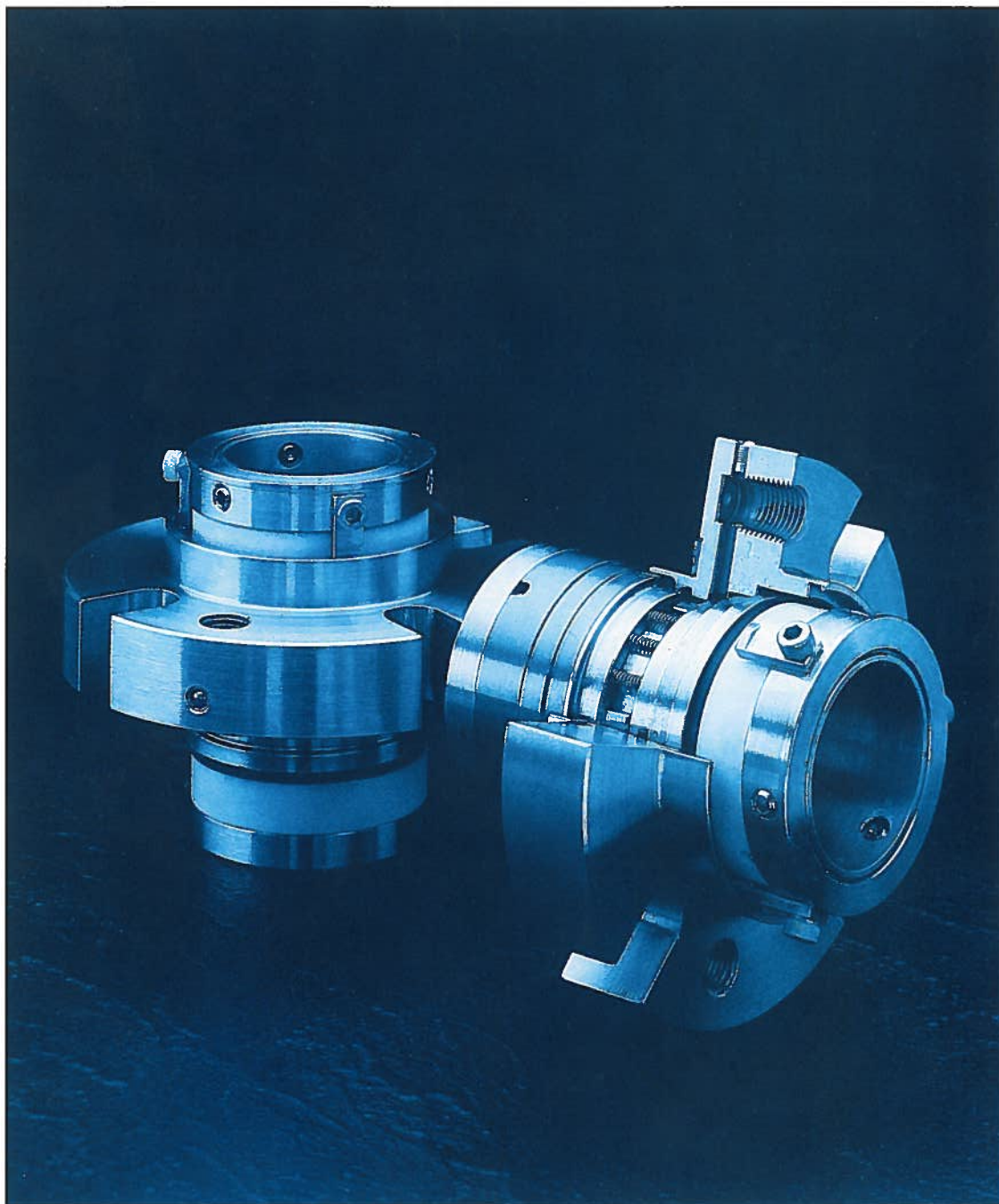


THD677

DOUBLE ACTING
CARTRIDGE SEALS
FOR THE
PULP & PAPER INDUSTRY



 **TYTON**

THD677

No Leaks No Pollution No Dilution

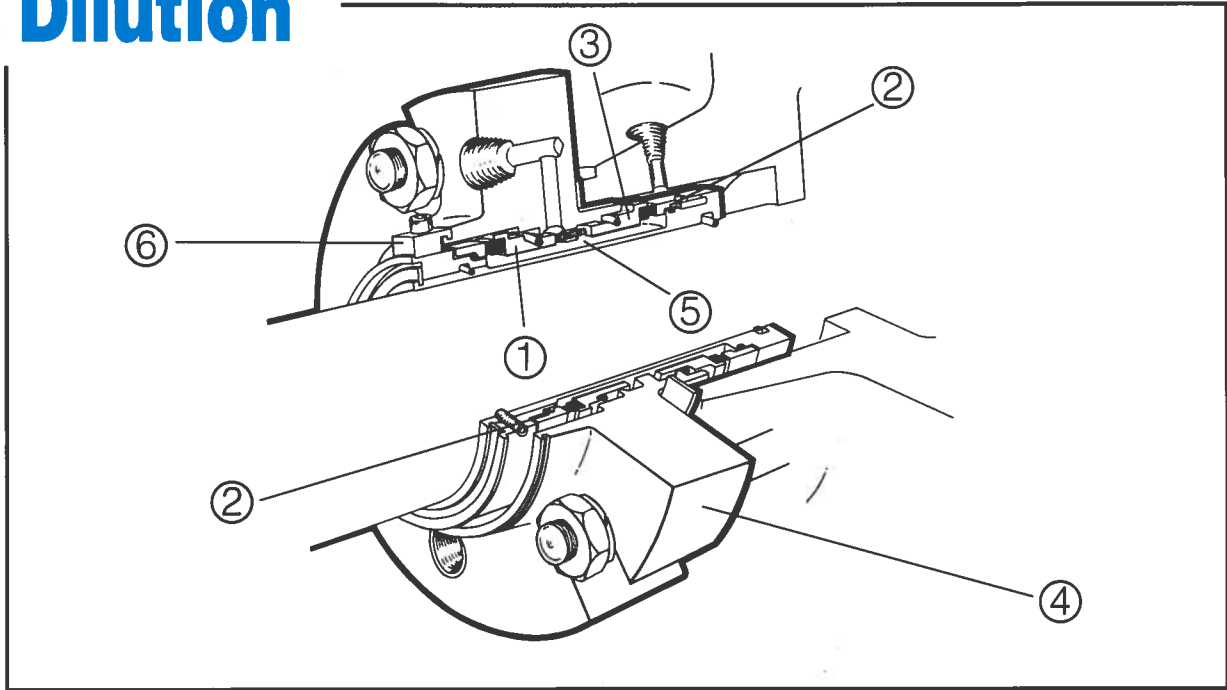
Easy to install, double acting, double balanced, and self-aligning cartridge design, the **TYTON THD677** is most widely used in high temperature, high pressure, corrosive and toxic chemical

applications. Featuring back to back sealing elements and a single set of centrally located springs, performance is unaffected by axial shaft movement and uniform face loading is maintained.

Water is supplied to the seal.

If pressurized below product pressure, QUENCH results in NO DILUTION.

If pressurized above product pressure, BARRIER FLUID results in NO LEAKAGE, NO POLLUTION.



① **OUTBOARD SEAL-pressure control**
Using seal faces interchangeable with the inboard seal enables pressure control of seal lubrication while reducing spare part inventory.

② **SEAT RINGS-self-aligning rotary**
Directly aligned with the shaft, it eliminates face run out and extends seal life. Made of solid carbides or oxides (rather than merely plated).

③ **SEALING RINGS-double balanced**
Hydraulically loaded by product or barrier fluid to handle up to 435 P.S.I. Capable of accommodating angular misalignment of gland ring to 1-1/2°.

④ **GLAND RING - universal flange**
Slotted gland to fit most pumps. Connections are provided for water circulation.

⑤ **HASTELLOY® SPRINGS - corrosion resistant**
Standard on all THD677 seals. Rugged and lasting. Hastelloy springs resist chloride stress corrosion and enjoy maximum life.

