



TAMAR SEAL
Innovative sealing technology

Patent No: 8,215,643 B2



We are ready to take on
your sealing challenges.

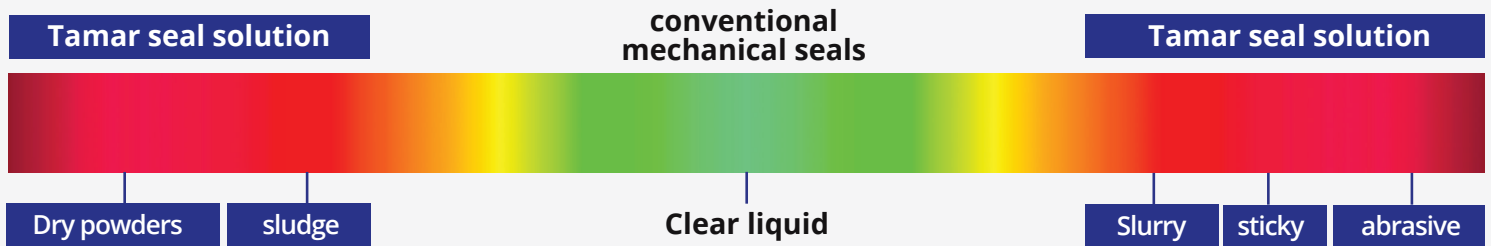
Reliable

Smart

Simple

Technologies

Sealing application spectrum



Applicable industries



About us

TAMAR specializes in the development and production of reliable and cost effective rotary shaft sealing systems. With over 30 years of experience in the sealing industry, we have managed to successfully install thousands of seals worldwide.

Our patented sealing technology is the best available technology for tough applications.

TAMAR seals can fit any equipment:
screw conveyors, screw feeders, rotary valves,
ribbon mixers, agitators, blowers, centrifugal pumps, screw
pumps etc.

TAMAR seals can easily replace any mechanical seal, powder air
purge seals, braided packing and others.

TAMAR fits ANSI and CEMA standard dimensions



Tamar seal 410-SF

Powder application

Features

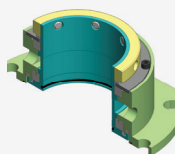
MTZ 410-SF is specially designed for **screw conveyors and feeders**. The MTZ 410SF easily fits any screw feeder designs and provides 3-4 weeks notification before maintenance.

- Optional - Split cartridge type - for simple and easy installation
- Can be serviced while the equipment is running, no downtime.
- Acts as a third bearing to support the shaft and reduces run outs.
- Average life before servicing - 2 years

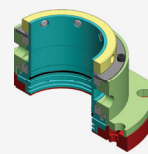
Parameters

- Max. sealing pressure _____ 0.5 bar (7 psi)
- Max. shaft speed _____ 3 m/s (10 f/s)
- PH _____ 0-14
- Max Temperature _____ 200°C (392 °F)
- Max radial runout _____ 0.5mm (0.02")

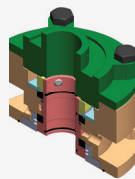
Seal options



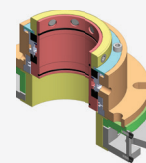
Standard dimensions for typical applications/split cartridge



Air flushed seal for high pressure applications



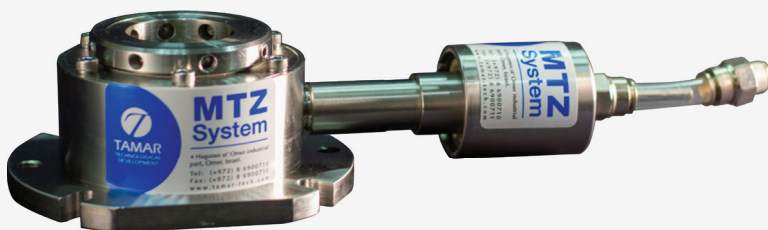
Bearing supported for custom designed applications



Flexible joint integrated for high shaft run-out



Screw conveyors | Food plant



Tamar seal 420-VD

Powder application

Features

MTZ 420-VD provides the best split sealing solution for **vacuum dryers**.

