

# Nytef Application Ideas

## High Performance Material "Measures Up"

**Background:** A leading manufacturer of precision analytical and measuring devices was proceeding with a design for a new line of equipment, featuring non-intrusive measurement of conductivity and chemical concentrations during industrial processes. Desired design parameters included; no complex sampling, no calibration, low maintenance, no contamination or flow obstruction, and no possibility of damage to either the system or the measurement apparatus.

**Problem:** Although the design engineers at this company had access to several material databases, finding a product that satisfied all of the design considerations without compromising equipment performance proved to be a daunting task. Not one material considered appeared to be up to the task.

Nytef Engineered Solution: Because of their experience in manufacturing material for use in similar demanding operating environments, the Nytef Sales Team rapidly narrowed the list of potential raw materials, concentrating on both standard and glass-filled Unitrex PEEK grades for this application. Both Unitrex and Unitrex Rg easily meet the needs for high heat resistance at relatively high (250 psi) pressure; exceed chemical resistance and non-conductivity needs, and offer both FDA and 3-A compliance to prevent material contamination during the measurement process. Because Unitrex meets all desired design requirements, this manufacturer was able successfully introduce a highly valued, highly efficient product to the market.





These sensor components in various configurations are precision fabricated from both glass-filled and standard grades of PEEK for exceptional performance in process measurement applications.

#### **Industries**

- Aerospace
- **Automotive**
- Chemical
- Food/Beverage
- Petroleum
- **Pharmaceutical**
- Medical
- **Semiconductor**
- **Transportation**
- Packaging/Labeling

#### **Materials**

- Acetal
- Nylon
- PEEK
- PPS
- PBT
- PPO
- PVDF
- PEI (Ultem®)
- **Polycarbonate**
- **Custom Filled**

### **Nytef Customer Fulfillment Centers**

- Philadelphia- 633 Dunksferry Rd., Bensalem, PA
- Chicago- 1610 Jarvis Ave., Elk Grove Village, IL
- Los Angeles- 13185 Imperial Hwy., Whittier, CA
  West Palm Beach- 6643 42<sup>nd</sup> Terrace, North, FL

National Toll Free-- 800-646-9833

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