

# CARCO®

LARGE DIAMETER SEALS

CARCOSEAL/TAD  
DOUBLE FACE SEAL FOR ROD WIRE MILLS

Manufacturing sealing solutions  
for heavy duty applications

since 1900



## ROD WIRE MILLS

In the heavy industry, the goal of a rod wire mill is to reheat and roll the steel billets into wire rods, which are mostly used in:

- Construction industry
- Automotive industry
- Machine engineering



The rod wire mill is composed of several stands; in each stand there are two bearings with increasing rotation speed from the first to the last stand.

The bearings are protected by double face seals to avoid ingress of cooling water and scale and leakage of bearing lubricant.

### Hard working conditions for the seals

*Very high Speed: > 100 meter per second*

*Working temperature up to 150°C / 300°F*



### The problem

*Cooling water mixing with bearing lubricant*

*Bearing damage and failure*

## THE SOLUTION: CARCOSEAL/TAD/o2 AND CARCOSEAL/TAD/L

Starting from the traditional seal design for rod wire mills, Carco was able to enhance the seal performance by optimizing the profile of the seal lips.

New rubber compounds have been developed with proprietary fillers in order to reduce the overall friction and achieve the longest working life.



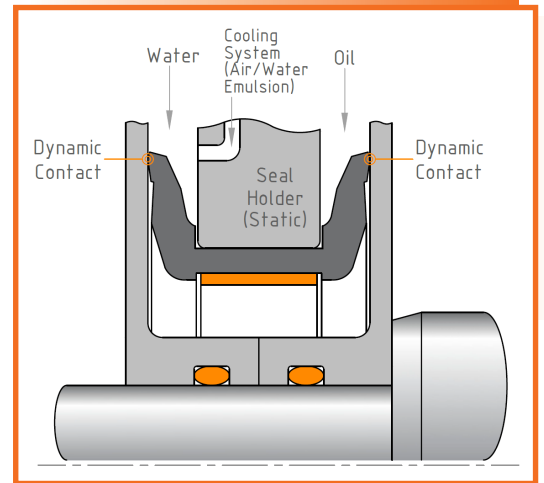


## CARCOSEAL/TAD/o2



Composed of the full rubber seal and a separate stainless steel band.

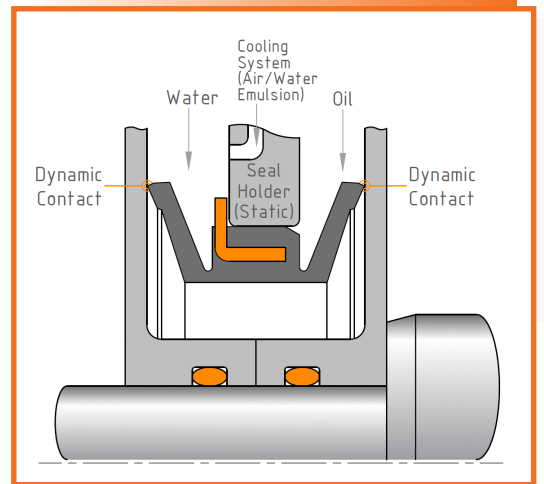
The steel band keeps the seal in position inside the housing.



## CARCOSEAL/TAD/L



Composed of the full rubber seal and a L-shaped metal band co-molded into the seal.



## SIZES AND MATERIALS

Carcoseal/TAD/o2 and Carcoseal/TAD/L are available in different sizes for mills manufactured by all major OEMs.

The most common seal materials are:

- HT700: suitable for all working conditions;
- HG700: rubber compound with fillers for lowest friction.

All seals can be delivered with our "Carcoflon" PTFE coating to protect the seal lips.

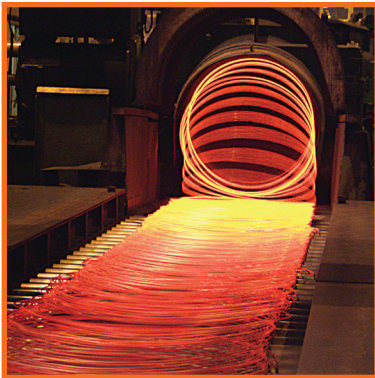
## SEAL FITTING

Carcoseal/TAD/o2 is designed to ease the fitting of the metal band into the rubber seal for a faster seal replacement.

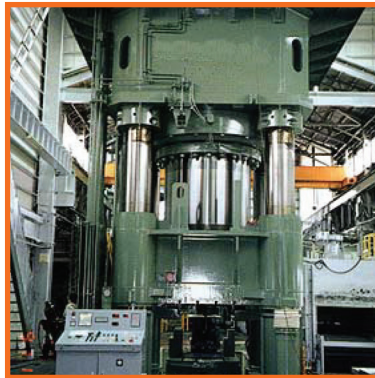
The Carco staff is available for technical support and inspection on site.



## CARCO IS A LEADING SUPPLIER OF SEALING SOLUTIONS IN THE FOLLOWING MARKETS



**HEAVY INDUSTRY**



**HEAVY HYDRAULICS**



**SHIPBUILDING**



**WINDPOWER**



**TUNNELLING**



**HYDROPOWER**

**CARCO**<sup>®</sup>

LARGE DIAMETER SEALS

[www.carcoseal.com](http://www.carcoseal.com)

**CARCO S.R.L. Head Office**  
Basiano (MI)  
ITALY  
sales@carco.it  
Tel.: +39 02 95760331

**CARCO GmbH**  
Hamburg  
GERMANY  
sales@carco-germany.de  
Tel.: +49 40212985855

**CARCO PRP Shanghai Co. Ltd.**  
Yue Yang Road, Shanghai  
CHINA  
carcochina@carco.it  
Tel.: 86 13564023005

**CARCO America LLC**  
Cleveland (OH)  
USA  
sales@carco-usa.com  
Tel.: +1 888-248-8206

**ICT21**  
Innovation Concept Technologie 21  
Za L'Agavon - FRANCE  
contact@ict21.fr  
Tel.: +33 4427772857

**PRP**  
Precision Rubber Products Italia srl  
Basiano (MI)  
ITALY  
info@prpitalia.it  
Tel.: +39 02 48702970

**PCTI**  
Polymer Concepts Technologies Inc.  
Apple Valley (CA)  
USA  
pcti@polymerconcepts.com  
Tel.: +1 7602404999

**PBY**  
Plastics, Inc.  
Ontario (CA)  
USA  
dan@pbyplas.com  
Tel.: +1 909-930-6700

**Microflex Technologies LLC**  
Orange (CA)  
USA  
sales@microflexseals.com  
Tel.: +1 714-937-1507