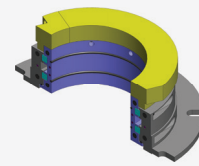
The MTZ 420VD is ideal for large thermal motion, changing pressures and shaft runout.

- Split cartridge type - simple and easy installation
- Can be serviced while the equipment is running, no downtime
- Simple to maintain and repair
- Average life before servicing -2 years

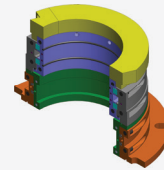
Parameters

- Max. sealing pressure_____ Vacuum 120 mmHg to 0.5 bar (7 psi)
- Max. shaft speed_____ 3 m/s (10 f/s)
- PH_____ 0-14
- Max . Temperture_____ 200°C (392 °F)
- Max radial runout_____ 0.5mm (0.02")

Seal options



Standard split design for fixed drive end



Split, shaft following arangment for heat expanding shaft end



Vacuum dryers | Chemical plant



Tamar seal 430-RV

Powder application

Features

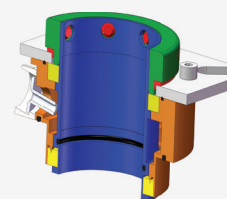
MTZ 430-RV provides a solution for **rotary valves**.
The MTZ 430RV easily fits tight designs and provides 3-4 weeks notification before maintenance.

- Can be serviced while the equipment is running (no downtime)
- Simple to install and maintain
- Average life before servicing -3 years

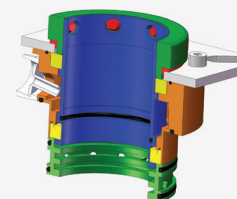
Parameters

- Max. sealing pressure _____ 1 bar (15 psi)
- Max. shaft speed _____ 3 m/s (10 f/s)
- PH _____ 0-14
- Max Temperature _____ 200°C (392 °F)
- Max radial runout _____ 0.5mm (0.02")

Seal options



Standard design for tight space applications



Air / Nitrogen flushed for high pressure applications



Rotary valves | Chemical plant



Tamar seal 440-PM

Powder application

Features

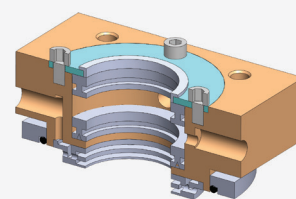
MTZ 440-PM provides a solution for batch weighing **packing machines**. The air flushed MTZ 440PM can handle extreme applications and provides 3-4 weeks notification before maintenance.

- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Average life before servicing -1 year

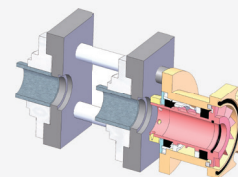
Parameters

- Max. sealing pressure _____ 2 bar (29 psi)
- Max. shaft speed _____ 5 m/s (16.5 f/s)
- PH _____ 0-14
- Max . Temperture _____ 80°C (176 °F)
- Max radial runout _____ 0.5mm (0.02")

Seal options



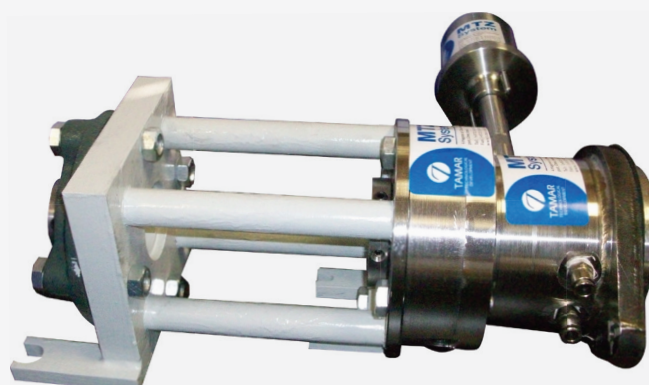
Standard design for tight space applications



