

Reliable



Pulp & Paper Industry Sealing Products

- Mechanical Seals
- Barrier Fluid Systems
- Return On Investment
- Case Histories
- Patent Pending & Patented Innovations



Mechanical Seals and Support System solutions for the Pulp and Paper Industry

This brochure is not an indication of availability

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, AESSEAL plc makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.



Pulp and Paper Industry

2

Copyright © 2022 AESSEAL plc

LIT-UK-L-PPG-04

www.aesseal.com



Contents

Section	Description	Page No.
1	Index of Specific Equipment Types & Manufacturers	4
2	Seals to suit Screens	6
3	Seals to suit Refiners	27
4	Seals to suit Centrifugal Pumps	31
5	Seals to suit PCP Pumps	44
6	Seals to suit Pulpers / Pulping area equipment	46
7	Seals to suit Agitators	49
8	Seals to suit Mixers	51
9	Seals to suit Filters	56
10	Seals to suit the Paper Machine	57
11	Seals to suit Other Equipment	59
12	AESSEAL® Standardization Options for the Pulp & Paper Industry	62
13	Standard AESSEAL® Designs used in the Pulp & Paper Industry	67
14	Barrier Fluid Systems and Double Mechanical Seals	78



ALL DESIGNS CONTAINED WITHIN THIS PUBLICATION ARE PROTECTED BY COPYRIGHT
& DESIGN RIGHTS AND ARE THE SOLE PROPERTY OF AESSEAL PLC.

MOST DESIGNS REPRODUCED WITHIN THIS PUBLICATION ARE PROTECTED
BY INTERNATIONAL PATENTS OR HAVE PATENTS PENDING.

01 - Index of Specific Equipment Types & Manufacturers

Screen Seals

Ahlstrom Moduscreens	6
Ahlstrom Pressure Screens	6
Beloit Screens	7
Beloit Jones Low Pulse Screens.	7
Bird Screens	8
Bird Centiscreen CN70	9
Black and Clawson Seletigier 8PH	9
Black and Clawson U V 500	10
Black & Clawson Ultra Screens	10
Black & Clawson 62 / 55mm Screen	11
Black & Clawson P24 Screen	11
Black & Clawson 300 Ultra H Screen	11
Black & Clawson P30 Selectifier Screen	12
Finckh Screens	12
Heinrich Fielder Screen.	13
Hooper / Impco Pressure Screens	13
Jylhavaara Screen.	14
Jylhavaara 150 Screen	14
Jylha Sunds Defibrator JP3	15
Lamort Screen -Single Designs	15
Lamort Screen - Double Concentric Designs.	16
Model 25 Screen.	16
Omega Screens.	17
Sunds Jyla Screen	17
Sunds Screens	18
Toschi Screen	18
Valmet Screens	19
Valmet FS200 Tampella screen	19
Valmet MS900 Screen	20
Valmet SDF 50/1G CMD Tampella	20
Voith Entstipper Screen	21
Voith Screen MF310	21
Voith Screens - MSS Range	22
Voith Screens - OS Range	22
Voith Minisorter Type 052.	23
Voith Minisorter GR II - Single Design	23
Voith Minisorter GR II - Double Design.	24
Voith GEV 34/3	24
Voith Omnifactor OS2	25

Voith Screen	25
Additional Screen design Concepts	26

Refiner Seals

Andritz screw feeder refiner	27
Andritz Sprout Bauer Refiner	27
Beloit Jones DD Refiner	28
Cavitron Deflaker CD1048F	28
Deflaker E4000	29
Recard Refiner	29
Sunds Defibrator Jalavarra Refiners	30
Voith AJS31 Turbo Refiner	30

Centrifugal Pump Seals

* Ahlstrom APP / APT Standard Single & Spacer	31
* Ahlstrom APP / APT Standard Double & Spacer.	31
* Ahlstrom APP / APT Exotic Single & Stubshaft.	32
* Ahlstrom APP / APT Exotic Double & Stubshaft	32
Ahlstrom APT 42-6 Pump	33
Ahlstrom APP / APT Pumps	33
Ahlstrom 12 DTB 14L split case Fan Pump	34
Ahlstrom MPP1500 Stock Pump	34
Allis Chalmers F8N1	35
Escher Wyss E1K / E2K	35
* Goulds 3175 - single seals designed for optimum performance c/w special stubshaft.	36
* Goulds 3175 - double seals designed for optimum performance c/w special stubshaft.	36
* Goulds 3196 XLT / XLT-X 2.500" - single seals designed for optimum performance c/w special stubshaft.	37
* Goulds 3196 XLT / XLT-X 2.500" - double seals designed for optimum performance c/w special stubshaft.	37
Goulds 3196 standard bore - single	38
Goulds 3196 standard bore - double	38
Goulds 3196 big / taper bore - single.	39
Goulds 3196 big / taper bore - double.	39
Goulds 3175 Knotter Feed Pumps	40
Goulds 3410L Black Liquor Pumps	40
Mather and Platt split case Pumps.	41
Nagle Pump.	41
Nagle Horizontal End Suction Pump	42
Nagle NRU Pump	42

* Designs marked with an asterisk (*) are Equipment Specific "special" seal designs with features aimed at improving MTBF.

Nagle vertical 190 - F40	43
T,E,D Egger Pump.	43

PCP Pump Seals

MONO (Monoflo)	44
Seepex	44
Moyno / Robbins & Myers	45
Netzsch	45

Pulper Seals

Andritz Top Winder Feeder	46
Bale Pulper	46
RCM 50 Pulper	47
Tampella Pulper	47
Valmet Pulper HD 4250.	48
Valmet SD-HD33 Pulper	48

Agitator Seals

Beloit Agitator	49
Lightnin Agitator	49
Voith Buttenruhrwek Type 850M	50
Voith Agitator 850 M	50
Voith Horizontal Agitator 1000M.	51

Mixer Seals

Ahlstrom Ahlmix 40P2-14-GR.	51
Ahlstrom Ahlmix 1991 & earlier single	51
Ahlstrom Ahlmix 1991 & earlier double.	52
Ahlstrom Ahlmix 1992 & later single	52
Ahlstrom Ahlmix 1992 & later double	53
Chemineer Mixer 5HSNX	53
Ahlstrom Salomix SLV-80.	54
Ahlstrom Salomix SL Range - Standard Single Seals	54
Ahlstrom Salomix SL Range - Standard Double Seals	55

Filter Seals

Kvaerner pressure disk filter	56
Kamyer Kvaerner pulping centrifilter.	56

Paper Machine

Valmet Pressurised Headbox Seal	57
Deflection Rolls	57
Steam Nozzles	58

Other Equipment

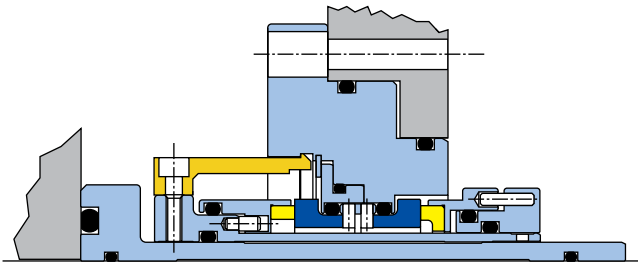
Lamort Gyroclean Light rejects rotary cleaner	59
Robbins & Myers RM6000 Macerator seal	59
Oxygen reactor "Fluffer" Seal	60
Warren EC 135 Thick Stock Screw Pump - Single Design	60
Warren EC 135 Thick Stock Screw Pump - Double Design	61

Index of Standard AESSEAL® Mechanical Seals

Convertor II™	67
SCUSI™	68
CURC™.	68
SMSS™.	69
CURE™.	68
CDSA™.	70
CDFI™.	70
DMSF™.	71
CSM™.	71
CDM™.	72
PCPS™	72
IASC™.	73
IADC™.	73
CMAX™.	73
DMAX™.	74
USFC™	74
CSWIB-AX™	75
RDS™	75
MagTecta™.	76
LabTecta®66	76
ISOS™.	77

02 - Seals to Suit Screens

Ahlstrom Moduscreens



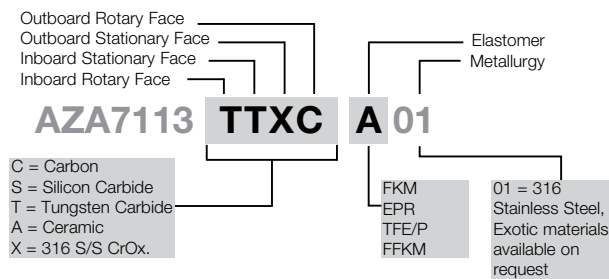
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom Moduscreen models F1, F3, F4 and F5.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

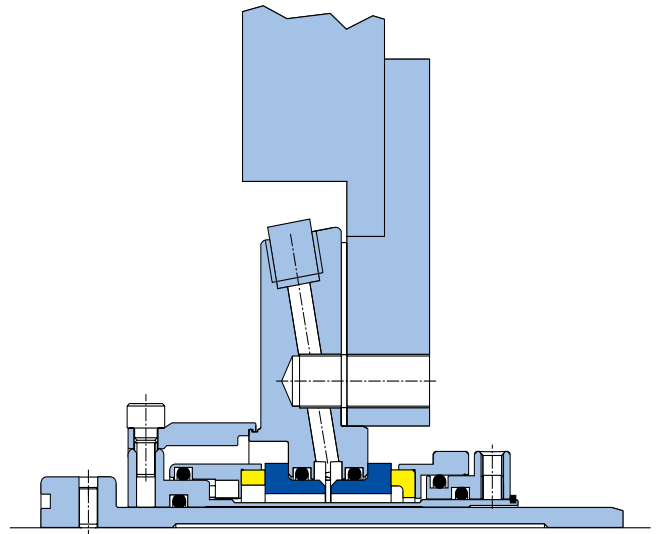
- Modular Design using standard components.
- Available as flow induced designs
- Reduces water consumption when used with a barrier fluid system

Z Reference Details

Model	Shaft	Z Ref	Drawing Number
F1	55mm	Z7522	7108513
F2	70mm	-	-
F3	110mm	Z7113	7104236
F4	110mm	Z7113	7104236
F5	5.875"	Z8619	7115842



Ahlstrom Pressure Screens



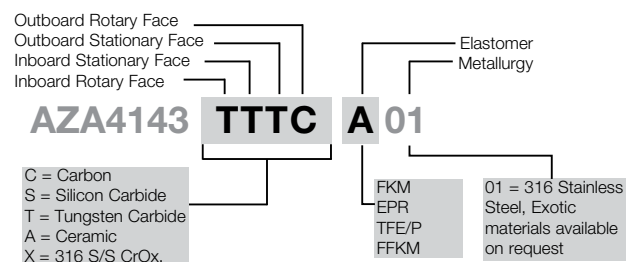
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom pressure screen models F1, F2, F3, F3F, F4, HB4 and HB5.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.

Z Reference Details

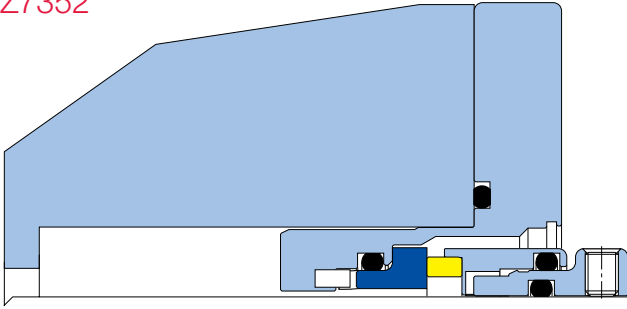
Model	Shaft	Z Ref	Drawing Number
F1	55mm	-	6462874
F2	70mm	Z9004	7120935
F3	110mm	Z4143	6460904
F4	110mm	Z4143	6460904
F3F	120mm	Z8934	7119672
HB4 & HB5	140mm	Z8749	7117311



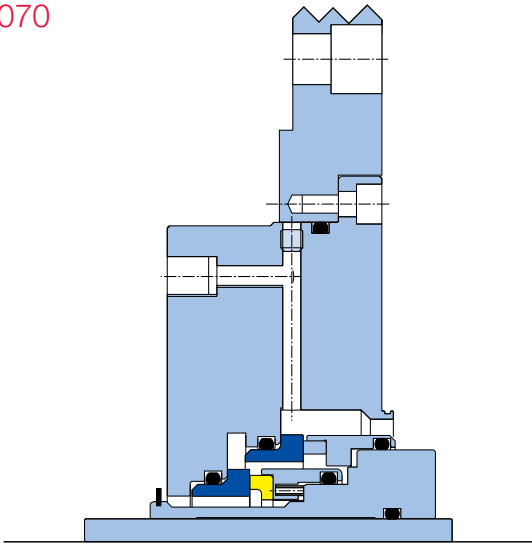
02 - Seals to Suit Screens

Beloit Screens

Z7352



Z9070



Seal Designs to suit Beloit Screens

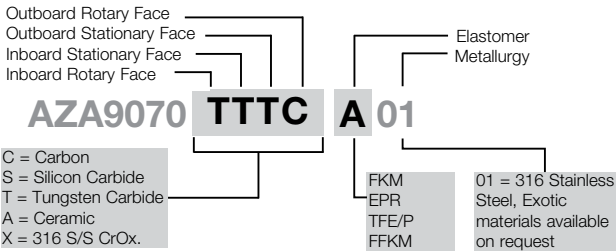
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Beloit Screens.

The cross sections shown above have been chosen to illustrate typical examples of the wide variety of designs available for this type of equipment.

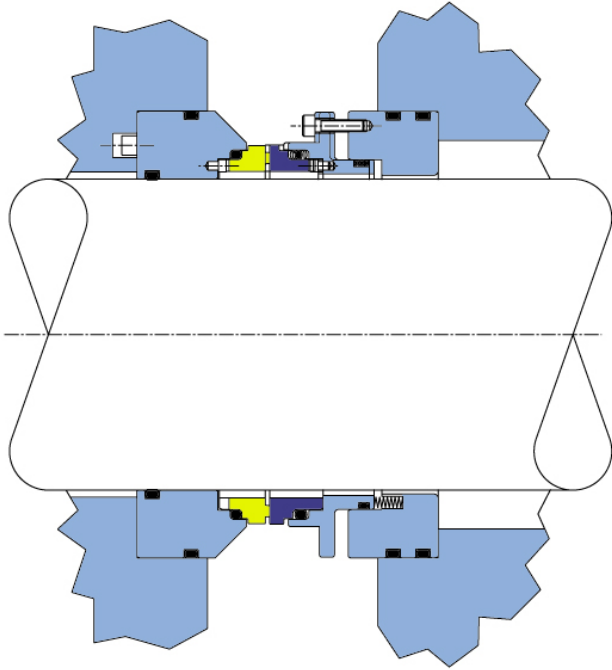
- Modular Design using standard components.

