

Fluon+™ Reinforced Compounds Optimized for Harsh Conditions

AGC

AGC

Introduction to Melt Processable Compounds



Your Dreams, Our Challenge

Why Fluoropolymer Compounds?



- Fluoropolymer resins impart unique characteristics.
- Performance is further increased by the use of various fillers.
- AGC offers filled PTFE compounds and melt processable compounds.

Product Groups

Concentrates

- Color
- Foam

Ready-to-Use

- Cross-link compounds
- Reinforced compounds
- Conductive compounds
- Lubricated compounds

Modified

- Flexible AR compounds
- Adhesive compounds
- Modified PEEK and PPS

Concentrates

Color concentrates

- Resins used: ECTFE, ETFE, PFA, MFA, FEP, PVDF
- High-melt flow and low-melt flow types available
- Superb surface finish, color consistency and dispersion
- Consistent pellet size and integrity
- Standard colors and custom match to various color standards such as Munsell, RAL and Pantone

Foam concentrates

- Resins used: ECTFE, ETFE, FEP, PFA, MFA, PVDF
- High-melt flow and low-melt flow types available
- Can be customized to meet specifications
- Minimize signal loss, enhance high-speed transmission
- Save weight and material

Re-Inventing ETFE: Stress Crack Improvement

- Aimed at automotive standard LV112 (Class F)
- C-88AXM-HT is almost 20% *less dense* than FEP
- Performs well at temperatures up to 200 °C
- Full range of color concentrates available

	C-88AXM-HT ETFE	Standard ETFE
5% weight loss	395 °C	380 °C
10% weight loss	405 °C	390 °C
MIT (no. cycles)	26,500	16,400
Tensile Elongation (%)	550	496
Tensile Strength (Mpa)	52	52
Stress Crack T*	220 °C	185 °C