Bearing supported for custom designed applications



Packing machines | Chemical plant



Tamar seal 450-SP

Powder application

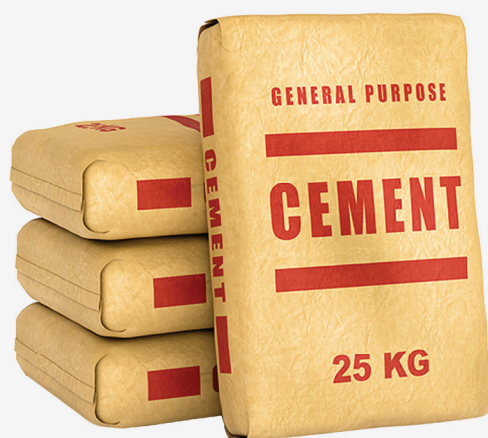
Features

MTZ 450-SP provides a long term solution for powder **screw pumps**. The air flushed MTZ 450SP has the best technology for high speed powder applications.

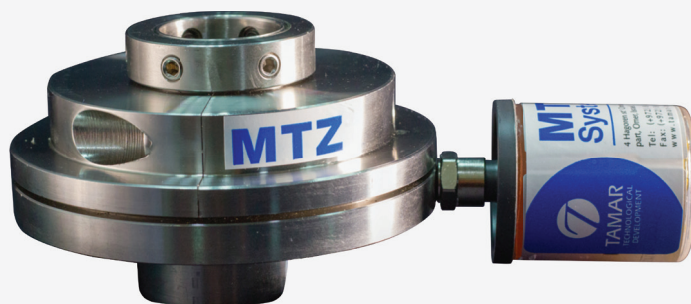
- Semi-Split arrangement- does not require pump disassemble for seal repair
- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Average life before servicing -1 year
- Without fragile faces

Parameters

- Max. sealing pressure _____ 2 bar (29 psi)
- Max. shaft speed _____ 3 m/s (9.8 f/s)
- PH _____ 0-14
- Max Temperture _____ ambient
- Max radial runout _____ 0.5mm (0.02")



Screw pumps | Cement industry



Tamar seal 510-RM

Sludge application

Features

MTZ 510-RM provides a solution for wet or dry process **ribbon mixers**.

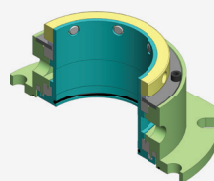
The MTZ 510RM can handle any process and provides 3-4 weeks notification before maintenance.

- Optional Split cartridge type - simple and easy installation
- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Average life before servicing -2 years

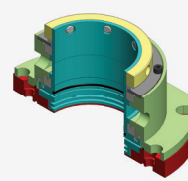
Parameters

- Max. sealing pressure _____ vacuum to 1 bar (15 psi)
- Max. shaft speed _____ 3 m/s (10 f/s)
- PH _____ 0-14
- Max . Temperture _____ 120°C (248 °F)
- Max radial runout _____ 0.5mm (0.02")

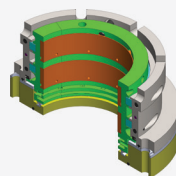
Seal options



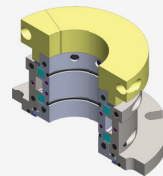
Standard dimensions for typical applications



Air flushed seal for high pressure applications



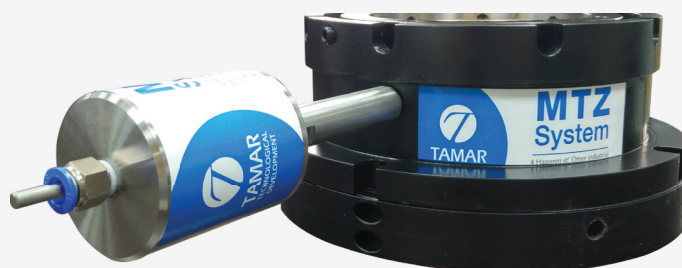
Unique 'floating seal' design for high run-out applications



Split seal arangment for large shat diameters



Ribbon mixers | Paint industry



Tamar seal 610-AG

Gas application

Features

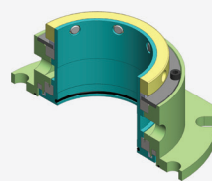
MTZ 610-AG provides a solution for **agitators and mixers**.