Z Reference Details

Model	Shaft	Z Ref	Drawing Number
30A	3.000"	Z9070	7121682
B80	5.500"	Z7352	7106443



Beloit Jones Low Pulse Screens



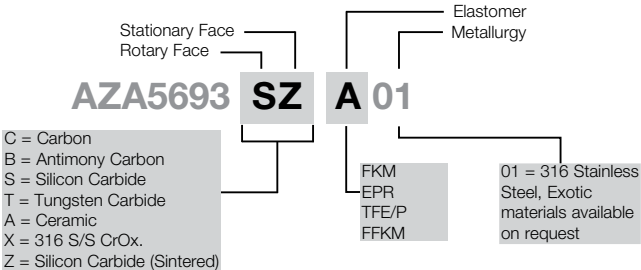
Component Seal Design to suit Beloit Jones Low pulse Screens

AESSEAL® have designed and supplied a single component mechanical seal for the 3.125", 4.000" and 5.500" Beloit Jones Low pulse Screen sizes M44, M32, M50, M58, M18, M24 and M28.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

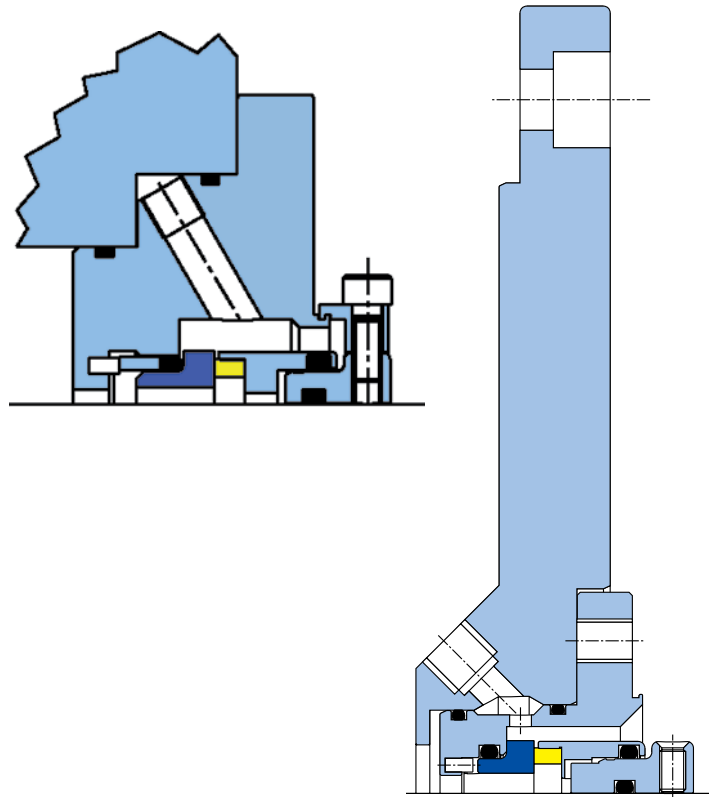
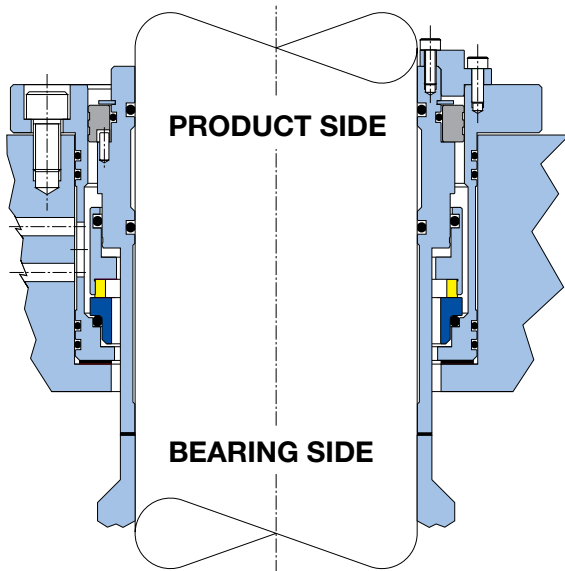
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
M18/M24/M28	3.125"	Z8358	7114055
M44/M32	4.000"	Z5693	6469433
M50/M58	5.500"	Z7166	7104921



02 - Seals to Suit Screens

Bird Screens



AESSEAL® have designed a range of cartridge mechanical seals specifically to suit a wide range of Bird Screens.

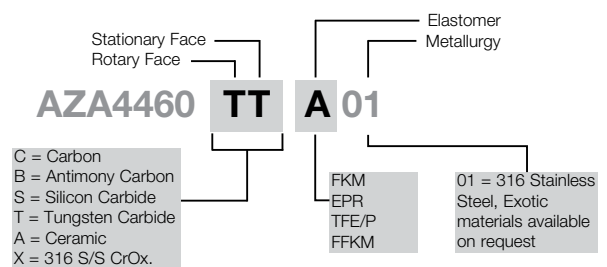
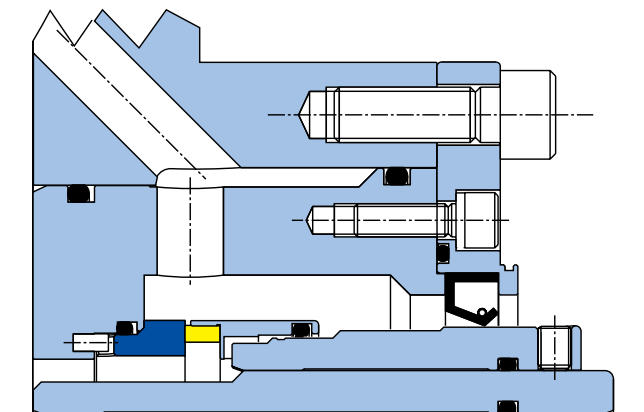
The cross sections shown on this page have been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

For further information see Case Histories 224, 273, 706, 723 and 1208

- Modular Design using standard components.
- Designed to maximize MTBF
- Innovative high performance solutions
- Flushed cavity design, generally with secondary containment seal / throttle bush

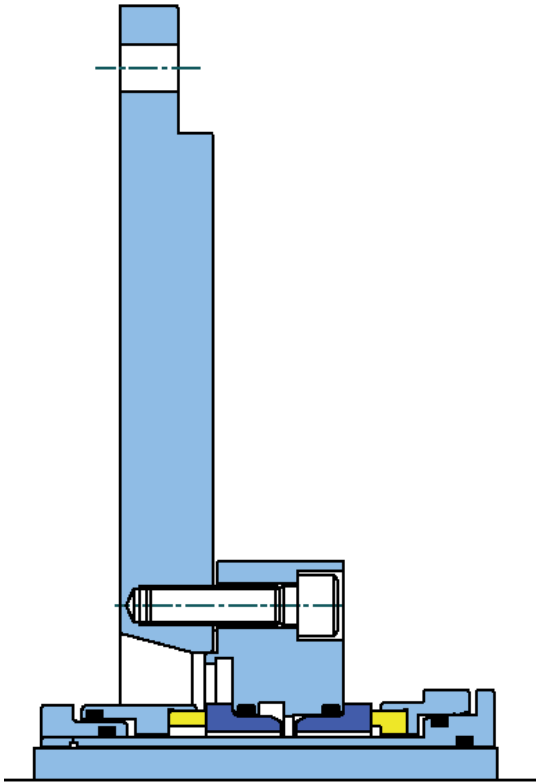
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
100	1.750"	Z8828	7118395
400	3.000"	Z5755	6469586
400	85mm	Z7386	7107036
14	3.750"	Z7644	7109521
14B	3.750"	Z9034	7121614
50	3.848"	Z4460	6462135
80	4.724"	Z4267	6461080



02 - Seals to Suit Screens

Bird Centriscreen CN70



5.500" IADC™ SEAL to suit a Bird Centriscreen CN70

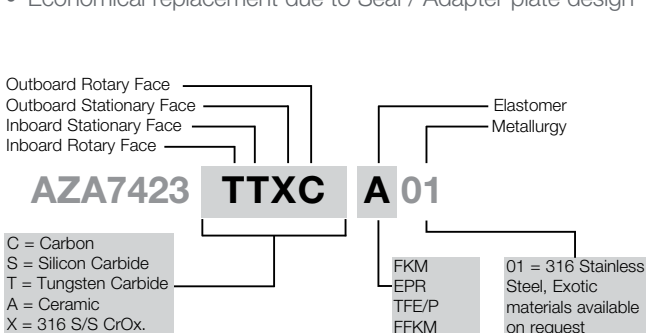
AESSEAL® Reference: Z7423

AESSEAL® Drawing Number: 7107509

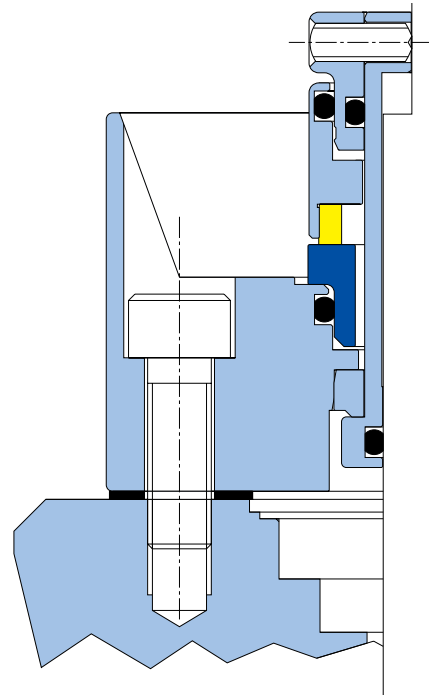
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Bird Centriscreens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Economical replacement due to Seal / Adapter plate design



Black & Clawson Seletigier 8PH



55/64mm IASC™ to suit a Black & Clawson Seletigier 8PH

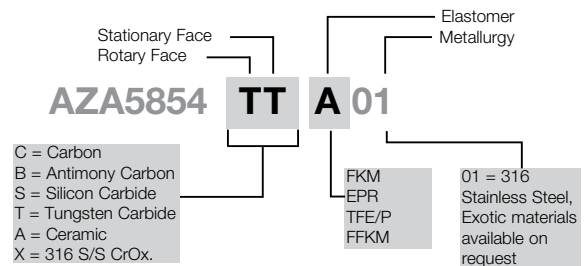
AESSEAL® Reference: Z5854

AESSEAL® Drawing Number: 6470299

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Black & Clawson Seletigier 8PH.

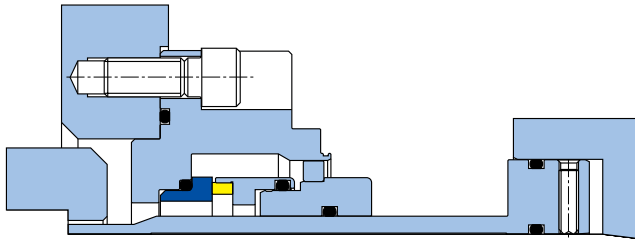
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Gland cavity design prevents hang-up / dry running on shutdown / start up cycle, as fluid is retained at the seal faces when the basket is drained.



02 - Seals to Suit Screens

Black & Clawson UV 500



100mm IASC™ to suit a Black & Clawson UV 500

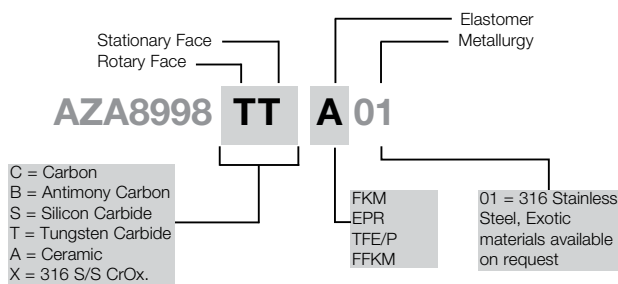
AESSEAL® Reference: Z8998

AESSEAL® Drawing Number: 7120908

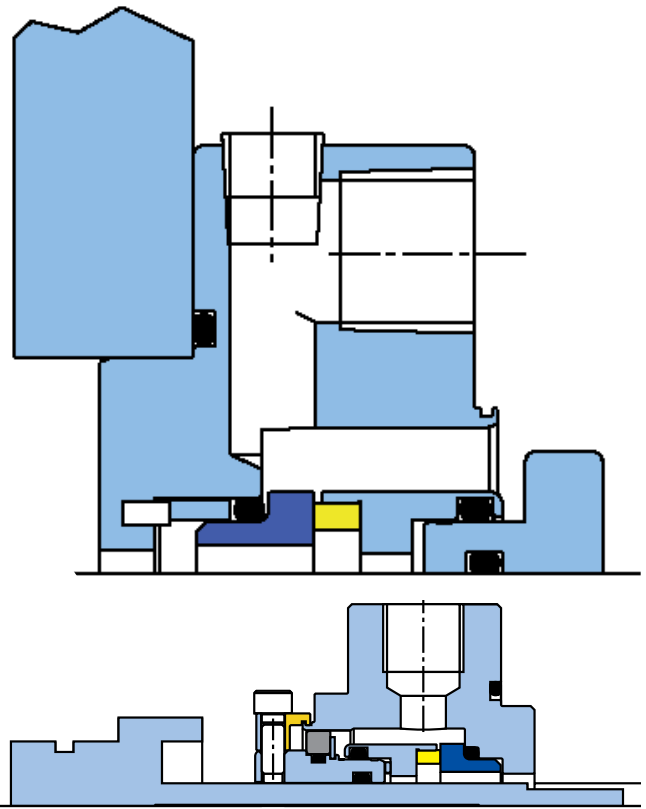
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Black & Clawson UV 500.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Flushed cavity design, generally with secondary containment seal / throttle bush



Black & Clawson Ultra Screens



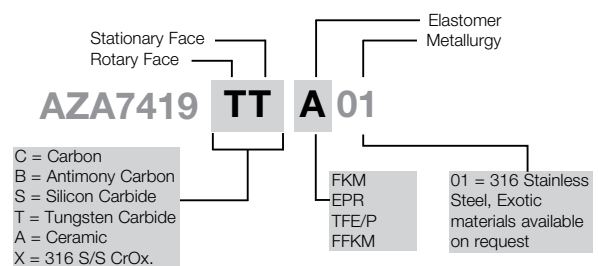
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit various Black & Clawson Ultra screen models.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- For further information see Case Histories 1396K & 1446K

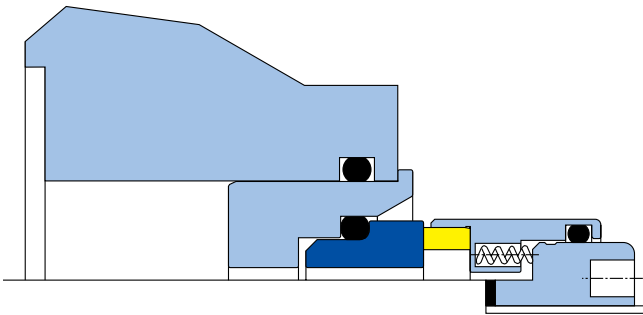
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
676 Ultra	100mm	Z7419	7107454
Ultra	3.500"	Z7510	7108441
Ultra	80mm	Z8892	7119098
Ultra	3.625	Z9372	7125401



