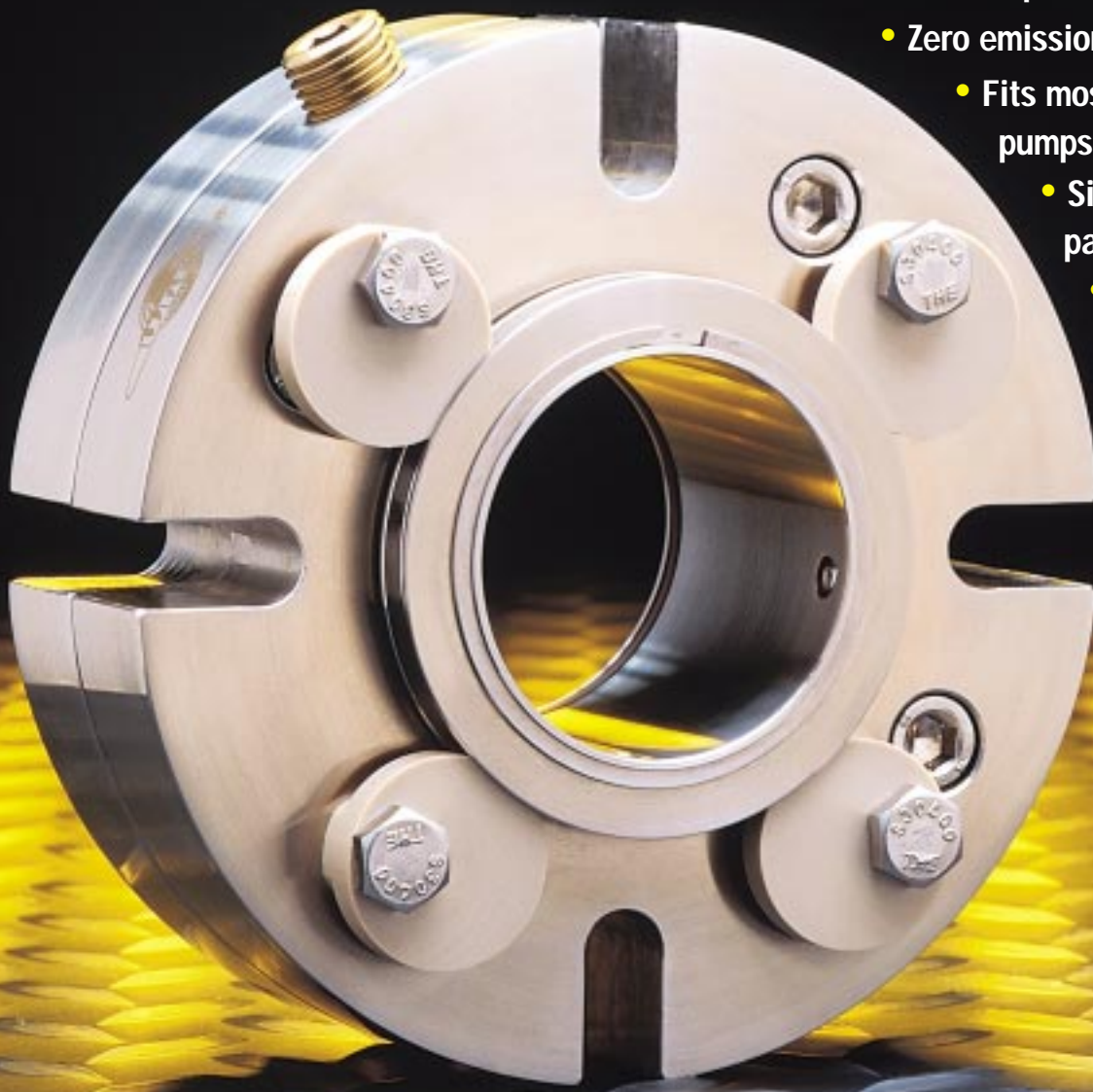


UTEX INDUSTRIES, INC.