Reinventing ETFE: Stress Crack Improvement

Standard ETFE



Ultra Heat Resistant C-88AXM-HT ETFE

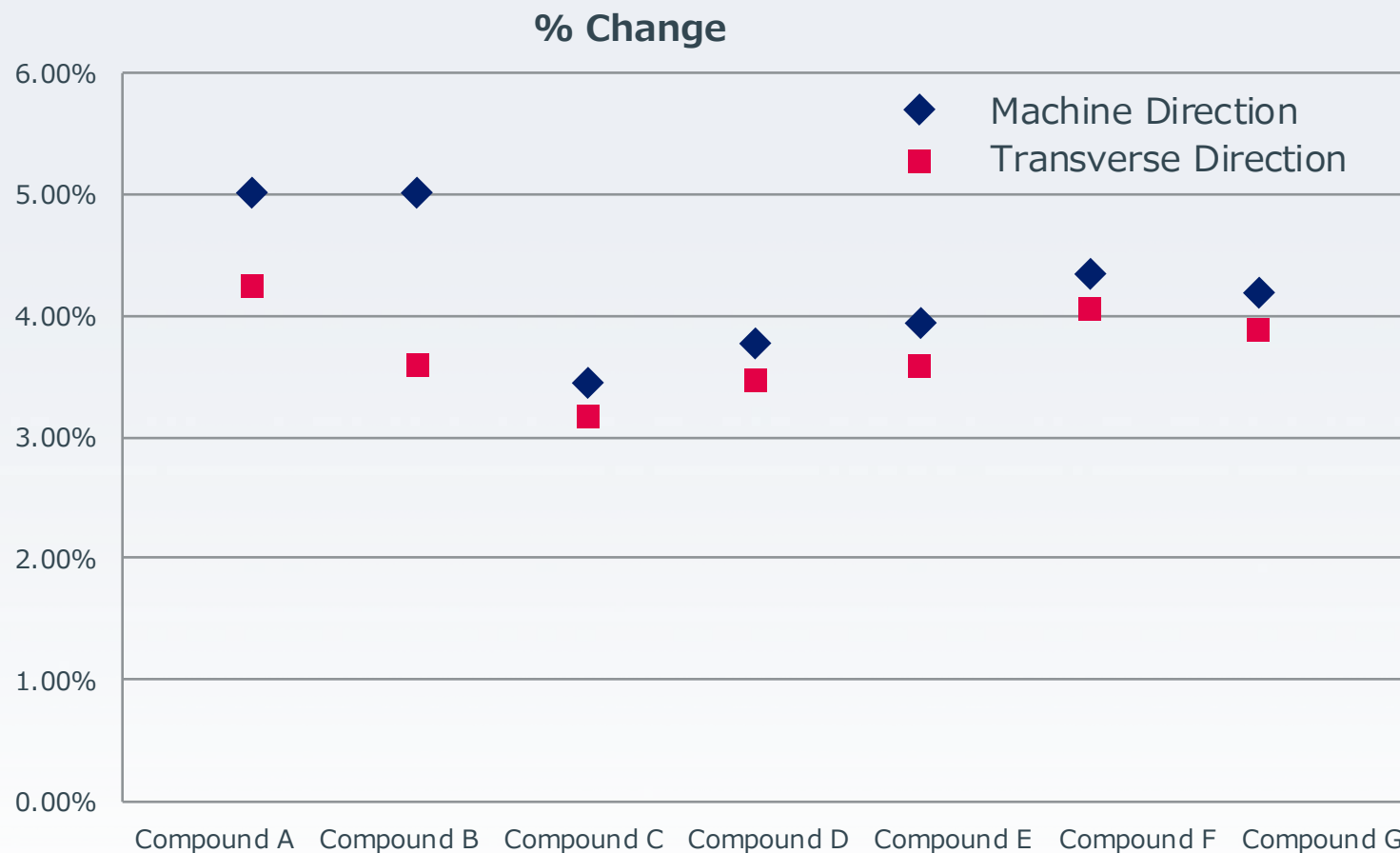


Procedure:

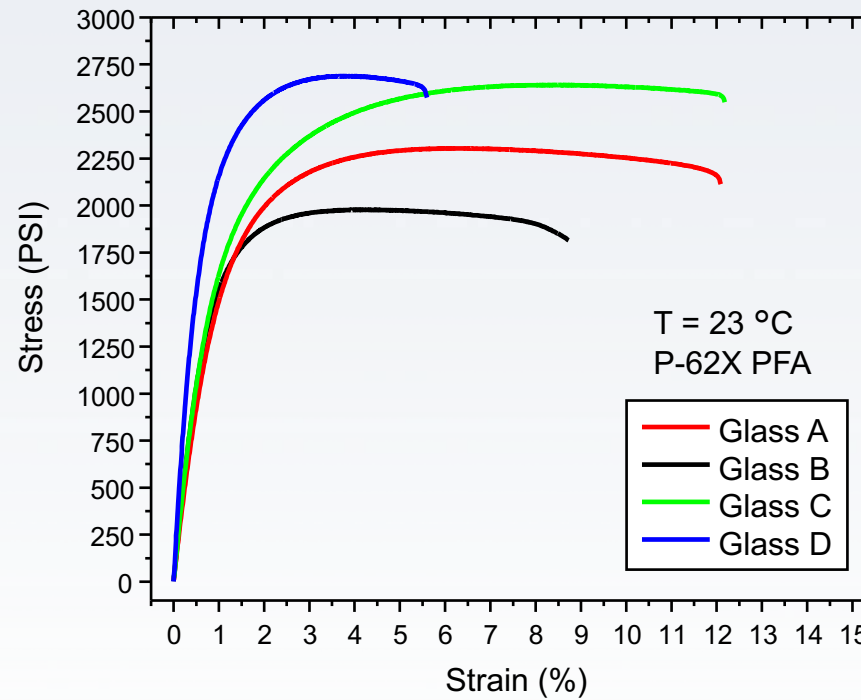
- Pre-aged 3 hours @ 225 °C before coiling
- 6 hours @ 225 °C after coiling

Shrink Reduction in PFA

Shrinkage (%)

