

## TAMAR 410SFS SEALS FOR TYPICAL SCREW CONVEYORS AND FEEDERS

The Tamar patented sela model 410SFS is the best rotary shaft seal for screw conveyors and feeders. With over 20 years of experience in the sealing industry, we have managed to successfully install thousands of seals on various applications worldwide.

The tamar seal is not like any other. There are no sealing faces or springs, and nothing is breakable within the cartridge

# ABOUT THE TAMAR SEAL

## HOW DOES IT WORK?

The seals use flexible sealant as the sealing media. The sealant is maintained at a pressure slightly above stuffing box pressure by a gas operated piston. Close-fitting bushings at either end of the seal retain the flexible sealant.

The pressurized sealant does not rotate with the shaft. The sealant remains stationary, operating as a flexible stationary seat. The shaft sleeve design is machined in a way to allow square vertical edge landings perpendicular to the shaft as rotating heads. Standard seals do not require any air consumption.

## AVAILABLE SEAL OPTIONS

The Tamar seal is stocked in various materials of construction and any of the components may be individually replaced. Fully split seals are available for applications where it is difficult to remove the bearing or drive to install the seal. Bearing integrated seals are also available upon request.

Since Tamar Technologies manufactures many custom seals, any dimensional or material requirement can be supplied.



## STANDARD CONSTRUCTION MATERIALS

| Housing   | Elastomers  | Sealant  |
|---|---|--|
| 1020 cast steel 316<br>stainless steel Anodize<br>coated aluminum | Viton (FDA Compliant)<br>EPDM (FDA Compliant)<br>FDA silicone (FDA Compliant) | Graphite based<br>Synthetic (fibers) PTFE (FDA<br>Compliant) |

# 410-SF / FOR SCREW CONVEYORS AND FEEDERS

**MTZ 410-SF** is specially designed for screw conveyors and feeders. The MTZ 410-SF easily fits any screw feeder designs, This seal design can provide 3-4 weeks notification before maintenance.

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

Max. sealing pressure: 0.5 bar (7 psi)  
Max. shaft speed: 3 m/s (10 ft/s)  
PH: 0-14  
Max Temperature: 200°(392°F) Max radial runout: 1.5mm (0.06")

Customer nonstandard parameters that exceed the ranges can be accommodated.

Please consult our team of experts in order to meet your requirements.

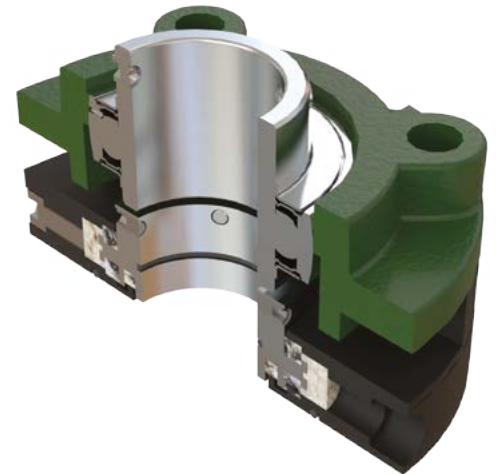
Tamar manufactures many custom seals. Any dimensional or material requirement can be supplied.

ATEX zone 1 and 2 compliant seals are available upon request for selective models.