- Can be serviced while the equipment is running, no downtime
- Acts as a third bearing to support shaft
- Average life before servicing - 3 years

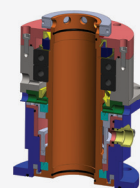
Parameters

- Max. sealing pressure _____ vacuum 120 mmHg to 1 bar (14 psi)
- Max. shaft speed _____ 3 m/s (10 f/s)
- PH _____ 0-14
- Max Temperature _____ 200°C (392 °F)
- Max radial runout _____ 0.5mm (0.02")

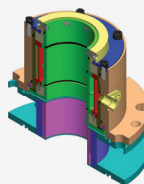
Seal option



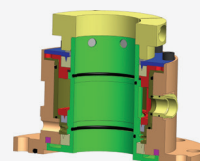
Standard Dimensions for typical applications.



Bearing supported for custom designed applications



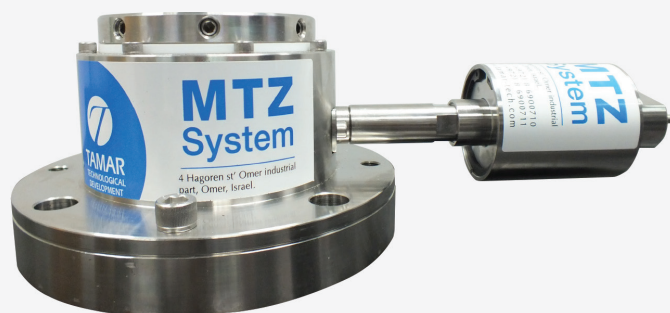
Jacketed seal for extreme temperature applications



Air / Nitrogen Flushed seal for "sniffer" monitored applications



Mixers | Sugar industry



Tamar seal 620-BL

Gas application

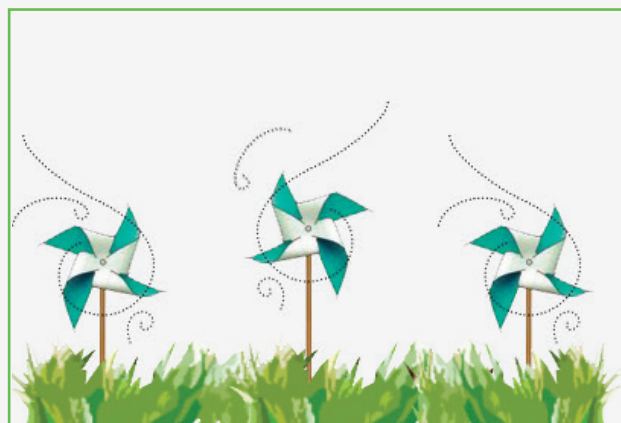
Features

MTZ 620-BL provides the best solution for sealing **blowers**. The MTZ620BL is easy to maintain, and provides 3-4 weeks notice before maintenance.

- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Free of fragile faces
- Average life before servicing - 3 years

Parameters

- Max. sealing pressure _____ up to 0.5 bar (7 psi)
- Max. shaft speed _____ 3 m/s (10 f/s)
- PH _____ 0-14
- Max Temperature _____ 200°C (392 °F)
- Max radial runout _____ 0.5mm (0.02")



Blower | Power plant



Tamar seal 710-SP

Pump application

Features

MTZ 710-SP provides a solution for **slurry pumps**.

The air flushed MTZ 710SP can handle extreme applications, and provides 3-4 weeks notification before maintenance.