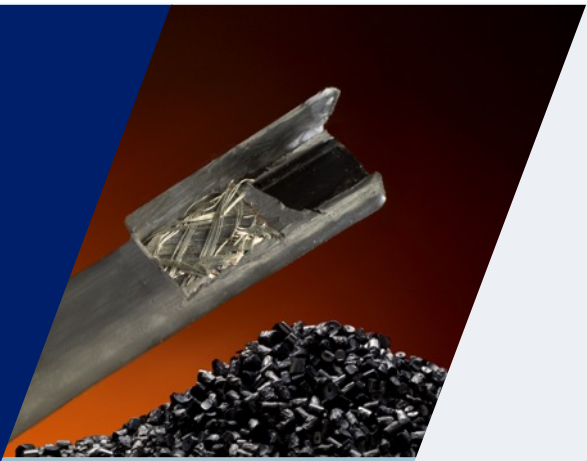


Glass-Reinforced Compounds



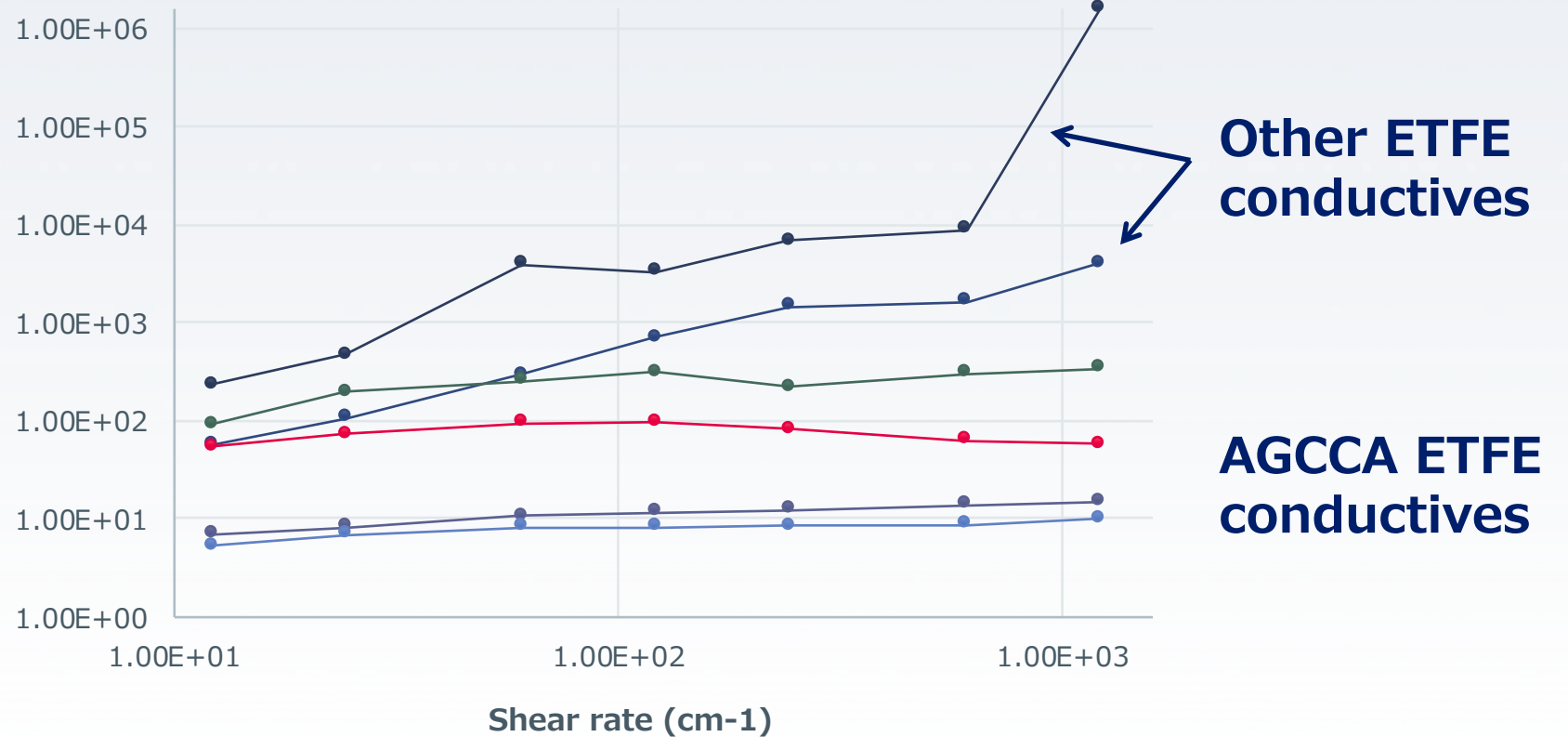
Not all glass is equal

- Chopped vs. milled
- Treated vs. untreated fibers
- Type of fiber treatment
- Performance at elevated temperatures



Conductive & Anti-Static Compounds

- Extremely stable conductivity
- Resistant to shear process
- Minimized losses over time



Downhole Cable Applications

- 25,000 ft depth
- 15,000 psi
- Ultra smooth outer surface
- Abrasion resistance
- Torsion and tension
- Extreme temperature cycling
- Bending fatigue



Conductor

Insulator

Inner Armor

**Inner
Fluoropolymer Jacket**

Outer Armor

**Carbon Filled
Fluoropolymer Jacket**



AGC



**Contact Us
for more Information**



Learn more
www.agcchem.com
610-423-4300 800-424-7833

Your Dreams, Our Challenge