02 - Seals to Suit Screens

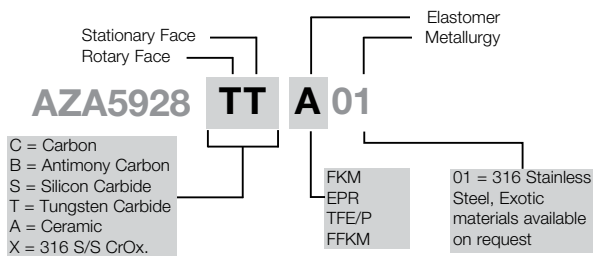
Black & Clawson Screen (62 / 55mm)



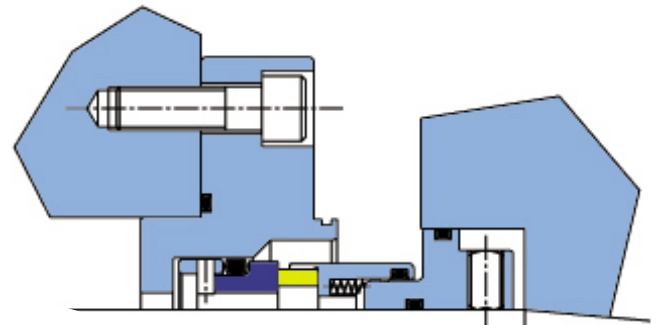
62/55mm Special SAI™ and Stationary to suit a Black & Clawson Screen

AESSEAL® Reference: Z5928

AESSEAL® Drawing Number: 6470610



Black & Clawson 300 Ultra H Screen (5.500")

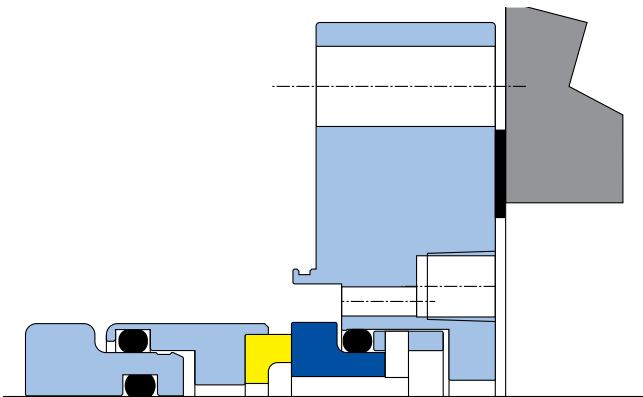


AESSEAL® have designed and supplied clipped single mechanical seals, 5.500" IASC™, to suit a Black & Clawson 300 Ultra-H Horizontal Screen.

The gland has been designed to align with the existing flush holes in the equipment, whilst the volume around the seal faces has been maximized to facilitate seal face cooling.

The stationary has been designed using the AESSEAL® standard, patented self aligning seat technology, and the sleeve has been extended to seal inside the hub of the rotor.

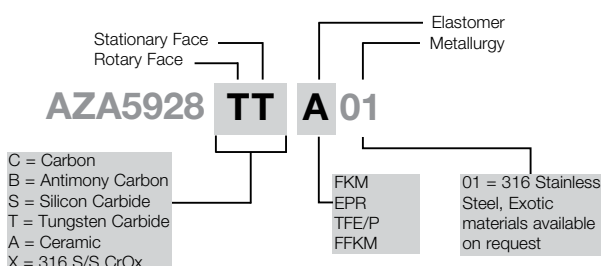
Black & Clawson P24 Screen



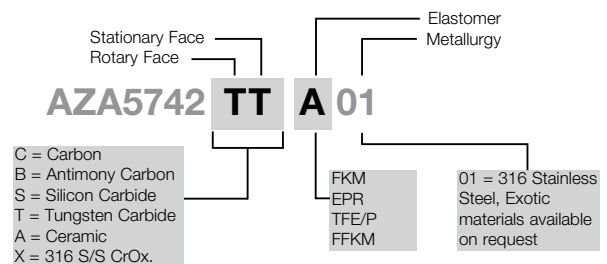
80mm IASC™ to suit a Black & Clawson P24 Screen

AESSEAL® Reference: Z5978

AESSEAL® Drawing Number: 6470703

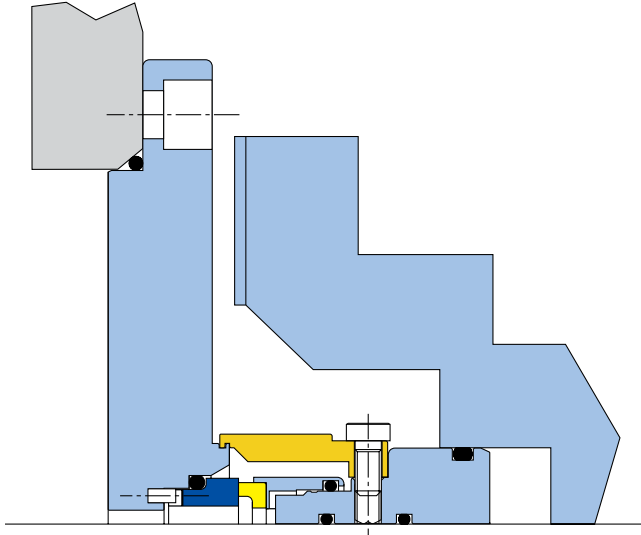


For further information, see Z Reference 5742 and AESSEAL® general arrangement 6469547.



02 - Seals to Suit Screens

Black & Clawson P30 Selectifier Screen



2.125" IASC™ to suit a Black & Clawson P30 Selectifier Screen

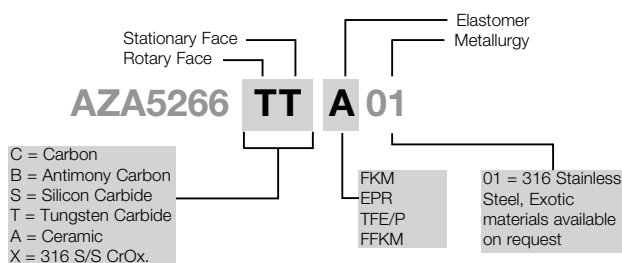
AESSEAL® Reference: Z5266

AESSEAL® Drawing Number: 6467103

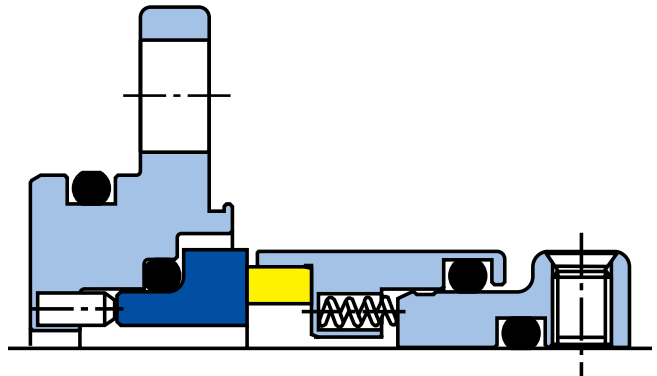
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Black & Clawson P30 Selectifier Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Finckh Screens



3.5625 IASC™ seal arrangement to suit a Finckh GR2 screen

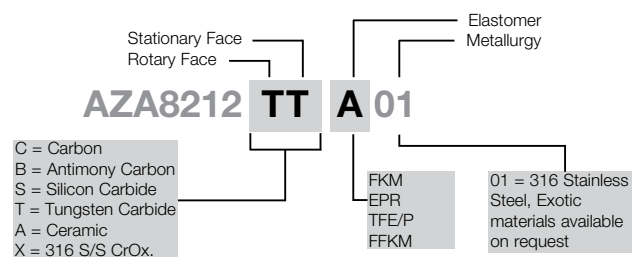
AESSEAL® Reference: Z8212

AESSEAL® Drawing Number: 7113102

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Finckh Screens.

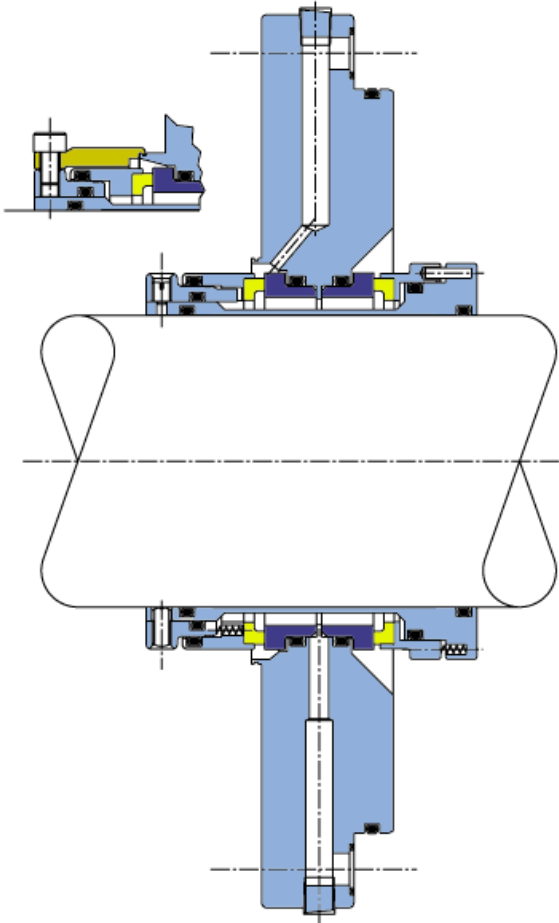
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Clipped Unit Design for ease of installation.



02 - Seals to Suit Screens

Heinrich Fielder Screen



90mm IADC™ to suit a Heinrich Fielder Screen

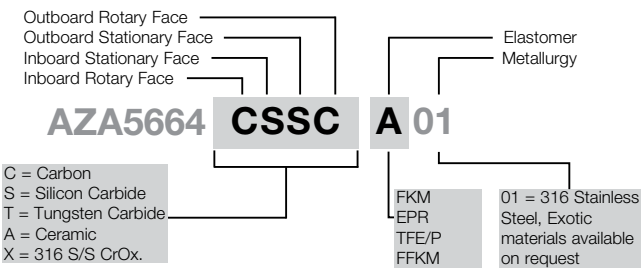
AESSEAL® Reference: Z5664

AESSEAL® Drawing Number: 6469213

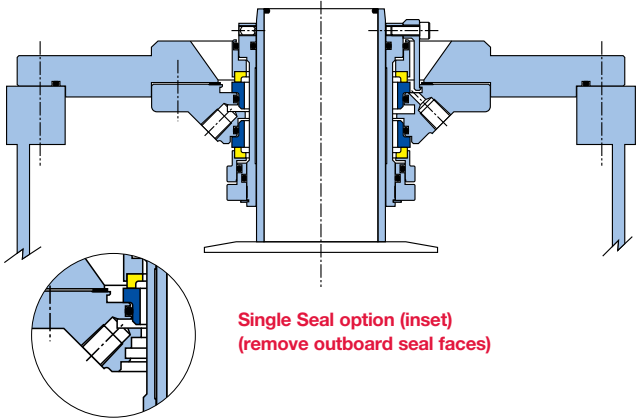
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Heinrich Fielder Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Hooper / Impco Pressure Screens



Single Seal option (inset)
(remove outboard seal faces)

AESSEAL® have designed a range of Screen and Knotter seals designed specifically to suit the Impco HI-Q Knotters and Impco HI-Q Fine Screen ranges, models 208, 210, 212, 300 and 400.

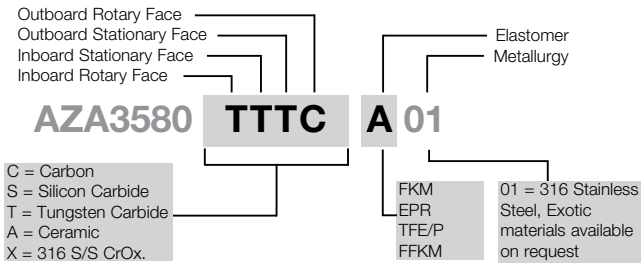
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

AESSEAL® has demonstrated proven COST savings, as described in case history 1210. Further case histories include 700, 703 and 705.

- Modular Design using standard components.
- Special Adapter plate accepts “standard” seal.

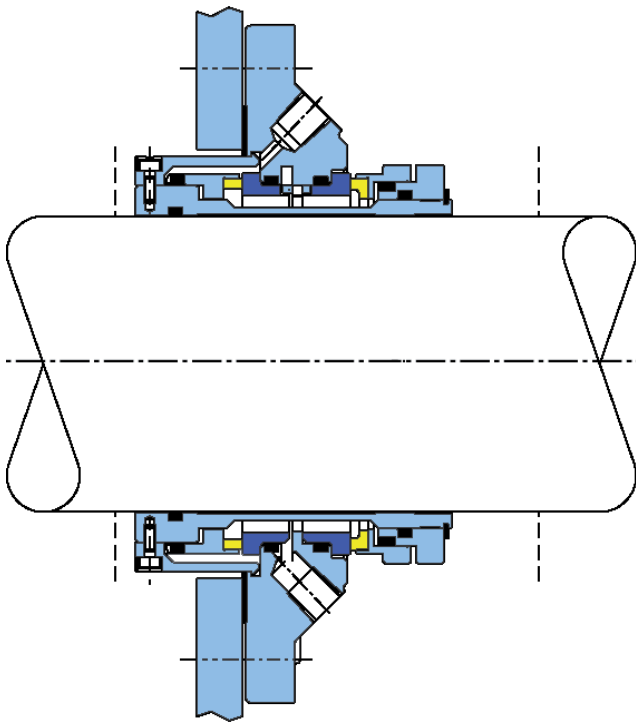
Z Reference Details

Model	Shaft Size	Seal Size	Z Ref Seal	Z Ref Adapter Plate	Drawing Number
Hi-Q Fine	-	3.500"	Z8351	-	7114013
Hi-Q Fine	-	3.500"	Z8460	Z8460	7114616
Hi-Q Fine	-	3.500"	Z9027	Z9027	7121187
PSV2600	4.000"	4.125"	Z4422	Z4423	6462045
PSV400 'B'	-	4.125"	Z4596	-	6462849
PSV400 'C'	4.000"	4.125"	Z4422	Z4597	6462850
Hi-Q Fine	-	85mm	Z4855	-	6464344
Hi-Q Fine	2.634"	85mm	Z5534	-	6468559



02 - Seals to Suit Screens

Jylhavaara Screen



100mm IADC™ c/w. FMG. Screen Seal to suit a Jylhavaara Screen

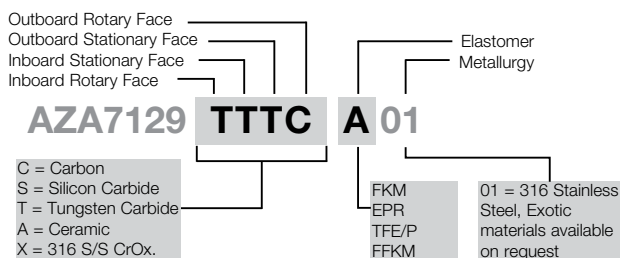
AESSEAL® Reference: Z7129

AESSEAL® Drawing Number: 7104494

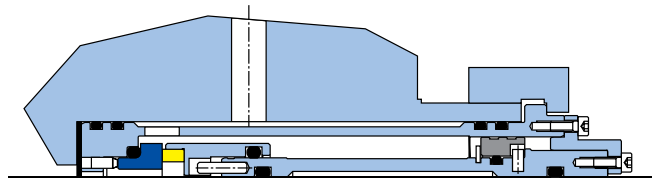
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Jylhavaara Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.



