

# Diffusers and shrouds

## Fluorosint® 500 PTFE for Turbo compressors



### Tighten the clearance between your diffuser and impeller

Fluorosint® 500 PTFE has been the industry standard for abradable polymer seals for over forty years. In gas distribution pump systems, surges are common. To off set the problem large clearances between impellers and diffusers are established and leads to low efficient machines. To reduce the clearance and improve compressor performance adding Fluorosint® 500 PTFE shroud inserts is the answer. As a bonus, along with the efficiency gains, Fluorosint® 500 PTFE becomes the sacrificial component keeping the high priced impeller from being destroyed if contact is made.

### Key benefits

- Increased compressor efficiency
- Reduced repair on impellers
- Increased design capabilities

### Trends In turbo compressor market

- Improved efficiency and reliability in compressors
- Eliminate destruction of impeller in surged compressors
- Reduced chemical corrosion
- Provide longer life material than thin coated films
- Cost effective solutions, easy to manufacture

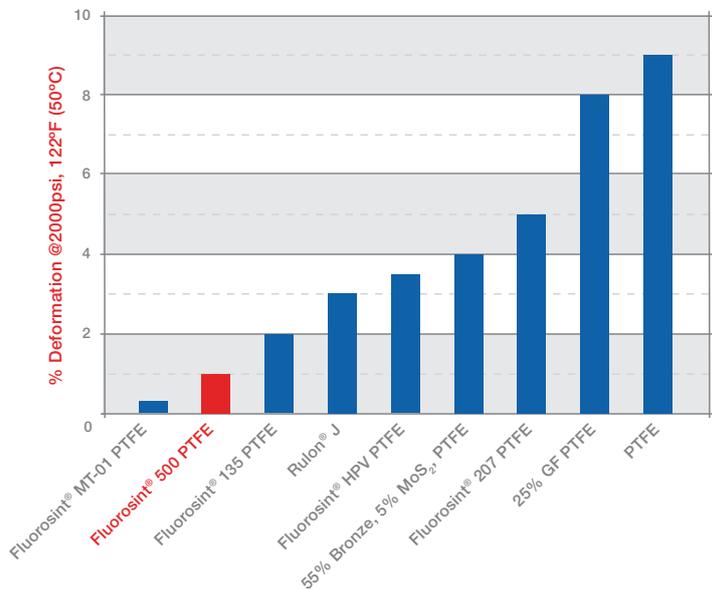
### Customer value

- Fluorosint® 500 PTFE stiffness at elevated temperature
- Coefficient of Linear Thermal Expansion similar to aluminum
- High resistance to fuels, lubricants and chemicals
- Near net shapes, machining and molded parts

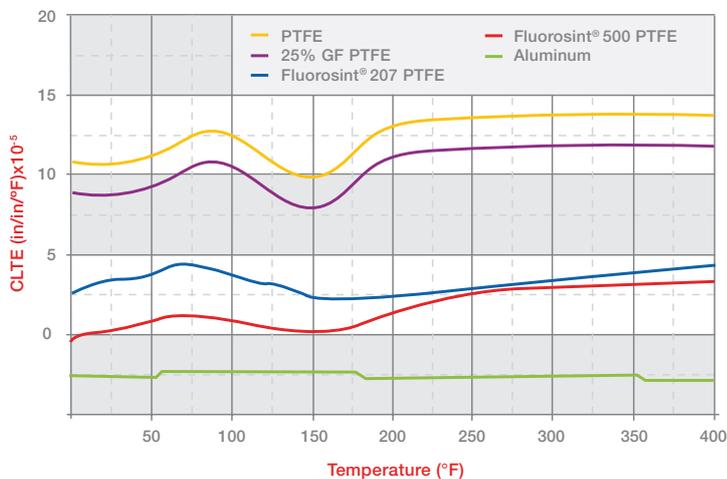
- Reduced downtime
- Lower cost in service
- NORSOK M-710 (sour gas aging) compliance for Ketron® PEEK stock shapes

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### Deformation under load



### Coefficients of Linear Thermal Expansion



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