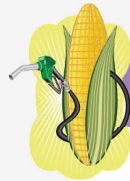
- Optional Semi-Split arrangement- does not require pump disassembly for seal repair
- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Withstands dry running
- Free of fragile faces
- Withstands thermal and hydraulic shocks
- Average life before servicing -3 year

Parameters

- Max. sealing pressure (s.box) _____ 3 bar (43.5 psi)
- Max. shaft speed _____ 8.5 m/s (28 f/s)
- PH _____ 0-14
- Max . Temperture _____ 120°C (248 °F)
- Max radial runout _____ 0.1mm (0.004")



Slurry pump | Ethanol plant



Success story

George Gregorowicz

SEAL DIV.MGR. at PUMPING SOLUTIONS INC



1d

Air seal in reboiler pump at an ethanol plant. high slurry at over 200F. takes dry run , serviceable while pump is running 3 years and still running. Also available for powder and mixers.



Tamar seal 720-PP

Pump application

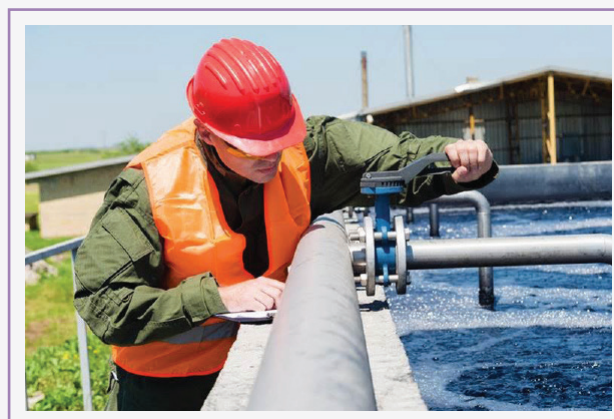
Features

MTZ 720-PP provides a solution for **process pumps**. The air flushed MTZ 720PP can handle extreme applications, and provides 3-4 weeks notification before maintenance.

- Standard ANSI dimensions
- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Withstands dry running
- Withstands thermal and hydraulic shocks
- Without fragile faces
- Average life before servicing -2 year

Parameters

- Max. sealing pressure (s.box) _____ 3 bar (43.5 psi)
- Max. shaft speed _____ 8.5 m/s (28 f/s)
- PH _____ 0-14
- Max . Temperture _____ 120°C (248 °F)
- Max radial runout _____ 0.1mm (0.004")



Process pump | Mineral industry



Tamar seal 730-TP

Pump application

Features

MTZ 730-TP provides a solution for **turbine pumps**.

The air flushed MTZ 730TP can handle extreme applications, and provides 3-4 weeks notification before maintenance.

- Optional Semi-Split arrangement - does not require pump disassemble for seal repair
- Can be serviced while the equipment is running, no downtime
- Simple to install and maintain
- Average life before servicing - 2 year

Parameters

- Max sealing pressure (s.box) _____ 3 bar (43.5 psi)
- Max shaft speed _____ 8.5 m/s (28 f/s)
- PH _____ 0-14
- Max Temperature _____ 120°C (248 °F)
- Max radial runout _____ 0.1mm (0.004")



Turbine pump | Waste water industry



Tamar seal 740-PC

Pump application

Features

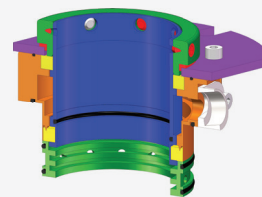
MTZ 740-PC provides solution for **progressive cavity pumps** such as Mono, Moyno and Seepex. The air flushed MTZ 740PC can handle extreme applications, and provides 3-4 weeks notification before maintenance.