Jylhavaara 150 Screen



100mm USFC™ seal arrangement to suit a Jylhavaara 150 screen

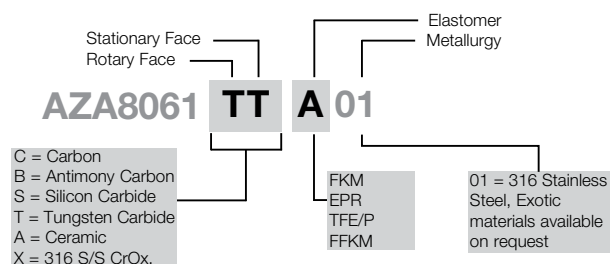
AESSEAL® Reference: Z8061

AESSEAL® Drawing Number: 7112057

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Jylhavaara Screens.

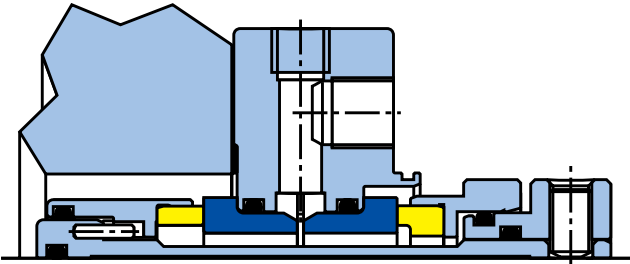
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Innovative flushed cavity design optimizes seal face environment.
- Multiple gland elastomers to compensate for poor stuffing box surface finish typically found in previously packed applications
- Cartridge design for ease of installation



02 - Seals to Suit Screens

Jylha Sunds Defibrator JP3



150mm CDM™ to suit a Jylha Sunds Defibrator JP3.

AESSEAL® Reference: Z9369

AESSEAL® Drawing Number: 7125379

For further information see Case History 1727K

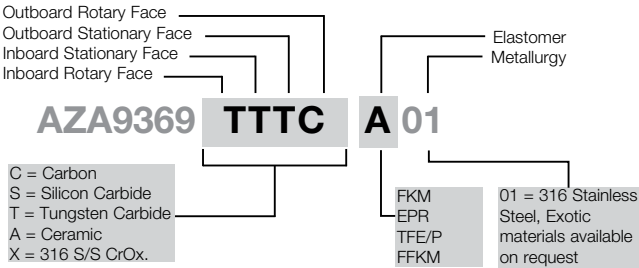
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit a Jylha Sunds Defibrator.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

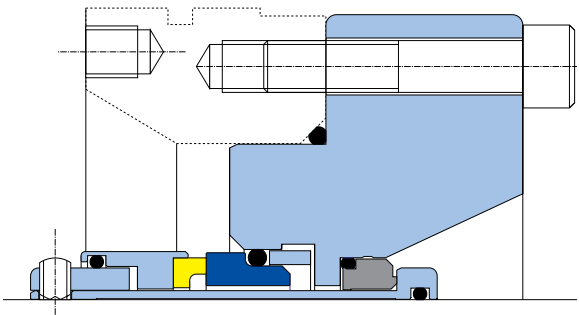
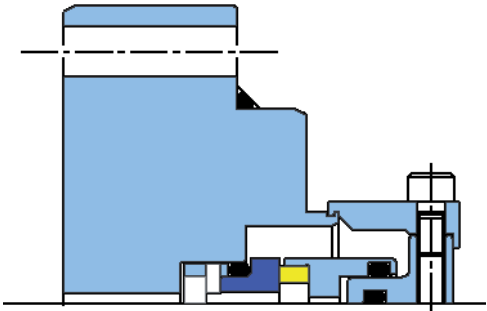
- Modular Design using standard components.
- Large Internal Clearances.
- Large Barrier Fluid ports for optimum seal face cooling and Lubrication.
- Cartridge design for ease of installation

Z Reference Details

Model	Shaft	Z Ref	Drawing Number
-	100mm	Z9589	7128681
JP3	150mm	Z9369	7125379



Lamort Screen - Single Designs



IASC™ Seal designs to suit Lamort Screens.

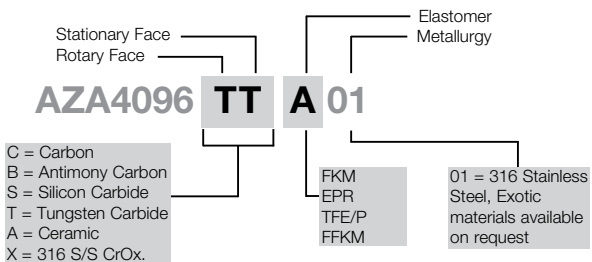
AESSEAL® have designed and supplied IASC™ seals for a wide range of Lamort Screens in various sizes.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Designs using standard components.
- Cartridge design for ease of installation

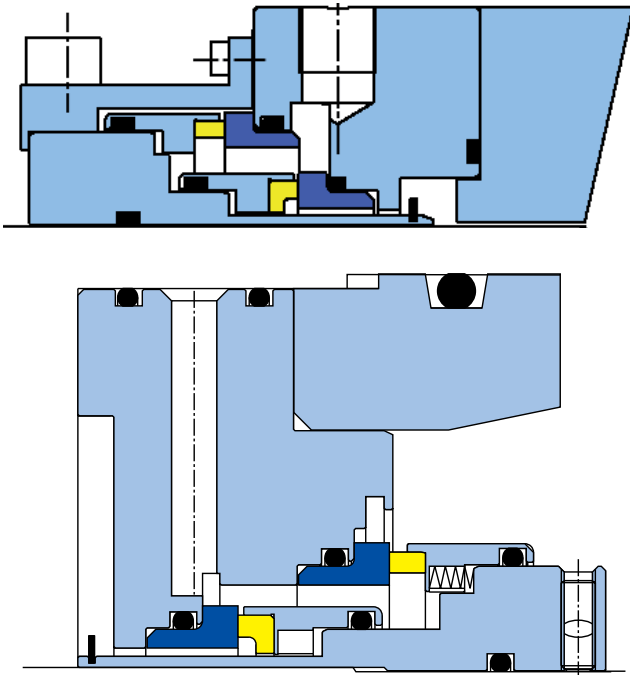
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
SPN4	40mm	Z7638	7109462
-	50mm	Z7577	7108949
SPN800	60mm	Z4096	6460759
SPN12	90mm	Z5902	6470478
-	90mm	Z7151	7104674



02 - Seals to Suit Screens

Lamort Screens - Double Concentric Designs



Double Concentric Seal designs to suit Lamort Screens.

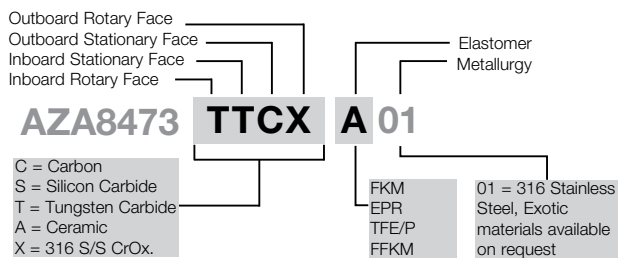
AESSEAL® have designed and supplied Double Concentric seals for a wide range of Lamort Screens in various sizes.

The cross sections shown above have been chosen to illustrate typical examples of the wide variety of designs available for this type of equipment.

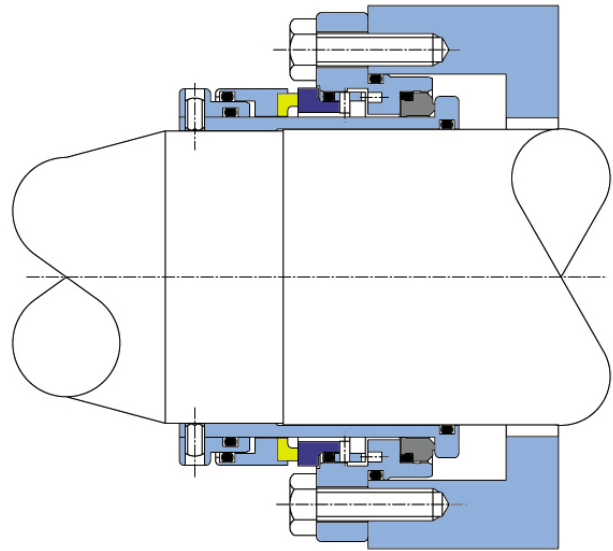
- Modular Designs using standard components.
- Cartridge design for ease of installation

Z Reference Details

Model	Shaft	Z Ref	Drawing Number
SP1200	90mm	Z8473	7114661
-	100mm	Z7152	7104706



Model 25 Screen



Single Cartridge Seal to suit Screen (Model 25) 90mm/91mm

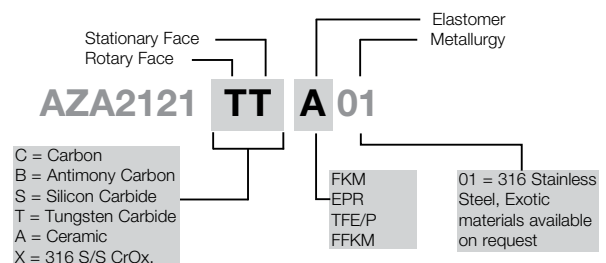
AESSEAL® Reference: Z2121

AESSEAL® Drawing Number: 6453744

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Model 25 Screens.

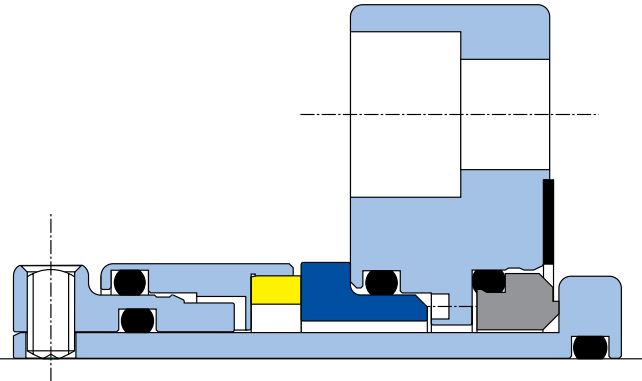
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



02 - Seals to Suit Screens

Omega Screens



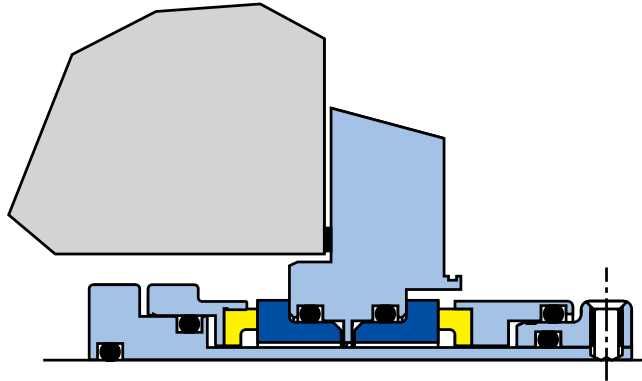
60 mm IASC™ Seal to suit an Omega Screen
 AESSEAL® Reference: Z5438
 AESSEAL® Drawing Number: 6468137

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Omega Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Robust single seal design
- Cartridge design for ease of installation

Sunds Jyla Screen



MDC™ seal to suit Sunds Jyla Screens
 For more information see Case Histories 1206 and 1207

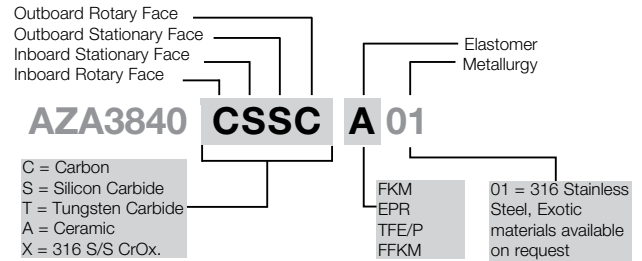
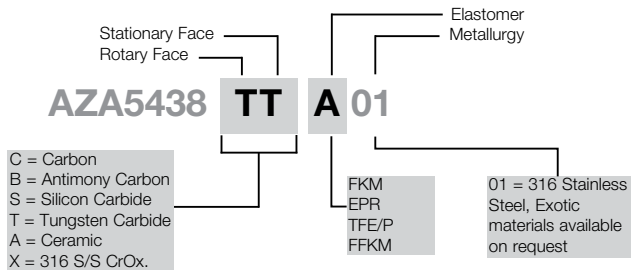
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Sunds Jyla Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation

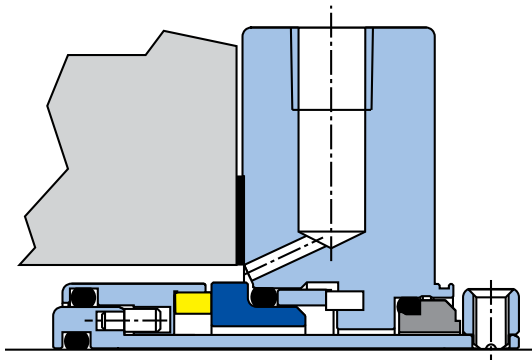
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
JYLA 100	75mm	Z3840	6459736
JYLA 150	100mm	Z3615	6458574



02 - Seals to Suit Screens

Sunds Screens



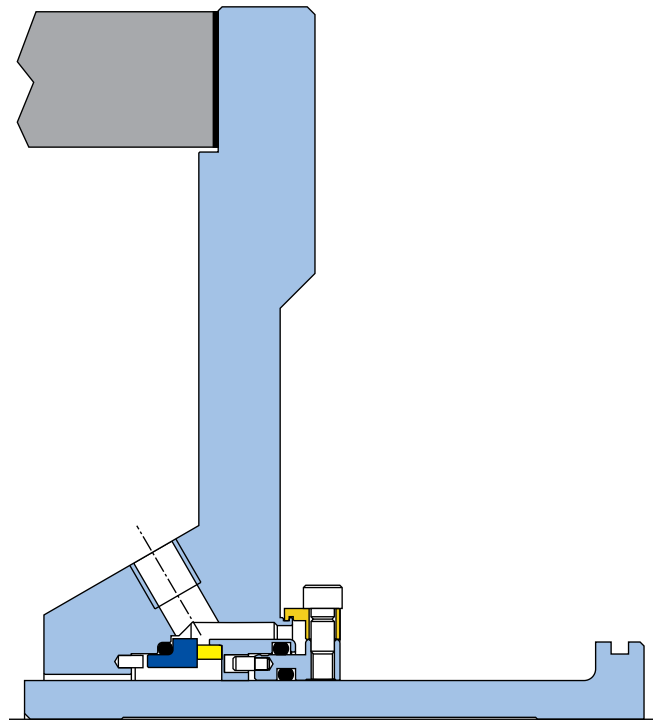
Single Cartridge Seal designs to suit Sunds Screens.