# DCG Seal™

DUAL COAXIAL GAS SEAL



- Fits smallest axial space available
- Zero emissions
- Fits most popular ANSI pumps
- Simple control panel design
- Low maintenance cost
- Eliminates liquid barrier systems



UTEX INDUSTRIES, INC.  
Taking Sealing Technology Beyond Tomorrow  
ISO 9001 Certified

# Gas Seal

## Features

Unique double step lift-off face design

Provides an effective positive pressure barrier against any escape of process fluid to the atmosphere

Coaxial coplanar face design  
(two active gas seals on a single face)

Operates without face contact

Low friction PTFE secondary seals

Springs are isolated from the product

## Benefits

Provides complete lift-off and zero wear

Zero emissions

Achieves the smallest axial space – fits most ANSI pumps

Results in low heat generation and power consumption

Prevents hang-up problems

Prevents clogging of the springs

## Specifications

### Metal Components

316 Stainless Steel

### Seal Rings

Stationary Seal Ring - Carbon is standard

Rotary Seal Ring - Silicon Carbide is standard

Note: Other materials available

### Dynamic Secondary Seals

Low Friction PTFE Lip Seals

### Static Elastomers

Fluorocarbon O-Rings are standard

Note: Other materials available

### Temperature

0° to 450° F (18° to 230° C)

### Pressure

0 to 300 psi (20 bar)

### Speed

Up to 5000 fpm (25m/s)

### Sizes

ANSI	1.000" to 3.000"
Big Bore	1.000" to 3.000"
Metric	25 mm to 75 mm

# Dual Coaxial

## UTEX Industries, Inc. Introduces the DCG™ – Dual Coaxial Gas Seal

UTEX Industries, Inc. has developed a dual coaxial gas seal with all the benefits of a double seal. The DCG seal will fit most popular ANSI pumps including those with small diameter stuffing box bores. The new seal design achieves one of the shortest axial sealing lengths by utilizing two unique seal faces on the same plane and same axis.

### Zero Emissions

The DCG seal has been designed to accept injected gas pressure directly between the faces. The outer coplanar seal face allows a minute amount of gas into the process fluid side. The unique design provides an effective positive barrier against any escape of process fluid to the atmosphere.

### Engineered for Reliable Operation

The new DCG seal provides reliable sealing for abrasive, low lubricity and multiphase liquids because the gas flow effect creates a barrier that keeps harmful particles away from the seal faces. In the event of loss of gas pressure, the DCG is capable of full recovery once gas pressure has been re-established in non-abrasive and non-sticky fluids. Under a loss-of-gas condition, the seal will operate as a conventional contacting seal and will contain the process fluid with controlled leakage.

### Low Heat Generation and Low Power Consumption

The DCG seal operates without contact which eliminates high frictional heat. Seal life and time between planned maintenance is dramatically increased, reducing operation cost.

### Simple Control Panel

A standard control panel is required to maintain filtered gas (air or nitrogen) pressure at 20 to 30 psi (0.14 to 0.21 MPa) above the maximum anticipated stuffing box pressure. The totally self-contained control panel consists of a ball valve, pressure gauge, check valve, flow meter, integrated filter and regulator.



### Reliable Operation

The DCG dual coaxial gas seal has been extensively tested in both laboratory and field conditions. The seal is designed for ease of installation.