⑥ **ASSEMBLY LOCKS - guarantee correct installation**
Locks provide pre-installation alignment of rotating and stationary parts. Locks to be removed after installation.

Hastelloy® is a registered trademark of Cabot Corp.



DESIGNED IN CANADA • MANUFACTURED IN CANADA • SERVICED WORLD-WIDE.

Seal Face Combinations

Hard Face Seal

For tough services, highly aggressive, extreme temperatures, like heavy black liquor in cooking zone and chlorine dioxide. Available with face material combinations of tungsten carbide, silicon carbide or ceramic.

Carbon Face Seal

For combinations of high temperature, high speed and high pressure, such as boiler feed pumps. Faces: carbon against tungsten carbide, silicon carbide or ceramic are available.

Standard seals are all stainless steel (A.I.S.I. 316) other alloys available upon request. A complete selection of elastomers is available for O-rings.

For further details to suit your applications, the TYTON mechanical Seal Selection Guide T201 is available upon request.

Ultimate Performer

The THD677 compliments the line of TYTON'S single-acting, industry leading seals. Successful case histories include applications such as heavy hot black liquor, chlorine dioxide and high pressure boiler feed water.



Seal Lubrication-Pressure Controlled

A minimum amount of clean water serves to act as a buffer between the product and atmosphere, thus eliminating dilution, controlling flashing and extending seal life. Flow rates and pressure recommendations depending on application available upon request.