AESSEAL® have designed and supplied single cartridge mechanical seals for a wide range of Sunds Screens in various sizes.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Designs using standard components.

Toschi Screens



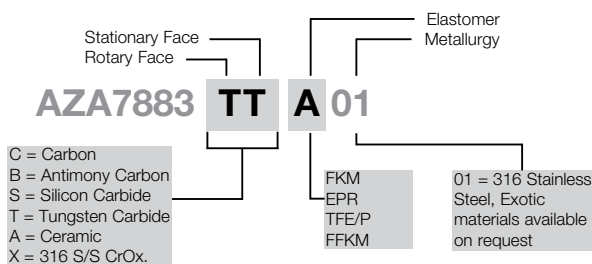
120mm IASC™ Seal arrangement to suit a Toschi ECT4 screen

AESSEAL® Reference: Z7519

AESSEAL® Drawing Number: 7107388

Z Reference Details

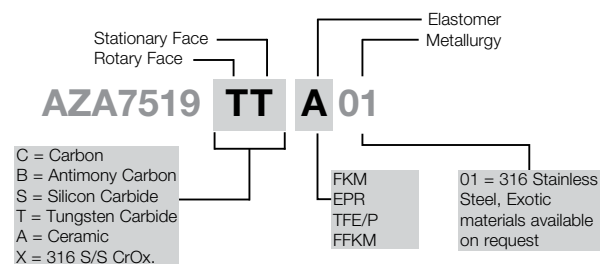
Model	Shaft	Z Ref	Drawing Number
T9-CURC™	100mm	Z7883	7111145
T9	100mm	Z7370	7106736



AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Toschi Screens.

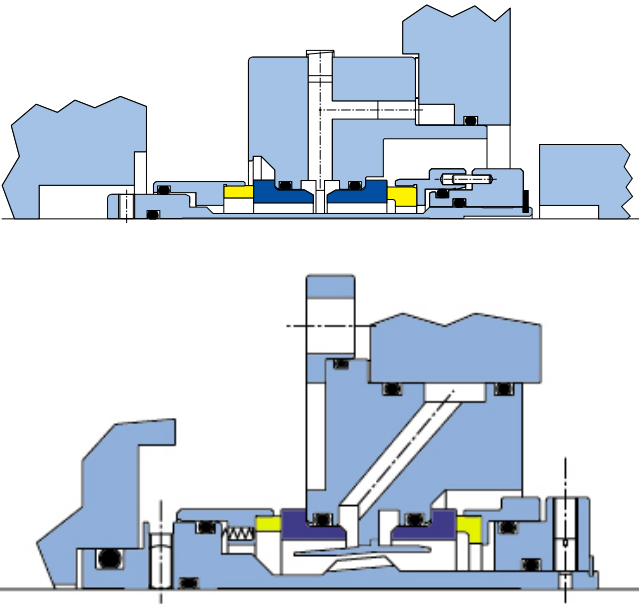
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



02 - Seals to Suit Screens

Valmet Screens



Double Seal Designs to suit Valmet Screens

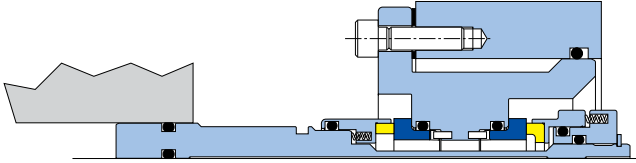
For more information see Case History 1205

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Valmet Screens

The cross sections shown above have been chosen to illustrate typical examples of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Used with SSE25 “jumbo” tank system
- Patented Pumping Ring
- 18 Months+ seal life & massive water cost savings

Valmet FS200 Tampella Screen



120mm IADC™ Seal to suit Valmet FS200 Tampella Screen

AESSEAL® Reference: Z4840

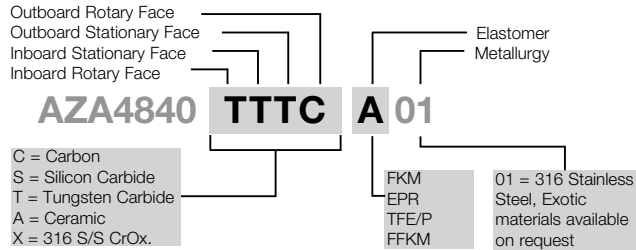
AESSEAL® Drawing Number: 6464264

For more information see Case History 1209

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Valmet Tampella Screens.

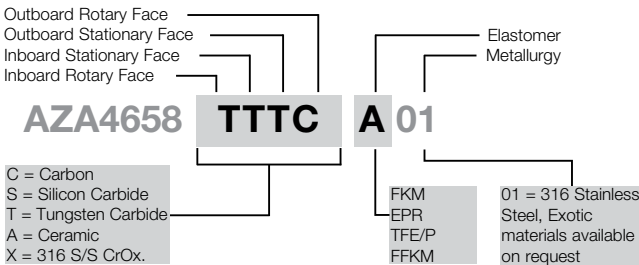
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Large Internal Clearances



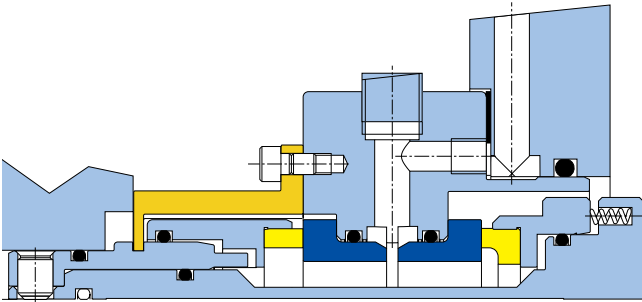
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
TL450/TL600	150mm	Z8500	7114799
TP100	80mm	Z4658	6463079
TAS 25H	70mm	Z8879	7118982



02 - Seals to Suit Screens

VALMET MS900 Screen



180mm IADC™ to suit a VALMET MS900 Screen

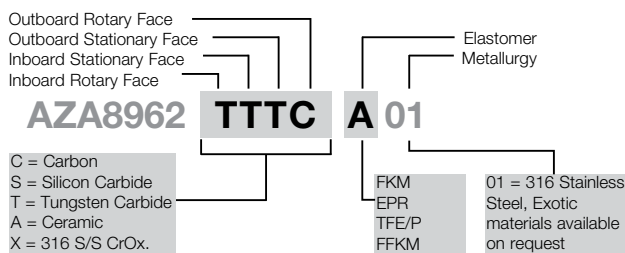
AESSEAL® Reference: Z8962

AESSEAL® Drawing Number: 7119997

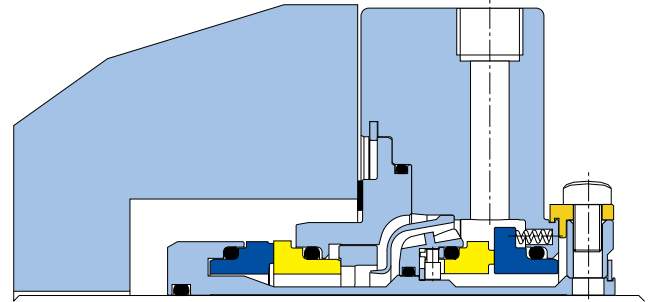
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VALMET MS900 Screens.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



VALMET SDF 50/1G CMD Tampella



140mm DMSF™ to suit a VALMET SDF 50/1G CMD Tampella

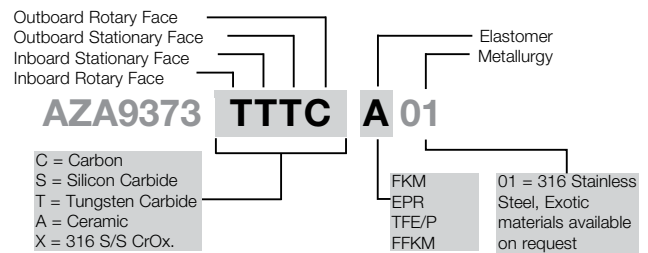
AESSEAL® Reference: Z9373

AESSEAL® Drawing Number: 7125408

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VALMET SDF 50/1G CMD Tampella.

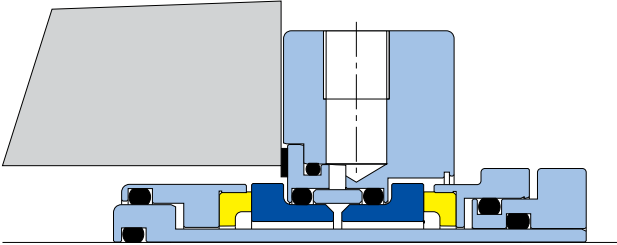
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



02 - Seals to Suit Screens

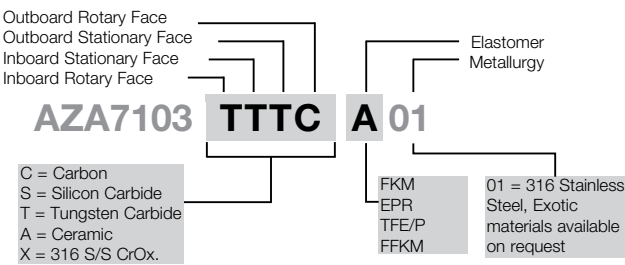
Voith Entstipper Screen



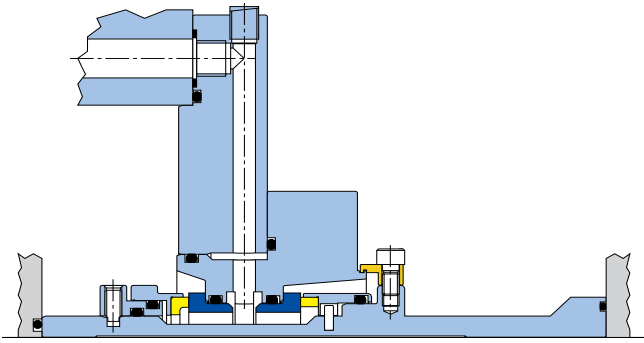
90mm CDSA™ seal to suit Voith type 2E Entstipper Screen.
AESSEAL® Reference: Z7103
AESSEAL® Drawing Number: 7103883
For further information see Case Histories 1253J

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Voith Entstipper screens.
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



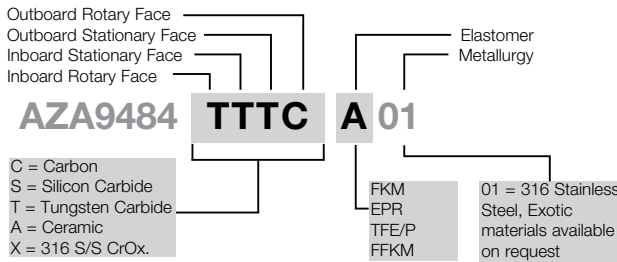
VOITH MF310 Screen



101mm IADC™ to suit a VOITH MF310 Screen
AESSEAL® Reference: Z9484
AESSEAL® Drawing Number: 7127006

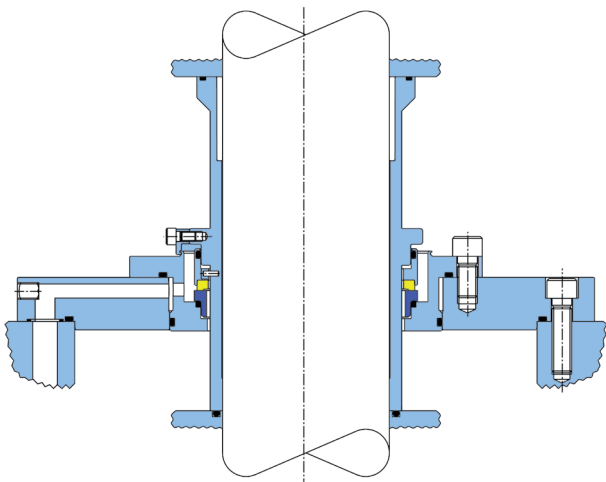
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH MF310 Screens.
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



02 - Seals to Suit Screens

Voith Screens - MSS Range



IASC™ Seal to suit Voith Screen models MSS 08/05, MSS 10/06, MSS 12/12, and MSS 15/15

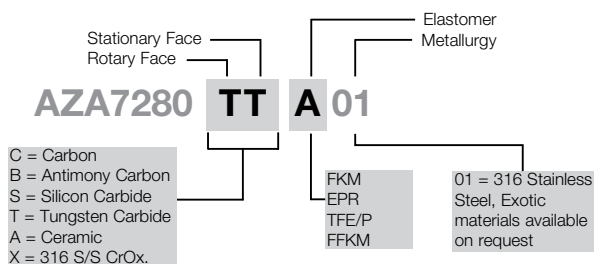
AESSEAL® have designed and supplied IASC™ single cartridge mechanical seals for a wide range of Voith Screens in various sizes.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

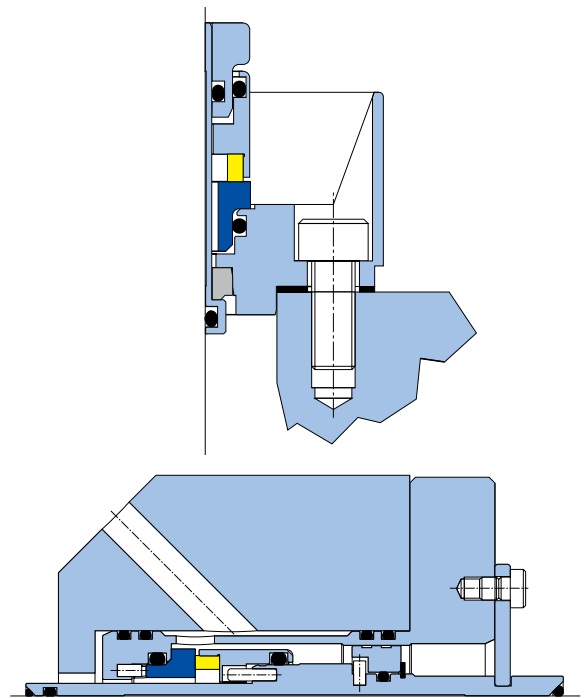
- Modular Designs using standard components.
- Cartridge design for ease of installation

Z Reference Details

Model	Shaft	Z Ref	Drawing Number
MSS 08/05 MSS 10/06	94mm	Z7280	6470880
MSS 12/12	101mm	Z7277	6470881
MSS 15/15	130mm	Z7278	6470890



Voith Screens - OS Range



Single Cartridge Seal designs to suit Voith Screens.

