

# TRUTECH™ 3330 MATERIAL

## The Solution for Oil-Free, Dry-Gas Service

*Extends service life in tough, bone-dry gas applications where PTFE alloys fall short*



### ROBUST NON-LUBE COMPONENTS

New TruTech 3330 material is a proprietary polymer alloy developed by Cook Compression to produce long-life sealing components for non-lubricated gas compressors. It is formulated to be especially effective in bone-dry (extreme low dew point) applications, but can also offer excellent results in wet service.

TruTech 3330 material delivers exceptional performance in packing rings, piston rings, rider rings and bushings. The unique formulation, together with Cook Compression's advanced manufacturing methods, produce sealing components that boost reliability in applications where PTFE's and other low-friction materials give poor service life.

### PROVEN DRY GAS ENDURANCE

Seal rings experience severe wear in dry-gas applications, particularly as pressures and speeds increase.

*TruTech 3330 material produces long-life components for challenging non-lube compressor applications*



Components made from TruTech 3330 material offer significantly longer service life in these applications, with up to eight times the longevity of traditional PTFE materials. Components made from TruTech 3330 have delivered longer, more reliable service with a wide range of dry gases, including hydrocarbon mixtures, natural gas, ammonia, ethylene and more.

### ADVANTAGES

- ▶ OUTSTANDING SERVICE LIFE IN OIL-FREE COMPRESSOR APPLICATIONS
- ▶ EXCEPTIONAL DURABILITY WITH BONE-DRY GASES
- ▶ UP TO 8 TIMES THE DURABILITY OF PTFE COMPONENTS IN DRY-GAS SERVICE
- ▶ EXTENDED LIFE IN WET SERVICES
- ▶ USED TO MAKE A WIDE VARIETY OF SEALING COMPONENTS
- ▶ COOK COMPRESSION ENGINEERING SUPPORT FOR MATERIAL SELECTION AND APPLICATION

### Application Histories

Service	Lube (Yes/No)	Product Type	Discharge psi	Ave Speed Ft/Min	Comments
Natural Gas	N	Packing rings	670	600	8x improvement over filled PTFE
Isobutane	N	Piston rings Rider rings	225	750	3x improvement over filled PTFE
Ethylene	N	Piston rings Rider rings	195	814	3x improvement over filled PTFE
Carbon dioxide	N	Piston rings Rider rings Packing rings	240	430	6x improvement over filled PTFE
Ethylene	N	Piston rings	200	788	4x improvement

**TruTech 3330 material makes packing rings, piston rings, rider rings and bushings last longer in oil-free, dry-gas service**

**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 performance characteristics. Experienced Cook Compression specialists provide engineering support to assure optimum results in each application.

**MATERIALS TECHNOLOGY**

The Cook Compression Materials Technology program integrates materials research with our 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 Compression product incorporates both leading materials technology and the industry's most rigorous quality standards in manufacturing.

For more information about TruTech 3330 and the benefits of optimizing material selection for your application, contact your Cook Compression representative.



*Rings made from TruTech 3330 material last up to 8 times longer than PTFE alloys in bone-dry service*

Typical Properties		
Tensile strength at 68°F	1600 psi	ASTM D1708
Elongation at 68°F	5%	ASTM D1708
Coefficient of thermal expansion	45 x 10 <sup>-6</sup> in/in/°F	ASTM E831
Hardness	65-70 D	ASTM D2240
Specific gravity	1.9	ASTM D792



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