# CAT® SEALS

**DESIGNED TO HANDLE TOUGH ENVIRONMENTS** 



**BUILT FOR IT.** 



#### **Metal Face Seals**

For more than 60 years industrial original equipment manufacturers and equipment users have turned to Cat® seals to protect their components from extreme, abrasive, and corrosive environments. Caterpillar is the leading manufacturer of metal face seals providing the best solutions for tough applications. Cat seals innovative designs and engineering protect a broad range of equipment and machinery working in adverse conditions such as mud, rock, sand, chemicals, water, heat and cold.

Cat seals are proven to provide long service life with low maintenance resulting in increased equipment up time, productivity and customer satisfaction.

Caterpillar offers Cat Duo-Cone<sup>™</sup> and Heavy Duty Dual Face seals. Both designs use various elastomeric load rings and various seal ring materials. Cat Duo-Cone seals require less space radially and Heavy Duty Dual Face seals require less space axially in a housing. Cat Duo-Cone seals incorporate a round toric while Cat Heavy Duty Dual Face seals have a trapezoidal Belleville Washer.



#### **Serving Your Industry**

- Agriculture
- Forestry
- Material Handling
- Mining
- Scrap Recycling
- Waste

- Construction
- Industrial
- Military
- Petroleum
- Tunneling
- · And many more industries

### **Performing in Your Application**

- Axles
- Final Drives
- Idlers
- Pumps
- Boring Cutters
- Drill Heads
- Mobile Track Systems
- Mining Equipment
- Rollers
- Undercarriages
- · And many more applications

#### **Protecting Products for Long Life**

Cat seals provide protection for internal working components, like bearings and gears, in abrasive applications and permit the use of oil as a lubricant instead of grease resulting in less friction and longer life. In most applications, the lubricant installed at the factory is permanent with no periodic lubrication or adjustment required.

Unscheduled equipment down time is very costly. Cat seals provide superior performance in extreme applications where lubricant retention and protection from damaging surroundings are essential. Years of proven field experience has shown Cat seals provide long life in many applications. Manufacturers in a variety of industries have utilized Cat seals in their equipment for decades.

### **Supplying Quality**

We know quality is important to you and we take pride in supplying our customers highly reliable and durable products. Caterpillar laboratories are equipped with the latest technologies and testing procedures for development and validation of new seal designs. The manufacturing quality of Cat seals is ensured by our ISO 9001: 2008 accreditation.

# Offering a Wide Variety of Sealing Options

We offer a complete line of Cat seals from 25 mm to 940 mm (1 inch to 37 inches) to serve your needs and we design new seals to address customers needs. We offer a variety of load ring and metal ring materials to satisfy your application requirements including our exclusive C6 material with superior corrosion resistance.

(See tables on back of brochure)

#### **Availability & On-time Delivery**

Cat seals are manufactured in Caterpillar facilities around the globe, enabling us to offer more variety and size options to best serve your needs. Our global supply network provides you the availability and on time delivery you require to run your business efficiently.

# Customer Service & Problem Solver

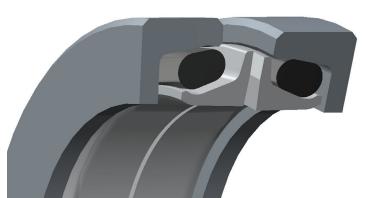
Our courteous and knowledgeable Representatives are available for you. We listen to understand your needs and take action to support your business. Experienced Caterpillar Engineers are available to evaluate your sealing requirements, work with your Engineering personnel and recommend the sealing solution to best address your needs. Your application information is critical to understand the demands of the system to be protected. Please visit our web site to complete an application data sheet to get started today.



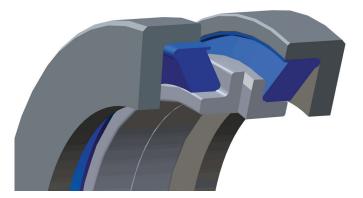
For more information on Cat seals www.cat.com/cat-seals



#### Cat® Duo-Cone™ Seal



# Cat® Heavy Duty Dual Face Seal







### **Metal Seal Ring Material Attributes**

	<b>C</b> 6	Stellite	NiHard	Formed			
Material	Nickel-Alloy	Iron-Alloy	Iron-Alloy	SAE 1074			
Process	Cast	Cast	Cast	Stamped			
Wear Life	High	High	Low/Medium	Low			
<b>Corrosion Resistance</b>	High	Medium/High	Low/Medium	Medium			
<b>Scoring Resistance</b>	High	Low	Medium/High	Low			
(Additional seal ring materials available)							

Nonmetallic Load Ring Material Attributes

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	Nitrile	Low-Temperature Ni	tril Silicone	<b>Hydrogenated Nitrile</b>	Fluoroelastomer			
Min Temp. (°C/°F)	-17/1	-35/-31	-55/-67	-40/-40	-7/20			
Max Temp. (°C /°F)	100/212	100/212	150/302	135/275	160/320			
Tear Resistance	Medium	Medium	Low	High	Medium			
<b>Abrasion Resistance</b>	Medium	Medium	Low	High	Medium			
Oil Resistance	Medium	Medium	Low	High	Superior			
Water Resistance	Superior	Superior	Superior	Superior	Medium			

(Additional load ring materials available)