## 410SFS SEAL OPTIONS – TYPICAL APPLICATIONS



Standard design without bearing support



Bearing supported with standard dimensions

Standard part number decoder

410SFS- M100 -A-V - Elastomer V-Viton; E-EPFM; S-FDA silicone

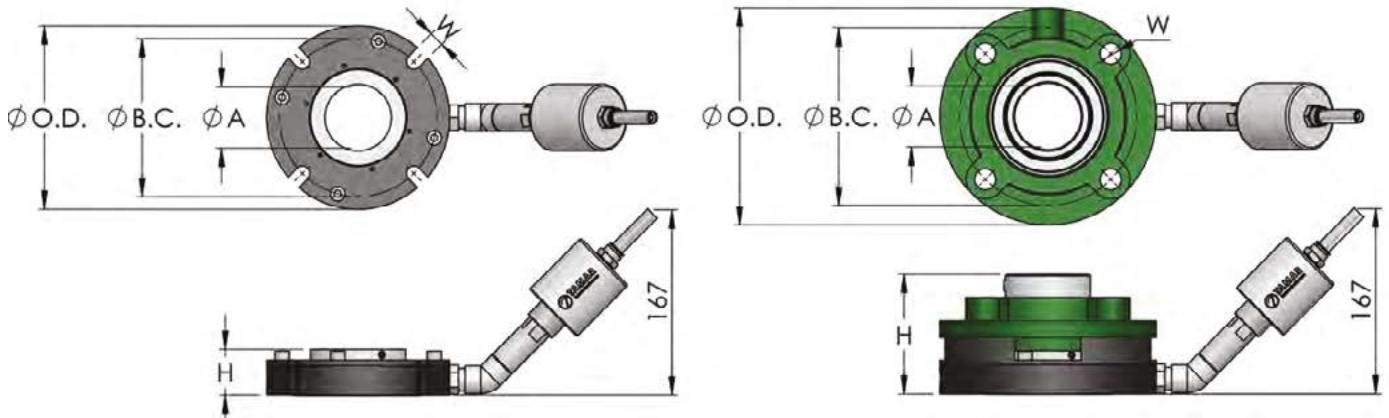
Construction material A-316; B-1020

Shaft diameter 1-inches; M-millimeters, and integers represents diameter

Model SFSH-standard; SFSB-bearing integrated seal

# TAMAR STANDARD SEAL DIMENSIONS

## CARTRIDGE SEAL W/WO INTEGRATED BEARING - TYPICAL APPLICATIONS



| TYPICAL SEAL (MILLIMETER) |       |       |    |    |
|---------------------------|-------|-------|----|----|
| ØA                        | ØO.D. | ØB.C. | W  | H  |
| 40                        | 145   | 120   | 12 | 42 |
| 45                        | 150   | 127   | 12 | 42 |
| 50                        | 155   | 132   | 12 | 42 |
| 55                        | 160   | 137   | 12 | 42 |
| 60                        | 165   | 142   | 12 | 42 |
| 65                        | 170   | 147   | 12 | 42 |
| 70                        | 175   | 152   | 12 | 42 |
| 75                        | 180   | 157   | 12 | 42 |
| 80                        | 190   | 165   | 14 | 46 |
| 85                        | 195   | 170   | 14 | 46 |
| 90                        | 200   | 175   | 14 | 46 |

| TYPICAL SEAL INTEGRATED UCFC BEARING (MILLIMETER) |      |       |       |    |     |
|---|------|-------|-------|----|-----|
| ØA  | UCFC | ØO.D. | ØB.C. | W  | H   |
| 40  | 208  | 145   | 120   | 14 | 92  |
| 45  | 209  | 160   | 132   | 16 | 92  |
| 50  | 210  | 165   | 138   | 16 | 94  |
| 55  | 211  | 185   | 150   | 19 | 98  |
| 60  | 212  | 195   | 160   | 19 | 108 |
| 65  | 213  | 205   | 170   | 19 | 108 |
| 70  | 214  | 215   | 177   | 19 | 117 |
| 75  | 215  | 220   | 184   | 19 | 120 |
| 80  | 216  | 240   | 200   | 23 | 129 |
| 85  | 217  | 250   | 208   | 23 | 132 |
| 90  | 218  | 265   | 220   | 23 | 142 |