### Applications

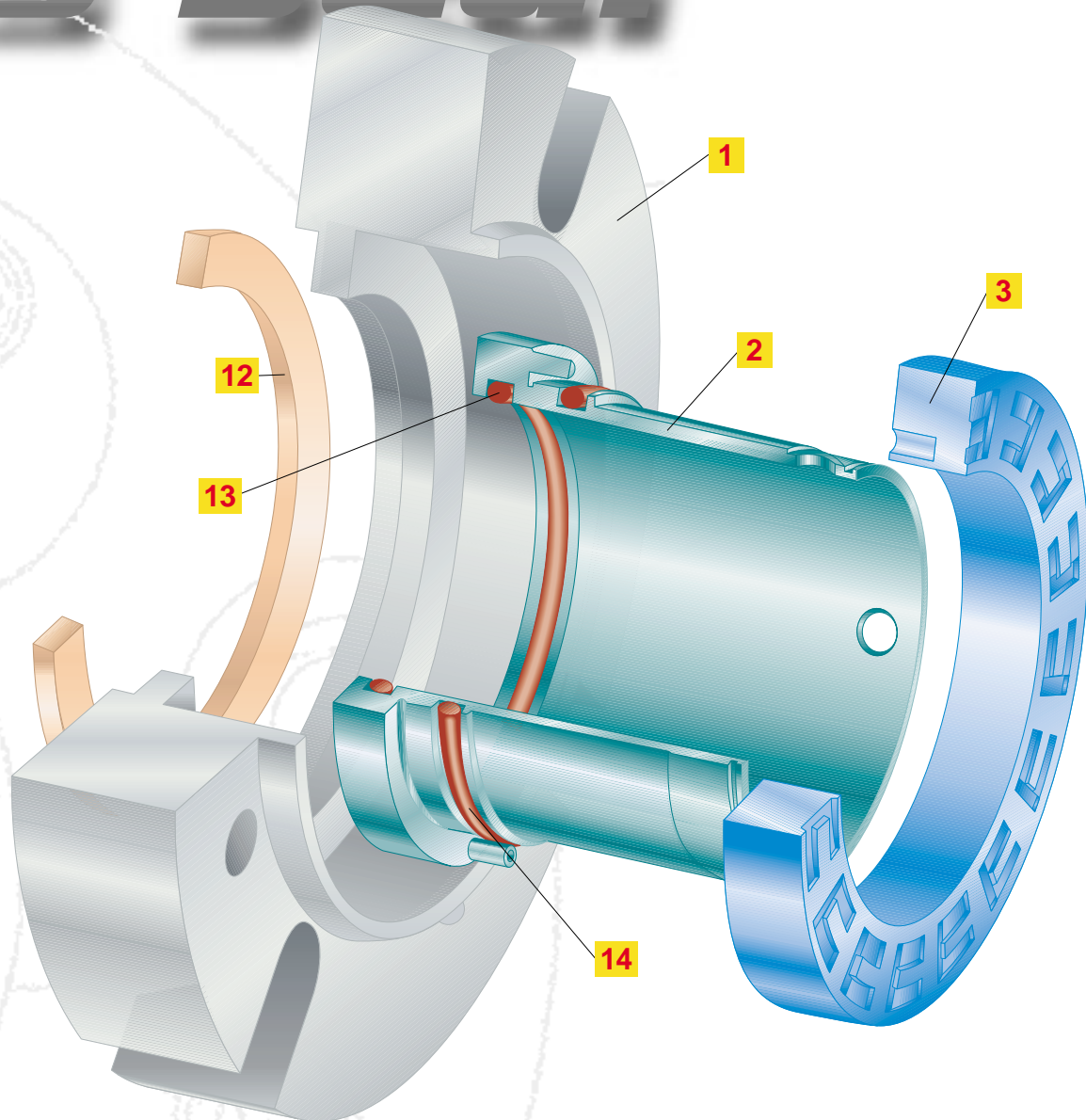
- Toxic Services
- Hazardous Services
- Acid/Caustic Services
- Environmentally Sensitive Services
- Dry Running Applications

### Industries Served

- Refineries and Petrochemicals
- Waste-Water Treatment
- Pulp & Paper
- Food Processing

# Gas Seal

- 1. Inner Housing
- 2. Shaft Sleeve
- 3. Mating Ring
- 4. Primary Ring
- 5. OD Secondary PTFE Seal
- 6. ID Secondary PTFE Seal
- 7. Drive Ring
- 8. Springs
- 9. Outer Housing
- 10. Drive Collar
- 11. Retaining Ring
- 12. Gasket
- 13. O-Ring
- 14. O-Ring
- 15. Coplanar, Coaxial Sealing Face