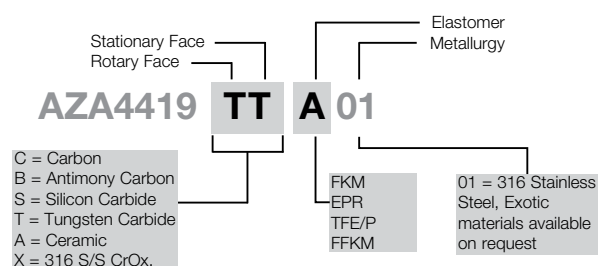
AESSEAL® have designed and supplied single cartridge mechanical seals for a wide range of Voith Screens in various sizes.

The cross sections shown above have been chosen to illustrate typical examples of the wide variety of designs available for this type of equipment.

- Modular Designs using standard components.

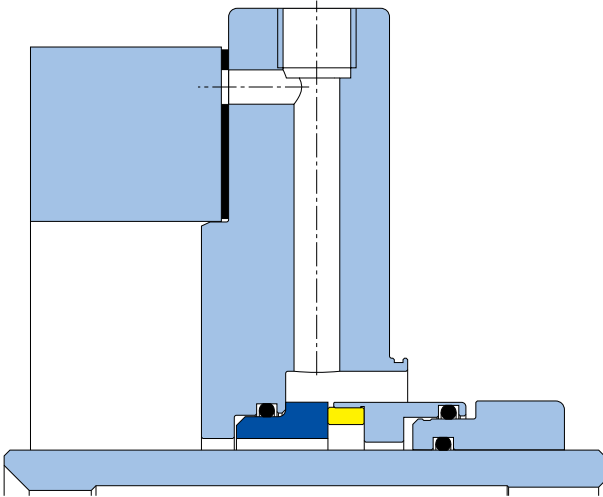
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
GR12	60mm	Z8931	7119576
OS2	70.0mm	Z4418	-
OS4	80.0mm	Z4419-	-
OS8	90.0mm	Z4420	-
VHO1T	95mm	Z8733	7117000
VS5	2.125"	Z8933	7119667



02 - Seals to Suit Screens

VOITH 052 Minisorter



55mm IASC™ to suit a VOITH 052 Minisorter

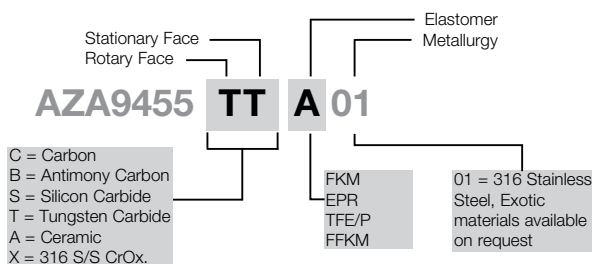
AESSEAL® Reference: Z9455

AESSEAL® Drawing Number: 7126575

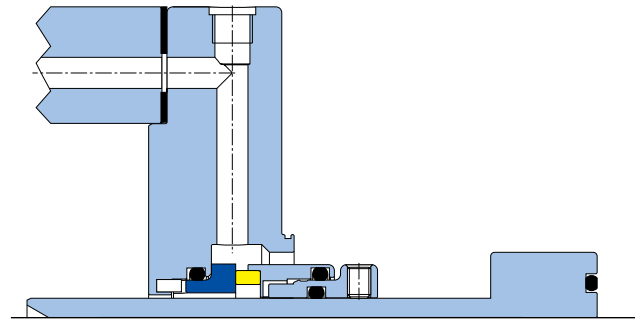
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH 052 Minisorters.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



VOITH Minisorter Gr II Single Design



70mm IASC™ to suit a VOITH Minisorter Gr II

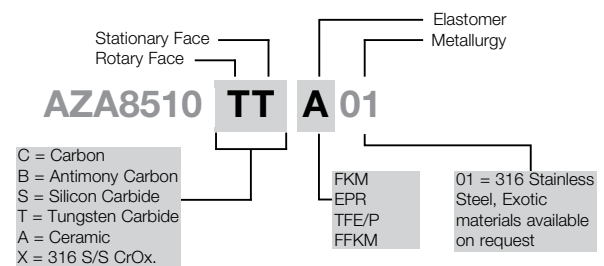
AESSEAL® Reference: Z8510

AESSEAL® Drawing Number: 7114882

AESSEAL® have designed a range of single cartridge mechanical seals specifically to suit VOITH Minisorter Gr II.

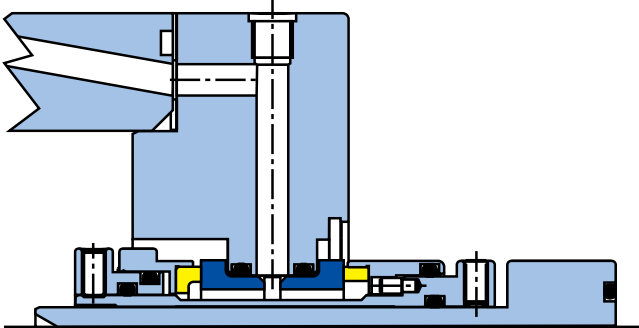
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



02 - Seals to Suit Screens

VOITH Minisorter Gr II Double Design



70mm IADC™ to suit a VOITH Minisorter Gr II

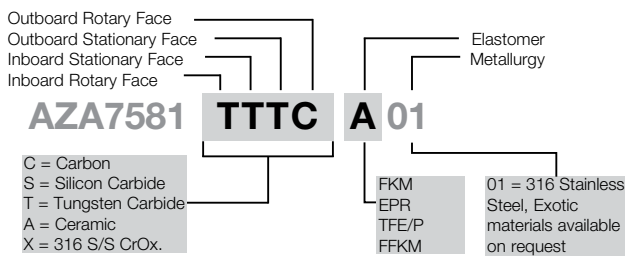
AESSEAL® Reference: Z7581

AESSEAL® Drawing Number: 7108967

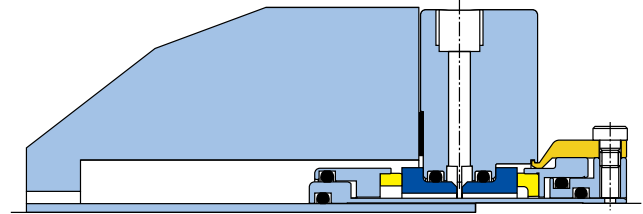
AESSEAL® have designed a range of double cartridge mechanical seals specifically to suit VOITH Minisorter Gr II.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



VOITH 34/3 GEV



5.000" CDM™ to suit a VOITH 34/3 GEV

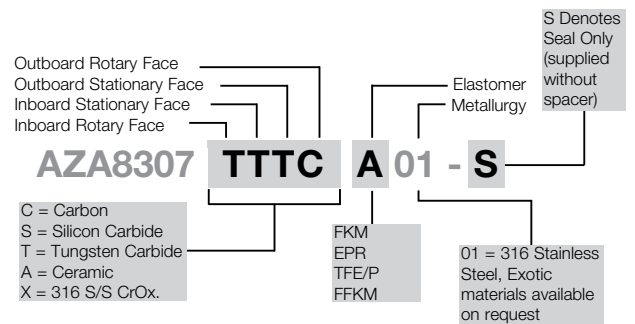
AESSEAL® Reference: Z8307

AESSEAL® Drawing Number: 7114283

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH 34/3 GEV

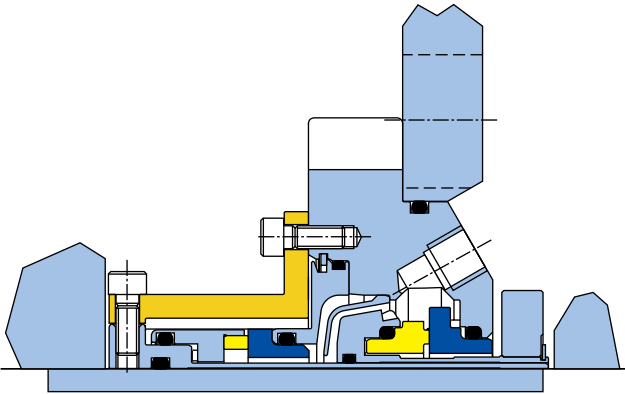
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



02 - Seals to Suit Screens

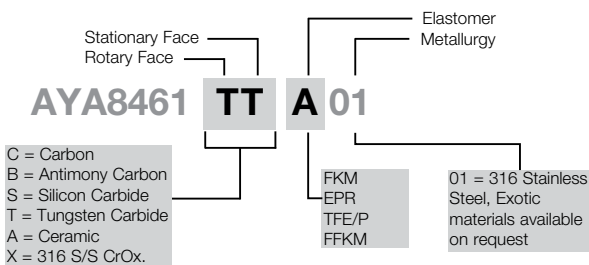
VOITH OS2 Omnifactor



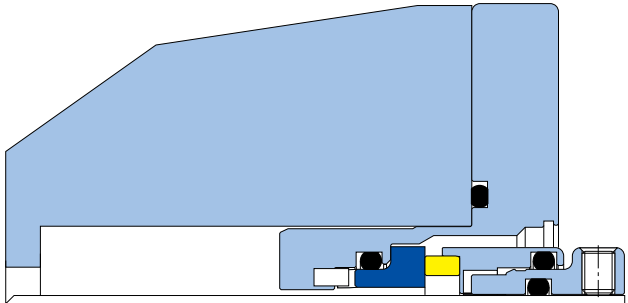
70mm IFDC™ to suit a VOITH OS2 Omnifactor
AESSEAL® Reference: Y8461
AESSEAL® Drawing Number: 7114793

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH OS2 Omnifactors.
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Patented pumping scroll design maximizes cooling at inboard seal faces.
- Large Quench & Drain ports increase barrier fluid flow.
- Cartridge design for ease of installation



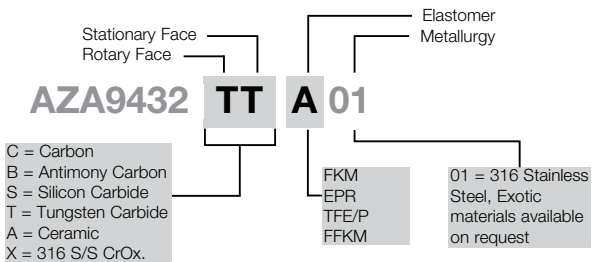
VOITH Screen



70mm IASC™ to suit a VOITH Screen
AESSEAL® Reference: Z9432
AESSEAL® Drawing Number: 7126182

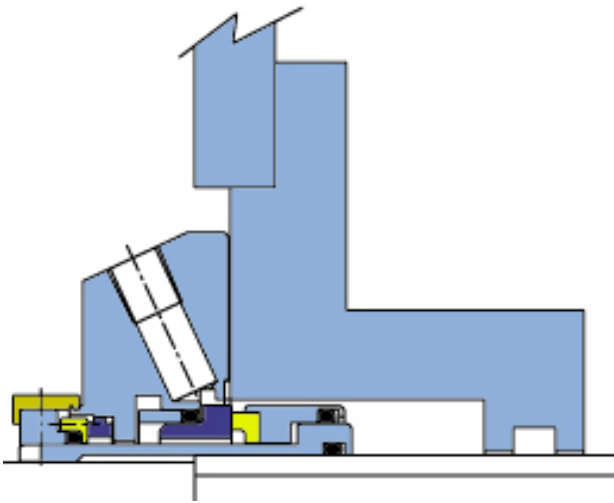
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH Screens.
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



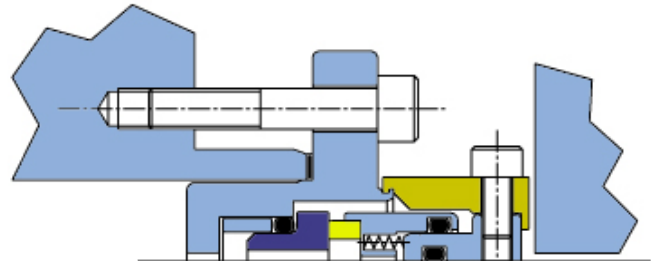
02 - Seals to Suit Screens

Additional screen seal designs



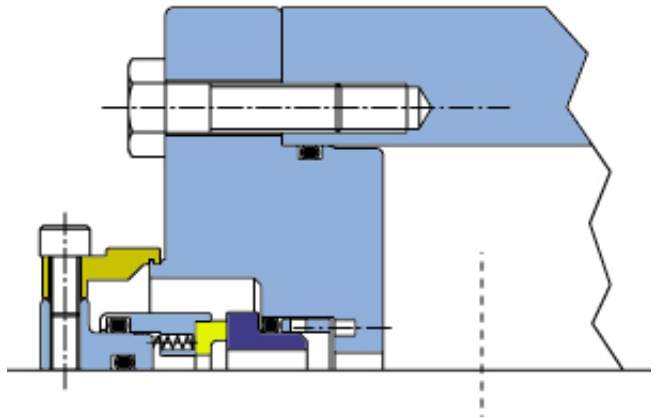
100mm CURE™ to suit Finckh Cyclo Screen (model 2)

AESSEAL® Drawing Number: 6462934



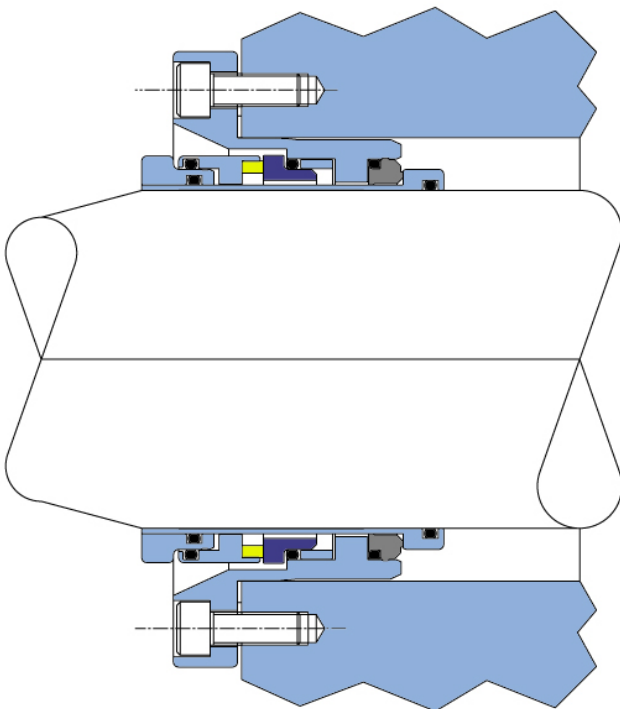
100mm IASC™ to suit Sunds Pressure Screen - Arjo Wiggins