| TYPICAL SEAL (INCH) |       |       |      |      |
|---------------------|-------|-------|------|------|
| ØA                  | ØO.D. | ØB.C. | W    | H    |
| 1.57                | 5.71  | 4.72  | 1/2  | 1.65 |
| 1.77                | 5.91  | 5.00  | 1/2  | 1.65 |
| 1.97                | 6.10  | 5.20  | 1/2  | 1.65 |
| 2.17                | 6.30  | 5.39  | 1/2  | 1.65 |
| 2.36                | 6.50  | 5.59  | 1/2  | 1.65 |
| 2.56                | 6.69  | 5.79  | 1/2  | 1.65 |
| 2.76                | 6.89  | 5.98  | 1/2  | 1.65 |
| 2.95                | 7.09  | 6.18  | 1/2  | 1.65 |
| 3.15                | 7.48  | 6.50  | 9/16 | 1.81 |
| 3.35                | 7.68  | 6.69  | 9/16 | 1.81 |
| 3.54                | 7.87  | 6.89  | 9/16 | 1.81 |

| TYPICAL SEAL INTEGRATED UCFC BEARING (INCH) |      |       |       |      |      |
|---|------|-------|-------|------|------|
| ØA  | UCFC | ØO.D. | ØB.C. | W    | H    |
| 1.31<br>1.50                                | 208  | 5.71  | 4.72  | 9/16 | 3.62 |
| 1.63<br>1.75                                | 209  | 6.30  | 5.20  | 5/8  | 3.62 |
| 1.88<br>2.00                                | 210  | 6.50  | 5.43  | 5/8  | 3.72 |
| 2.13<br>2.25                                | 211  | 7.28  | 5.91  | 3/4  | 3.88 |
| 2.25<br>2.38                                | 212  | 7.68  | 6.30  | 3/4  | 4.25 |
| 2.50<br>2.63                                | 213  | 8.07  | 6.69  | 3/4  | 4.25 |
| 2.75  | 214  | 8.46  | 6.97  | 3/4  | 4.63 |
| 3.00  | 215  | 8.66  | 7.24  | 3/4  | 4.74 |
| 3.13  | 216  | 9.45  | 7.87  | 7/8  | 5.08 |
| 3.25<br>3.38                                | 217  | 9.84  | 8.19  | 7/8  | 5.20 |
| 3.50  | 218  | 10.43 | 8.66  | 7/8  | 5.59 |

# TAMAR SEAL GALLERY



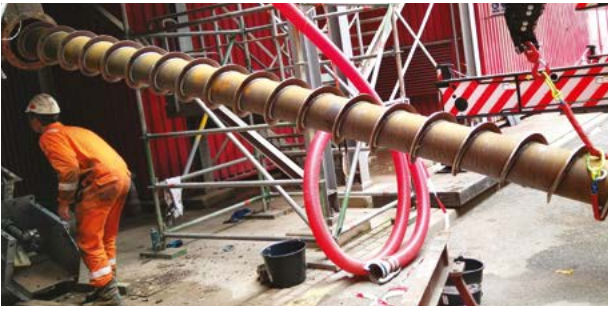
**WE ARE READY TO TAKE  
ON YOUR SEALING  
CHALLENGES**

# KLINKENBERG SERVICES

## WHAT IS KLINKENBERG SERVICES?

The Klinkenberg Services organization is the affiliated partner responsible for installing and maintaining these TAMAR seals on behalf of TAMAR in the Netherlands and Belgium. The synergy between Klinkenberg Zaanstad, TAMAR Innovative Sealing Technology, and Klinkenberg Services enables us to serve and advise our customers effectively on the right rotating sealing systems. This allows us to support customers from design to end-of-life cycle in optimizing their shaft seals. This encompasses engineering, realization, maintenance, inspections, direct advice, and complete asset management.





**IN COLLABORATION WITH TAMAR, KLINKENBERG SERVICES CAN EVEN BRING THE CUSTOMER TO THE LEVEL OF PREDICTIVE MAINTENANCE, APPLYING IOT TECHNOLOGY TO THE TAMAR SEALS.**



Klinkenberg Services B.V. is a recent addition to our group, founded in 2021, with the goal of providing our customers with comprehensive life cycle services, from design to decommissioning. This includes commissioning both new and used installations/machines, as well as performing preventive or corrective maintenance on the machines. We conduct rotating and stationary inspections as part of a tactical maintenance plan. With a strong focus on customer support, we have built a robust service department (including night shifts), where certified technicians and inspectors showcase their skills and expertise.



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