Patent Pending

SHAFT (in) (mm)	STUFFING BOX BORE		STUFFING BOX BORE		PILOT DIAMETER		INSTALLED LENGTH		GLAND LENGTH		GLAND DIAMETER				BOLT SIZE 5/16(in) 8(mm)				BOLT SIZE 3/8(in) 10(mm)				BOLT SIZE 7/16(in) 12(mm)				BOLT SIZE 1/2(in) 12(mm)						
	A	B	B	B	C	C	D	D	E	E	G	G	MIN	MIN	MAX	MAX	MIN	MIN	MAX	MAX	MIN	MIN	MAX	MAX	MIN	MIN	MAX	MAX	MIN	MIN	MAX	MAX	
1.000	25	1.250	31.8	1.860	47.2	2.037	51.7	1.661	42.2	1.260	32.0	4.000	101.6	2.563	65.1	3.688	93.7	2.625	66.7	3.625	92.1												
1.125	29	1.375	34.9	1.860	47.2	2.037	51.7	1.661	42.2	1.260	32.0	4.000	101.6	2.563	65.1	3.688	93.7	2.625	66.7	3.625	92.1												
1.188	30	1.438	36.5	2.110	53.6	2.287	58.1	1.692	43.0	1.291	32.8	4.375	111.1	2.813	71.4	4.063	103.2	2.875	73.0	4.000	101.6	2.938	74.6	3.938	100.0	3.000	76.2	3.875	98.4				
1.250	32	1.500	38.1	2.110	53.6	2.287	58.1	1.692	43.0	1.291	32.8	4.375	111.1	2.813	71.4	4.063	103.2	2.875	73.0	4.000	101.6	2.938	74.6	3.938	100.0	3.000	76.2	3.875	98.4				
1.312	33	1.562	39.7	2.110	53.6	2.287	58.1	1.692	43.0	1.291	32.8	4.375	111.1	2.813	71.4	4.063	103.2	2.875	73.0	4.000	101.6	2.938	74.6	3.938	100.0	3.000	76.2	3.875	98.4				
1.375	35	1.625	41.3	2.110	53.6	2.287	58.1	1.692	43.0	1.291	32.8	4.375	111.1	2.813	71.4	4.063	103.2	2.875	73.0	4.000	101.6	2.938	74.6	3.938	100.0	3.000	76.2	3.875	98.4				
1.500	38	1.750	44.5	2.610	66.3	2.613	66.4	1.860	47.2	1.449	36.8	4.750	120.7	3.313	84.1	4.438	112.7	3.375	85.7	4.375	111.1	3.438	87.3	4.313	109.5	3.500	88.9	4.250	108.0				
1.562	40	1.812	46.0	2.610	66.3	2.613	66.4	1.860	47.2	1.449	36.8	4.750	120.7	3.313	84.1	4.438	112.7	3.375	85.7	4.375	111.1	3.438	87.3	4.313	109.5	3.500	88.9	4.250	108.0				
1.625	41	1.875	47.6	2.610	66.3	2.613	66.4	1.860	47.2	1.449	36.8	4.750	120.7	3.313	84.1	4.438	112.7	3.375	85.7	4.375	111.1	3.438	87.3	4.313	109.5	3.500	88.9	4.250	108.0				
1.687	43	1.937	49.2	2.985	75.8	2.869	72.9	2.028	51.5	1.609	40.9	5.500	139.7	3.688	93.7	5.188	131.8	3.750	95.3	5.125	130.2	3.813	96.8	5.063	128.6	3.875	98.4	5.000	127.0				
1.750	44	2.000	50.8	2.985	75.8	2.869	72.9	2.028	51.5	1.609	40.9	5.500	139.7	3.688	93.7	5.188	131.8	3.750	95.3	5.125	130.2	3.813	96.8	5.063	128.6	3.875	98.4	5.000	127.0				
1.875	48	2.125	54.0	2.985	75.8	2.869	72.9	2.028	51.5	1.609	40.9	5.500	139.7	3.688	93.7	5.188	131.8	3.750	95.3	5.125	130.2	3.813	96.8	5.063	128.6	3.875	98.4	5.000	127.0				