AESSEAL® Drawing Number: 6470062



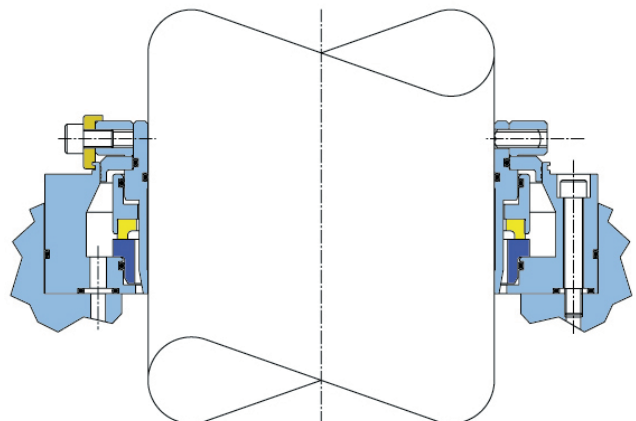
90mm IASC™ to suit a Heinrich Fielder Screen

AESSEAL® Drawing Number: 6467456



AESSEAL® Bird Screen design

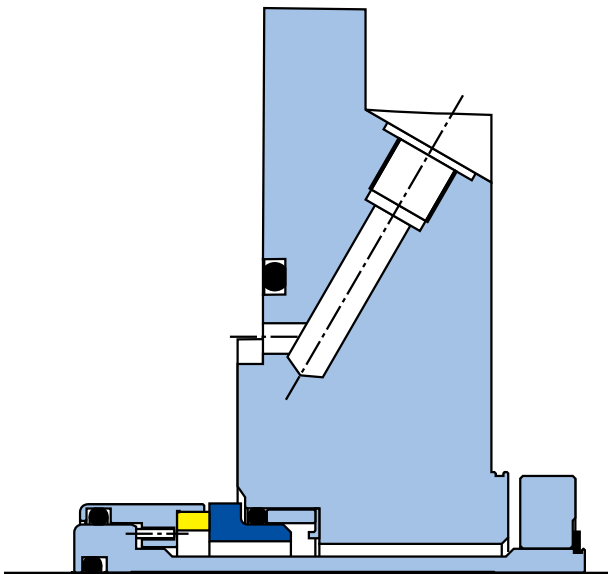
AESSEAL® Drawing Number: 6459757



7.374" Screen Seal to suit Lamort SPM1900 Stock Screen

AESSEAL® Drawing Number: 6461781

Andritz Screw Feeder Refiner



4.250" CURC™ to suit a Andritz Screw Feeder Refiner

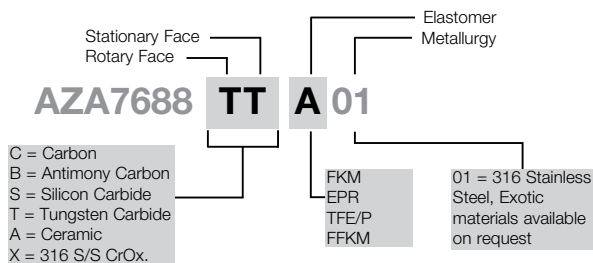
AESSEAL® Reference: Z7688

AESSEAL® Drawing Number: 7109774

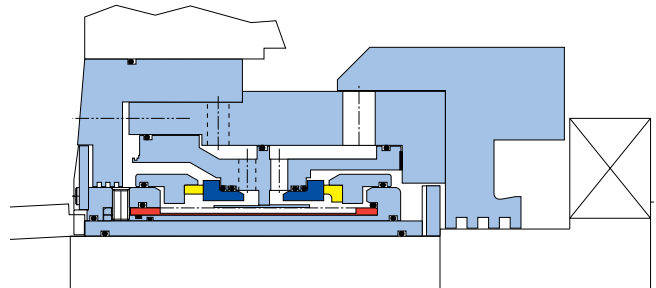
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Andritz Screw Feeder Refiners.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Andritz Sprout Bauer Refiner



AESSEAL® Double Seal Design to suit the 42/45-ICP Andritz Sprout Bauer Refiner

AESSEAL® Drawing Number: 6462166

Andritz Sprout Bauer are a typical manufacturer of wood chip refiners. The installed seal assemblies, on horizontal ICP refiners, gave approximately 12 months survival, and consumed approximately 1/4 Gallon per minute of flush water to prevent the inboard lip seal from burning out. Assuming a 24 hr/day, 365 day/year operation, typical water usage equates to 131,040 gallons per year, per refiner.

Typical operating conditions of the seal include ;

Shaft Size: 5.970"

Axial movement: 0.012" (Kingsbury type tilt pad bearing opposite end to the refiner head).

Design Pressure: 11 barg (150 psig)

Shaft Speed: 1,800 rpm

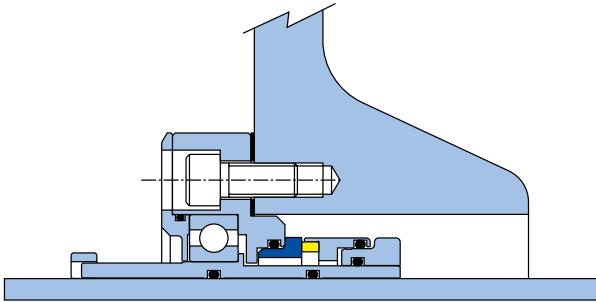
Temperature: 180°C (350°F)

AESSEAL® have designed the arrangement shown to be fitted to such equipment. In particular, the design shown above is for the 42/45-ICP Andritz Sprout Bauer Refiner.

AESSEAL® have a PATENT PENDING application on this design.

03 - Seals to Suit Refiners

Beloit Jones DD Refiner



BJDD™ seal to suit a Beloit Jones DD Refiner.

AESSEAL® Drawing Number: 6460811

The AESSEAL® design shown above for the Beloit range of refiners offers the following features / advantages;

Design principles

1. The clamp drive collar is secured to the shaft, and drives the seal sleeve through integral drive lugs.
2. The seal gland plate is secured to the housing / bearing frame.
3. The integral seal bearing helps to support the seal faces, and is designed to withstand the resulting thrust forces derived from the product pressure acting on the end of the sleeve.

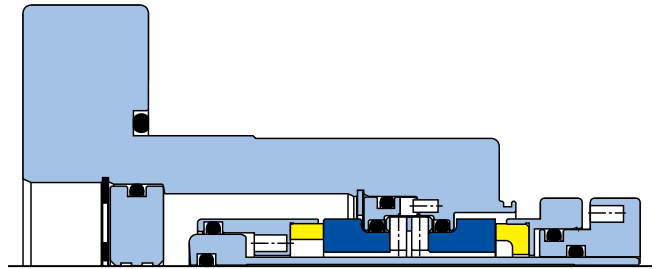
As the shaft moves axially with respect to the housing (or vice versa), the movement is taken by the clamp ring through the sleeve drive lugs, whilst the drive lugs transmit rotational shaft movement from shaft to seal sleeve. Seal face loading is therefore unaffected by the axial movement, helping to ensure that the correct “idealized” face sealing conditions are achieved.

A double seal variant, employing concentric seal face technology, is available upon request.

AESSEAL® have a PATENT PENDING application on this design.

- Will accept any amount of axial movement without disturbing the seal faces
- Cartridge design for ease of installation

Cavitron CD 1048-F Deflaker



60mm CDSA™ to suit a Cavitron CD 1048-F Deflaker

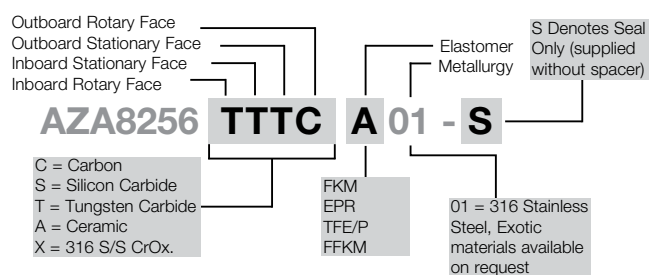
AESSEAL® Reference: Z8256

AESSEAL® Drawing Number: 7113487

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Cavitron CD 1048-F Deflakers.

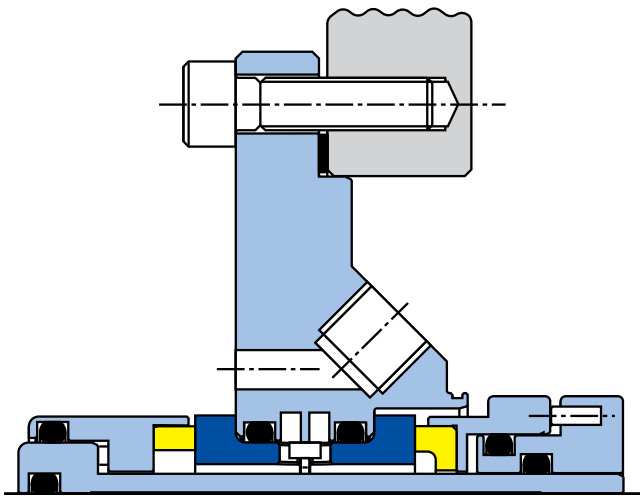
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Canister Design with throttle bushing enhances seal operating environment and reduces flush volume.
- Cartridge design for ease of installation



03 - Seals to Suit Refiners

E4000 Deflaker



105mm CDM™ to suit an E4000 Deflaker

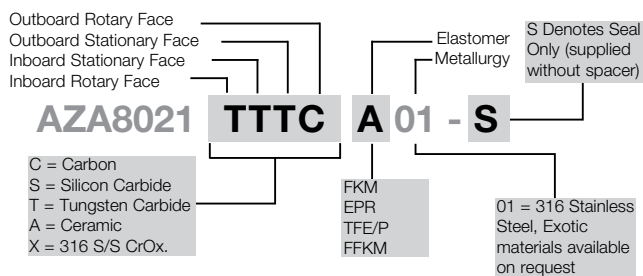
AESSEAL® Reference: Z8021

AESSEAL® Drawing Number: 7111880

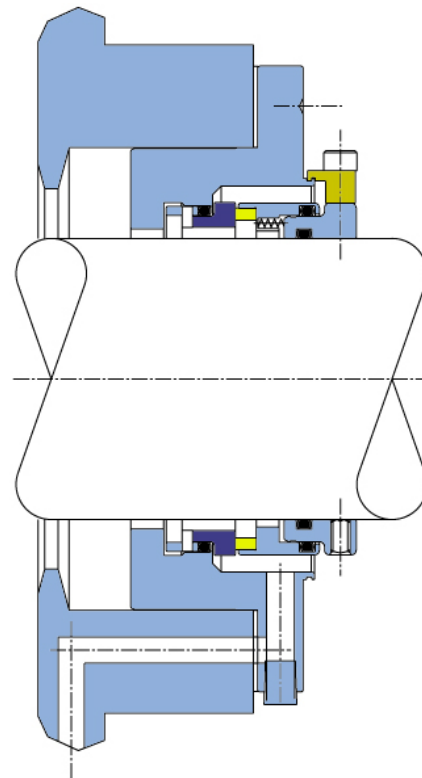
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit E4000 Deflakers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation



Recard Refiner



IASC™ Seal Design to suit Recard Refiners

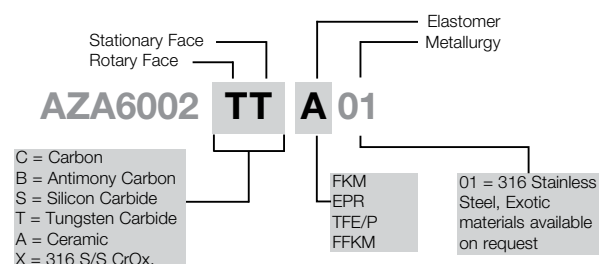
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Recard Refiners.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation

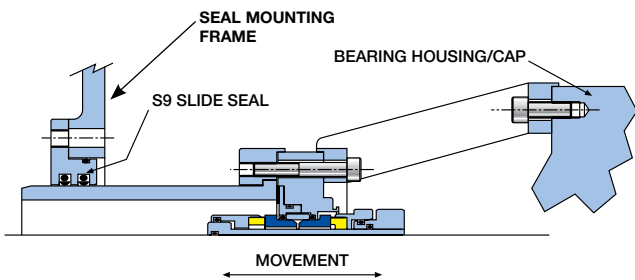
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
80	80mm	Z6002	6470845
85	85mm	Z5807	6469875
105	105mm	Z5808	6469853



03 - Seals to Suit Refiners

Sunds Defibrator Jalavara Refiners

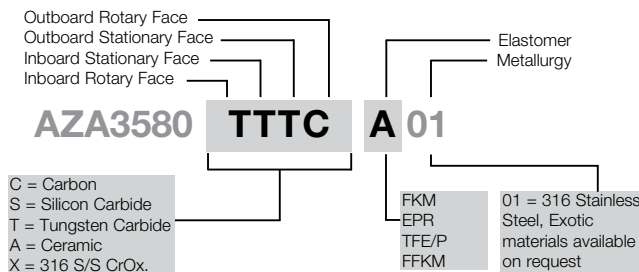


The diagram above shows a Sunds Defibrator JC04 Refiner converted to a DMAX-AX™ Double Cartridge Seal arrangement with large axial movement capabilities. This solution uses a Z Reference CDSA™ or CDM™ seal with standard modular components, ensuring reliable performance and economical repair.

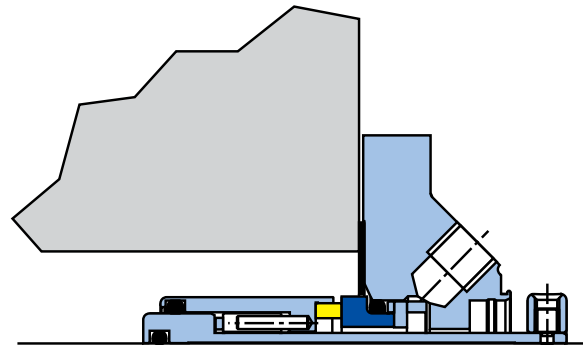
For further information see Case History 481.

- Modular Design using standard components.
- No sleeve or shaft damage
- Eliminates requirement for re-setting seal or re-packing stuffing box on machine shutdown.
- 2 Years+ seal life with no stripdown of equipment.
- Will accept any amount of axial movement without disturbing the seal faces
- Cartridge design for ease of installation

Model	Shaft Size	Z Reference
JC01	115mm	Z4386
JC02	-	-
JC03	150mm	Z1427
JC04	200mm	Z3580



VOITH AJS31 Turbo



125mm CMAX™ Type A to suit a VOITH AJS31 Turbo

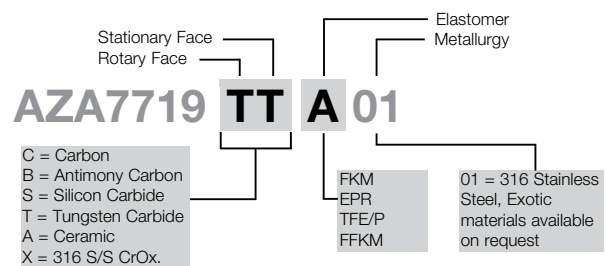
AESSEAL® Reference: Z7719

AESSEAL® Drawing Number: 7110030

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH AJS31 Turbo

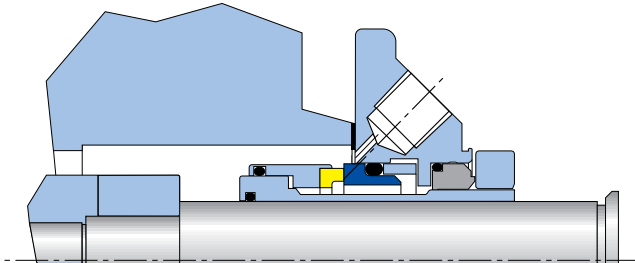
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Axial movement capabilities.
- Cartridge design for ease of installation.



