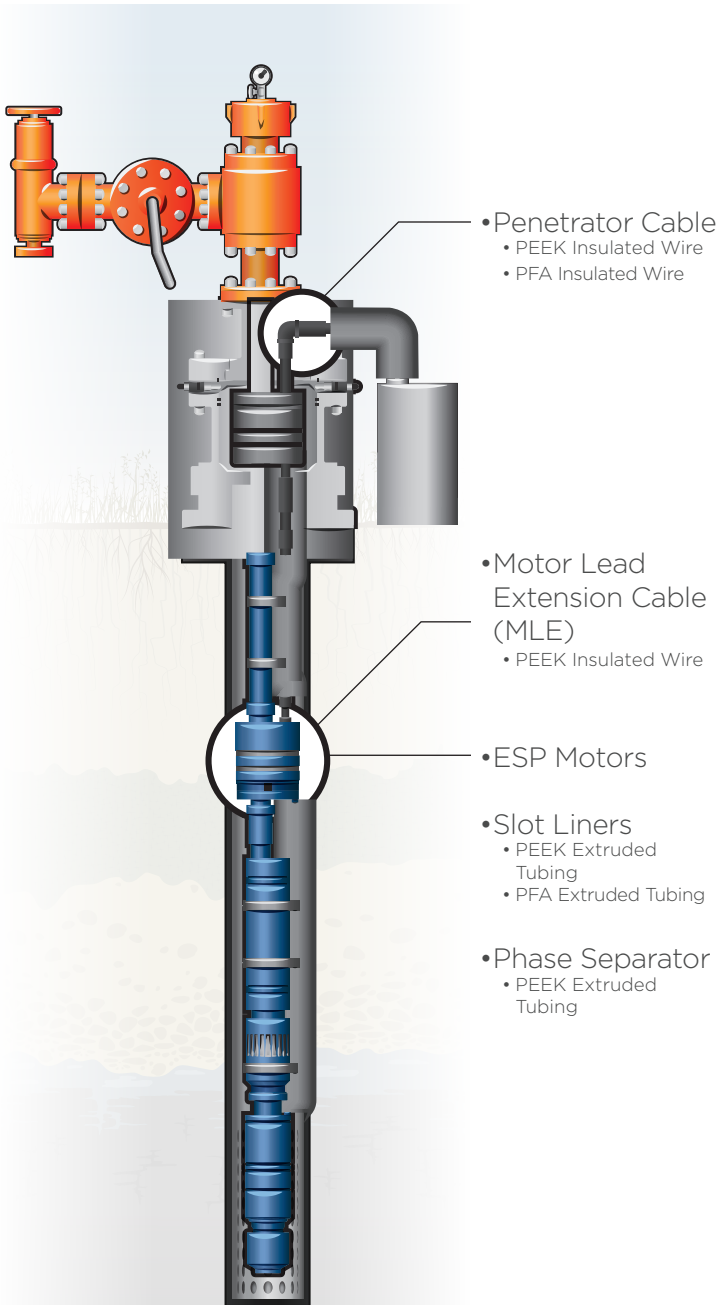
**Dielectric strength results are dependent upon wall thickness.*



Continuous Improvement

Energy is a fundamental part of our everyday lives and it plays an essential role in global economic growth. Although most of our energy needs have been met through the consumption of nonrenewable resources such as oil, coal, natural gas, and nuclear sources, there has been an increased emphasis on consumption through renewable sources such as biomass, geothermal, hydroelectric, solar, and wind.

For over 50 years, Zeus has been supplying extruded products or components to support the advancement of renewable and nonrenewable technologies that meet new design challenges.



Electromechanical Insulation

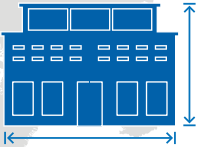
CUSTOMIZED EXTRUSIONS AND TUBING:

We provide round tubing, Lay-Flat™ tubing, or extruded profiles from resins such as PEEK, PFA, PTFE, and FEP which can be used for ground wall or slot liner insulation. Annealing options are available to increase dimensional stability at high temperature ranges.

About Zeus.



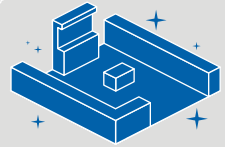
1,500
EMPLOYEES



400,000+ ft²
MANUFACTURING SPACE



23
CLEAN ROOMS



3,876 ft²
DEVOTED TO
CLEAN ROOMS



50+
SCIENTISTS,
ENGINEERS &
R&D PERSONNEL



5,000 ft²
BIOABSORBABLES
RESEARCH & MFG.



100+
CLASS VI APPROVED
RESINS & PIGMENTS



ZOS
OPERATIONAL
EXCELLENCE



**ISO
CERTIFIED**
ISO 9001
AS 9100
ISO 13485
IATF 16949

- OVER 50 YEARS OF INDUSTRY SOLUTIONS -

Zeus delivers precision polymer solutions that transform businesses, markets, and lives. We have dedicated ourselves to building partnerships, products, and services for the benefit of our customers.

Headquartered in Orangeburg, South Carolina, Zeus employs approximately 1,500 people and operates multiple facilities around the world.



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