OPERATING DATA

Hard face seal

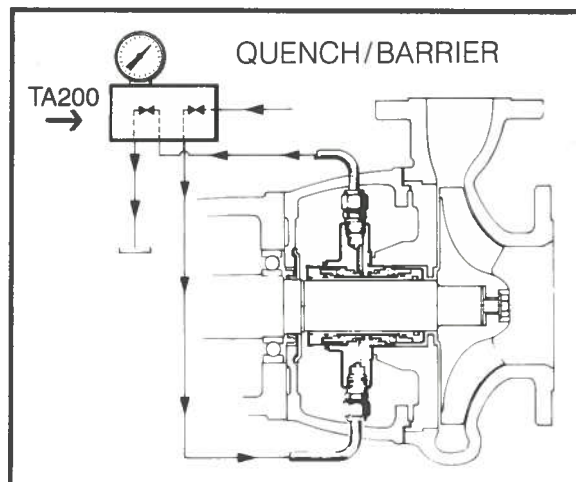
Pressure	up to 435 psi	(3,000 kPa)
Temperature	-4 to 250°F	(-20° to +120°C)
Face speed	up to 30 ft/s	(10 m/s)

Carbon face seal

Pressure	up to 435 psi	(3,000 kPa)
Temperature	-40° to 400°F	(-40° to +205°C)
Face speed	65 ft/s	(20 m/s)

Shaft movement allowance

Dia.	Radial	Axial	Angular
to 2 1/2"	± .020" (0.50 mm)	± .040" (1.00 MM)	1°
>2 1/2"	± .020" (0.50 mm)	± .060" (1.52 mm)	1 1/2°



Off-the-shelf availability

TYTON stocks a full supply of standard sizes from 1" to 5" to fit most pumps. We also supply both custom size and metric seals up to diameters of 12".

Quality assurance

A major reason for our success in the industry is our rigorous system of inspection and quality control. The customer is guaranteed top performance as every seal is meticulously checked and carefully pressure tested before leaving the TYTON plant.

Superb Solution

Superior materials and technical "know-how" combined with many years of experience makes the **THD677** the performance success in the Pulp and Paper Industry.

LESS PROBLEMS WITH POLLUTION CONTROL- LESS WATER REQUIRED- LESS DOWNTIME AND REDUCED POWER CONSUMPTION

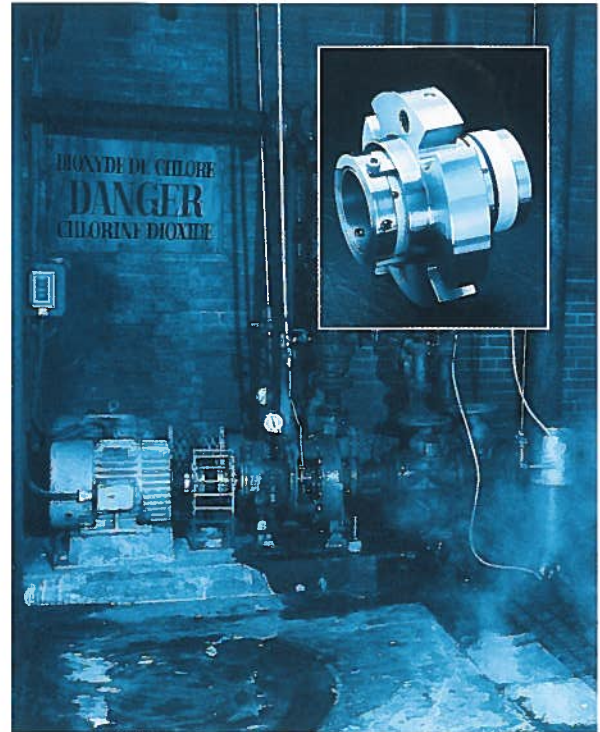
Reliability

Performance of the seal can be enhanced by installation of the Tyton Control Unit **TA200**. Developed in Canada, the **TA200** controls seal water pressure and flow and can be equipped with an alarm for connection to the control system.

TYTON

We are a truly Canadian enterprise, founded in 1961 and headquartered in Montreal, with representation throughout Canada. Our soundly established experience, particularly in the Pulp and Paper industry, has earned us a reputation for aggressively tackling problems of major scope and developing innovative solutions. This is a service which seal distributors are not capable of supplying.

We further provide a service of presenting nonbiased product seminars either in-house or at the mill. It has been a strong factor in the acceptance and success **TYTON** enjoys today.



The designing and manufacturing capabilities of **TYTON** range widely to include Marine, Turbine, and Industrial applications of many kinds. You are invited to consult us on any application. **TYTON's** technical response will prove to be rapid and total.

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