- Can be serviced while the equipment is running no downtime
- Acts as a third bearing to support shaft and reduces run-outs
- Average life before servicing - 2 years

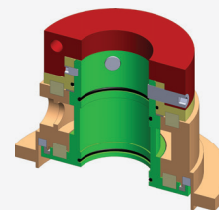
Parameters

- Max. sealing pressure _____ 1 bar (15 psi)
- Max. shaft speed _____ 2 m/s (6.6 f/s)
- PH _____ 0-14
- Max. Temperature _____ 130°C (260 °F)
- Max radial runout _____ 0.5mm (0.004")

Seal options



Internal seal cartridge for packing replacement



External seal cartridge for mechanical seal replacement



PC pump | Mineral Industry



Tamar seal 810-MS

Marine application

Features

MTZ 810-MS provides a solution for **marine applications**.

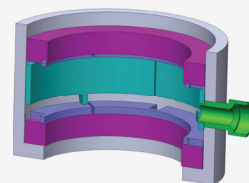
The MTZ 810MS is safe to use in boats and provides the best method to keep minimal leakage and shaft wear.

- One minute maintenance
- Fully split design for fast installation and repair
- Minimal shaft wear
- Can be serviced while the equipment is running
- Average life before servicing -2 year
- Without fragile faces

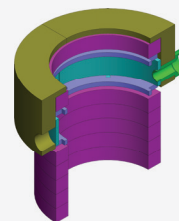
Parameters

- Max. sealing pressure _____ 0.5 bar (7.5 psi)
- Max. shaft speed _____ 3 m/s (9.8 f/s)
- PH _____ 0-14
- Max Temperature _____ ambient
- Max radial runout _____ 0.5mm (0.02")

Seal options



Standard dimensions to fit in a stuffing box - replaces packing



split external seal for large shaft diameter



Marine seal | Tug-boats



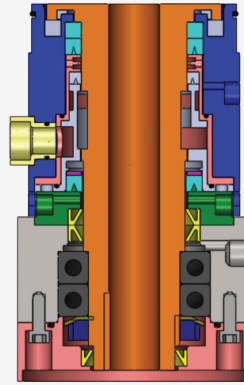
An aerial night photograph of a large industrial complex, possibly a refinery or chemical plant. The scene is dominated by tall distillation columns, storage tanks, and a network of pipes and structural steel. Warm artificial lights from within the facility create a strong contrast with the deep blue twilight sky. Wispy clouds are visible in the upper right and lower left portions of the frame. A white rectangular box is centered over the image, containing the text "Creative solutions" in a stylized, hand-drawn font. The overall mood is one of industrial scale and innovative problem-solving.

Creative
solutions

Chemical industry

Specialy custom designed bearing integrated seal for a bottom entry powder mixer

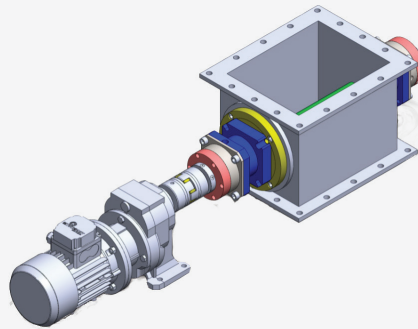
45 mm (1.7") shaft, 50 rpm, in servc for over 4 years.



Mineral industry

custom designed, bearing integrated seal and construction modification for a magnetic seperator

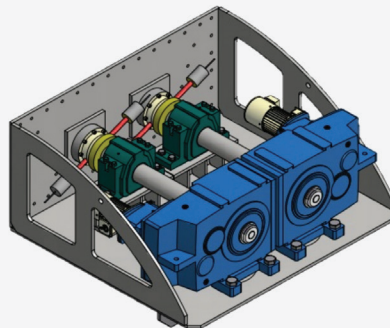
40 mm (1.5") shaft, 80 rpm, in service for over 2 years.