2.000	51	2.250	57.2	3.100	78.7	3.126	79.4	2.086	53.0	1.667	42.3	5.500	139.7	3.813	96.8	5.188	131.8	3.875	98.4	5.125	130.2	3.938	100.0	5.063	128.6	4.000	101.6	5.000	127.0				
2.125	54	2.375	60.3	3.475	88.3	3.376	85.8	2.162	54.9	1.743	44.3	6.000	152.4	4.188	106.4	5.688	144.5	4.250	108.0	5.625	142.9	4.313	109.5	5.563	141.3	4.375	111.1	5.500	139.7				
2.188	56	2.438	61.9	3.475	88.3	3.376	85.8	2.162	54.9	1.743	44.3	6.000	152.4	4.188	106.4	5.688	144.5	4.250	108.0	5.625	142.9	4.313	109.5	5.563	141.3	4.375	111.1	5.500	139.7				
2.250	57	2.500	63.5	3.475	88.3	3.376	85.8	2.162	54.9	1.743	44.3	6.000	152.4	4.188	106.4	5.688	144.5	4.250	108.0	5.625	142.9	4.313	109.5	5.563	141.3	4.375	111.1	5.500	139.7				
2.375	60	2.625	66.7	3.965	100.7	3.833	97.3	2.506	63.7	2.027	51.5	6.500	165.1	4.688	119.1	6.188	157.2	4.750	120.7	6.125	155.6	4.813	122.2	6.063	154.0	4.875	123.8	6.000	152.4				
2.625	67	2.875	73.0	3.965	100.7	3.833	97.3	2.506	63.7	2.027	51.5	6.500	165.1	4.688	119.1	6.188	157.2	4.750	120.7	6.125	155.6	4.813	122.2	6.063	154.0	4.875	123.8	6.000	152.4				
2.687	68	2.937	74.6	4.465	113.4	4.333	110.0	2.658	67.5	2.179	55.4	7.000	177.8	5.188	131.8	6.688	169.9	5.250	133.4	6.625	168.3	5.313	134.9	6.563	166.7	5.375	136.5	6.500	165.1				
2.750	70	3.000	76.2	4.465	113.4	4.333	110.0	2.658	67.5	2.179	55.4	7.000	177.8	5.188	131.8	6.688	169.9	5.250	133.4	6.625	168.3	5.313	134.9	6.563	166.7	5.375	136.5	6.500	165.1				
2.875	73	3.125	79.4	4.465	113.4	4.333	110.0	2.658	67.5	2.179	55.4	7.000	177.8	5.188	131.8	6.688	169.9	5.250	133.4	6.625	168.3	5.313	134.9	6.563	166.7	5.375	136.5	6.500	165.1				
3.000	76	3.250	82.6	4.465	113.4	4.333	110.0	2.658	67.5	2.179	55.4	7.000	177.8	5.188	131.8	6.688	169.9	5.250	133.4	6.625	168.3	5.313	134.9	6.563	166.7	5.375	136.5	6.500	165.1				

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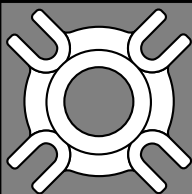
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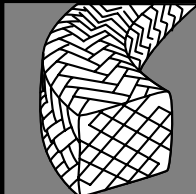
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**Mechanical Seals**



**Compression Packing**



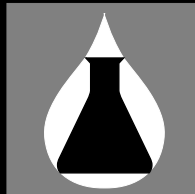
**Sheet Packing**



**Packing Tools**



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