

# TRUTECH™ 3210 MATERIAL

## *Superior Performance for High-Temperature, Non-Lubricated Applications*

*TruTech 3210 is a special polymer alloy created for rod packing, piston rings and riders used in non-lubricated and/or high-temperature applications. It is uniquely suited for the demands of injection-stretch blow molding processes used to produce PET (polyethylene terephthalate). It also provides outstanding performance in a variety of other applications, both lubricated and non-lubricated.*



### Exceptional Wear Resistance

TruTech 3210 is a blend of proprietary fillers in a matrix of PTFE (polytetrafluoroethylene). It was developed for non-lubricated applications up to 1,000 psi/70 bar and lubricated applications up to 2,500 psi/175 bar. TruTech 3210 has demonstrated exceptional wear behavior with air, methane, propane, LNG and bone dry gases.

TruTech 3210 is suitable for a wide range of rod packing rings, piston rings and rider rings. It exhibits excellent mechanical properties and readily accommodates special features. As with all Cook Compression products, the performance of TruTech 3210 is backed by extensive engineering research and analysis.

### TRUTECH MATERIALS

TruTech is a family of innovative, engineered materials available exclusively from Cook Compression. Incorporating the latest advances in polymer science, TruTech materials offer superior performance in component durability and critical sealing characteristics. Experienced Cook Compression specialists provide engineering support to assure optimum results in each application.



*Ideal for PET blow molding applications*

### FEATURES

- ▶ OUTSTANDING DURABILITY IN OIL-FREE APPLICATIONS
- ▶ EXCELLENT SERVICE IN BONE DRY (VERY LOW DEW POINT) ENVIRONMENTS
- ▶ MORE TOLERANT OF DIRTY GAS STREAMS
- ▶ SUITABLE FOR USE IN MANY LUBRICATED AND NON-LUBRICATED APPLICATIONS
- ▶ RIGOROUSLY TESTED AND FIELD-PROVEN
- ▶ SUPPORT FROM COOK COMPRESSION IN-HOUSE ENGINEERS TO ASSURE PROPER MATERIAL SELECTION AND APPLICATION

**TruTech 3210 provides outstanding performance in a variety of lubricated and non-lubricated applications**



Typical Properties		
Tensile strength	1800 psi	ASTM D638
Elongation	130%	ASTM D638
Coefficient of thermal expansion	68x10 <sup>-6</sup> /°F	ASTM E831
Hardness	65 Shore D	ASTM D2240
Specific gravity	3.9	ASTM D792

Application Histories					
Service	Lube (Yes/No)	Product Type	Discharge psi/bar	Ave Speed Ft/Min / M/S	Performance Comments
Propane	N	piston rings	350/25	900/4.6	10x improvement over filled ptfe
Methane	Y	rider rings	400/28	1,000/5.1	15x improvement over OEM
Air	N	piston rings	680/47	700/3.6	2x improvement over OEM
Propane	N	rod rings	350/25	900/4.6	10x improvement over filled ptfe
Methane	Y	rider rings	1,200/83	1,000/5.1	15x improvement over OEM
Air	N	piston rings	575/40	700/3.6	2x improvement over OEM

### MATERIALS TECHNOLOGY

The Cook Compression Materials Technology program integrates the latest advances in materials with extensive engineering resources and more than a century of practical experience. New materials receive intensive laboratory analysis and

undergo comprehensive testing in Cook Compression in-house test compressors before release to the field.

Every Cook product incorporates both leading materials technology and the industry's most rigorous quality standards in manufacturing.



*One Name, a World of Solutions*

Compressor Valves | Capacity Control | Valve Restraining Systems | Rod Rings | Packing Cases | Piston Rings | Rider Rings  
 Pistons | Rods | Cylinder Liners | Compressor and Engine Repair Services | Diagnostics and Analysis Services | Online Monitoring  
 and Response Systems | Lubrication Systems and Services | Control and Automation | Engineering and Technical Support

**CookCompression.com**