Oil industry

split seals on a twin shaft mixer for heavy sludge

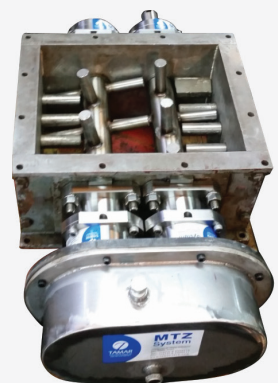
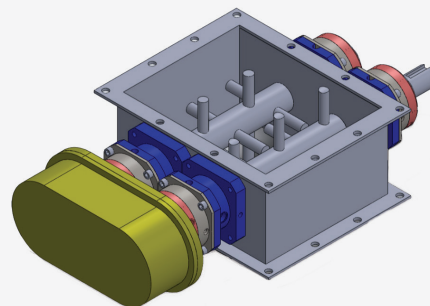
150 mm (6") shaft, 20 rpm, in service for over 5 years.

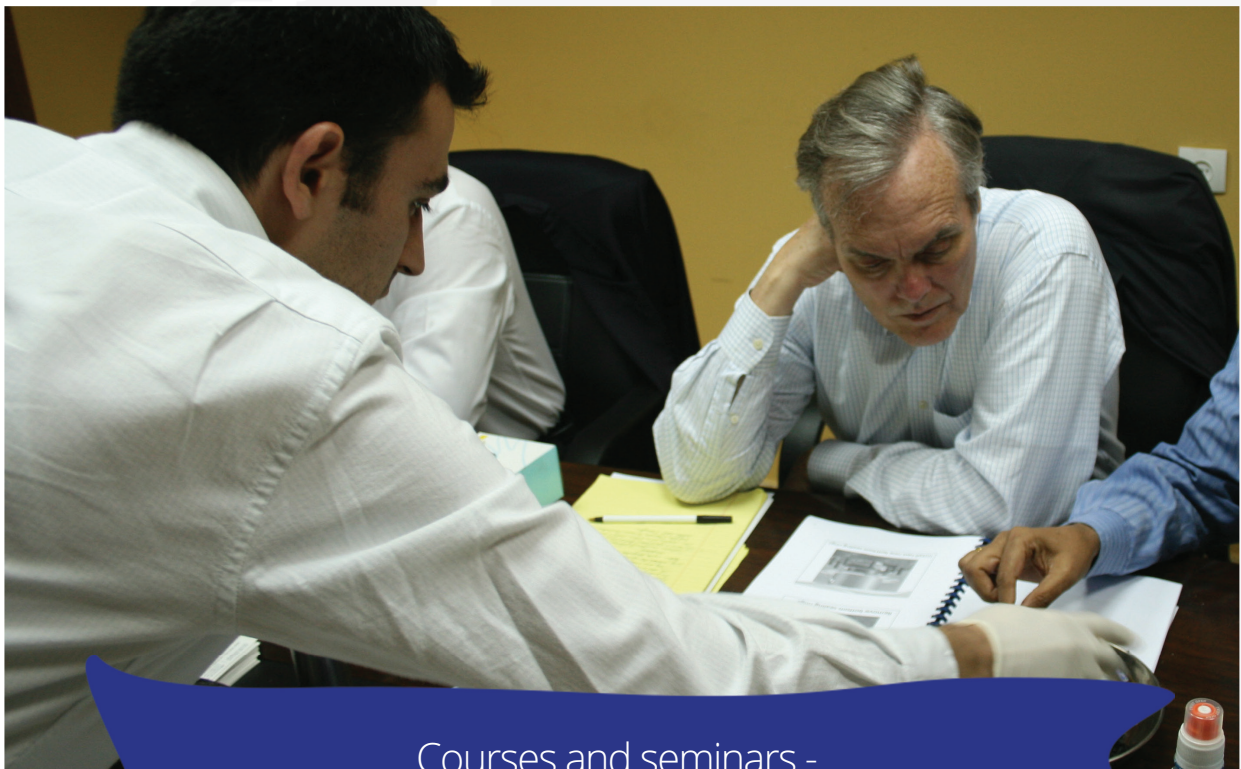


Chemical industry

speacially designed bearing integrated seals for a twin shaft chopper

40 mm (1.5") shaft, 90 rpm, in service for over 2 years.





Courses and seminars -
we invite you to attend a technical seminar

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Patent No: 8,215,643 B2