04 - Seals to Suit Centrifugal Pumps

Ahlstrom APP / APT Pumps Standard Single Seals



CURC™ to suit Ahlstrom APP/APT Pumps

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Ahlstrom APP/APT Pumps.

The design shown removes the need for the OEM hooked sleeve and replaces this with a simple spacer. The mechanical seal is then mounted directly on to the shaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

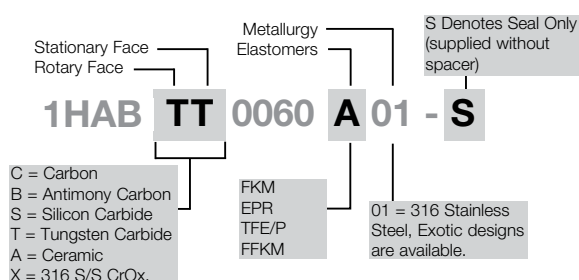
CURC™ Seal Ordering Information

Bearing Unit	Bare Shaft	GA Drg. No.	Stock Code
1	30mm	6463383	1HABTT0030A01*
2	40mm	6463383	1HABTT0040A01*
3	50mm	6463383	1HABTT0050A01*
4	60mm	6463383	1HABTT0060A01*
5	80mm	6463383	1HABTT0080A01*
6	90mm	6463383	1HABTT0090A01*

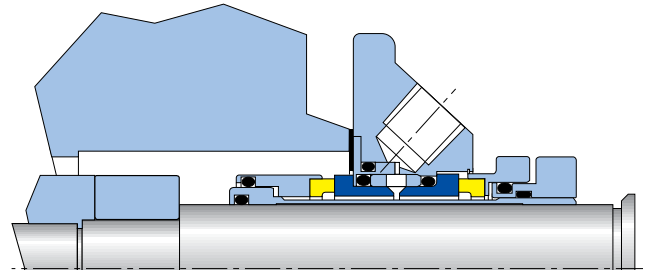
*Note: the codes shown in the table are for a Seal supplied with a spacer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below.

Seal stock codes show TC v TC seal faces and TFE/P elastomers, adjust stock code using the example below to meet your process requirements.

EG. 60mm CURC™ TC/TC TFE/P



Ahlstrom APP / APT Pumps Standard Double Seals



CDSA™ to suit Ahlstrom APP/APT Pumps

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Ahlstrom APP/APT Pumps.

The design shown removes the need for the OEM hooked sleeve and replaces this with a simple spacer. The mechanical seal is then mounted directly on to the shaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

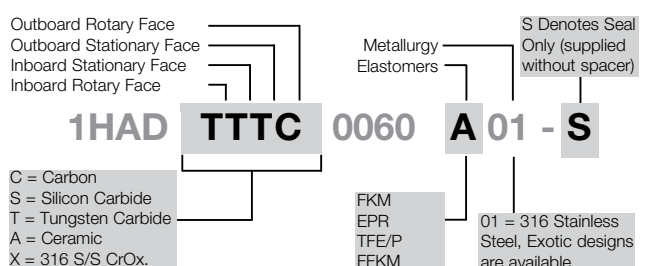
CDSA™ Seal Ordering Information

Bearing Unit	Bare Shaft	GA Drg. No.	Stock Code
1	30mm	6463373	1HADTTTC0030A01*
2	40mm	6463373	1HADTTTC0040A01*
3	50mm	6463373	1HADTTTC0050A01*
4	60mm	6463373	1HADTTTC0060A01*
5	80mm	6463373	1HADTTTC0080A01*
6	90mm	6463373	1HADTTTC0090A01*

*Note: the codes shown in the table are for a Seal supplied with a spacer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below.

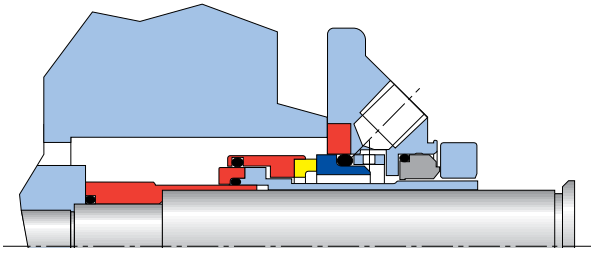
Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers, adjust stock code using the example below to meet your process requirements.

EG. 60mm CDSA™ TC/TC//TC/CARBON TFE/P



04 - Seals to Suit Centrifugal Pumps

Ahlstrom APP / APT Pumps Exotic Single Seals



Exotic Alloy CURC™ to suit Ahlstrom APP/APT Pumps

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Ahlstrom APP/APT Pumps with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

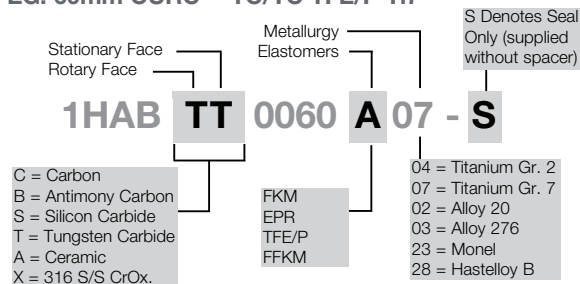
Exotic Alloy CURC™ Seal Ordering Information

Bearing Unit	Bare Shaft	GA Drg. No.	Stock Code
1	30mm	6463385	1HABTT0030A07*
2	40mm	6463385	1HABTT0040A07*
3	50mm	6463385	1HABTT0050A07*
4	60mm	6463385	1HABTT0060A07*
5	80mm	6463385	1HABTT0080A07*
6	90mm	6463385	1HABTT0090A07*

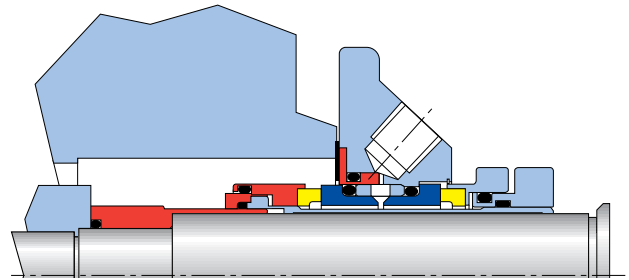
*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

Seal stock codes show TC v TC seal faces, TFE/P elastomers and Ti7 wetted parts, adjust stock code as necessary using the example below.

EG. 60mm CURC™ TC/TC TFE/P Ti7



Ahlstrom APP / APT Pumps Exotic Double Seals



Exotic Alloy CDSA™ to suit Ahlstrom APP/APT Pumps

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Ahlstrom APP/APT Pumps with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

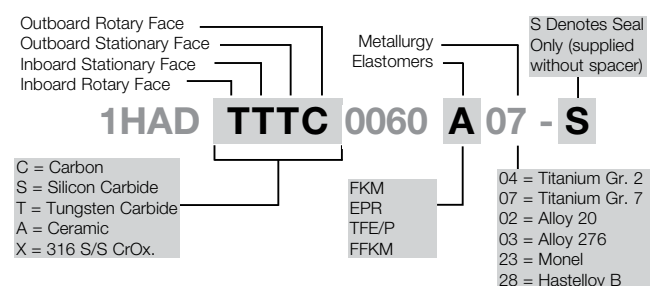
Exotic Alloy CDSA™ Seal Ordering Information

Bearing Unit	Bare Shaft	GA Drg. No.	Stock Code
1	30mm	6463384	1HADTTTC0030A07*
2	40mm	6463384	1HADTTTC0040A07*
3	50mm	6463384	1HADTTTC0050A07*
4	60mm	6463384	1HADTTTC0060A07*
5	80mm	6463384	1HADTTTC0080A07*
6	90mm	6463384	1HADTTTC0090A07*

*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

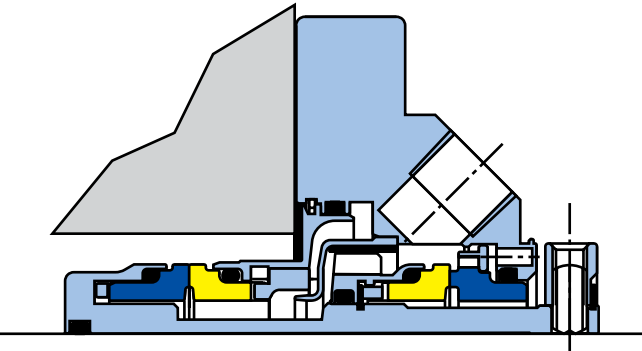
Seal stock codes show TC/TC//TC/C seal faces TFE/P elastomers and Ti7 wetted parts, adjust stock code as necessary using the example below.

EG. 60mm CDSA™ TC/TC//TC/CARBON TFE/P Ti7



04 - Seals to Suit Centrifugal Pumps

Ahlstrom APT 42-6 Pump



60mm DMSF™ seal to suit AHLSTROM APT-42-6 pump.

AESSEAL® Reference: Z5101

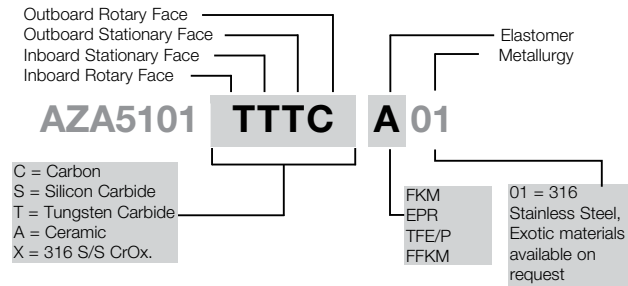
AESSEAL® Drawing Number: 6466030

For further information see Case History 1238K.

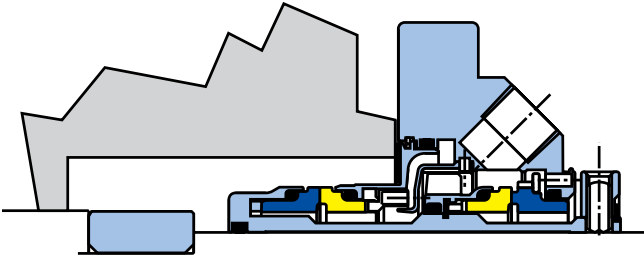
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom APT 42-6 pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Large internal clearances for maximum cooling
- Patented pumping scroll and deflector arrangement optimize barrier fluid circulation under inboard seal faces.
- Double balanced seal faces tolerate large process pressure fluctuations.



Ahlstrom APP / APT Pumps



50mm DMSF™ seal to suit AHLSTROM APP/APT pumps.

AESSEAL® Reference: Z5119

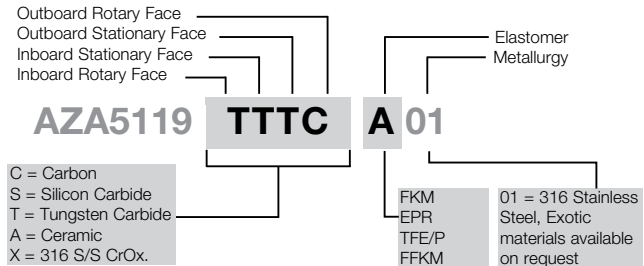
AESSEAL® Drawing Number: 6466141

For further information see Case Histories 1224J, 1722K, 1757K, 1758K, 1759K.

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom APP/APT pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Large internal clearances for maximum cooling
- Patented pumping scroll and deflector arrangement optimize barrier fluid circulation under inboard seal faces.
- Double balanced seal faces tolerate large process pressure fluctuations.
- Mounted to equipment shaft to eliminate tolerance stack-ups and maximize stuffing box clearances.



04 - Seals to Suit Centrifugal Pumps

Ahlstrom 12 DTB 14L Split Case Fan Pump



2.375" CURC™ c/w FMG & Stepped sleeve to suit Ahlstrom 12 DTB 14L Pump

AESSEAL® Reference: Z4717

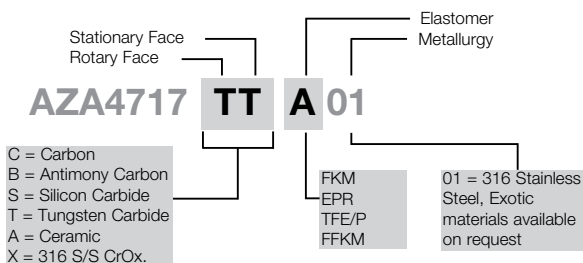
AESSEAL® Drawing Number: 6463468

For further information see Case History 731G

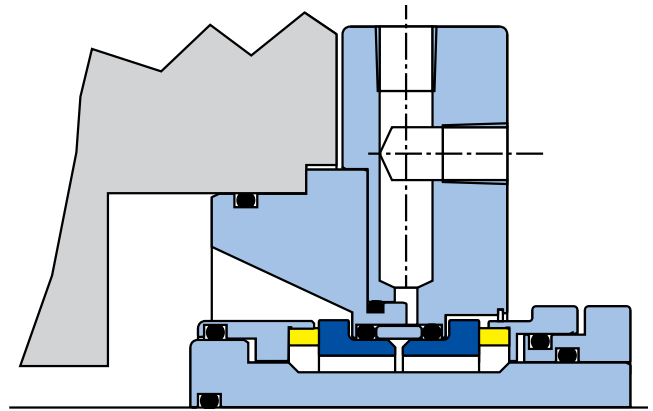
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom 12 DTB 14L pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- MTBF in excess of 2 1/2 years.
- Cartridge design for ease of installation.



Ahlstrom MPP1500 Stock Pump



70mm CDSA™ seal to suit Ahlstrom MPP1500 stock pump.

AESSEAL® Reference: Z3841

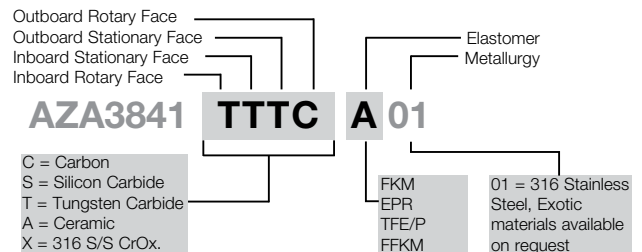
AESSEAL® Drawing Number: 6459765

For further information see Case History 945H.

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom MPP1500 stock pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

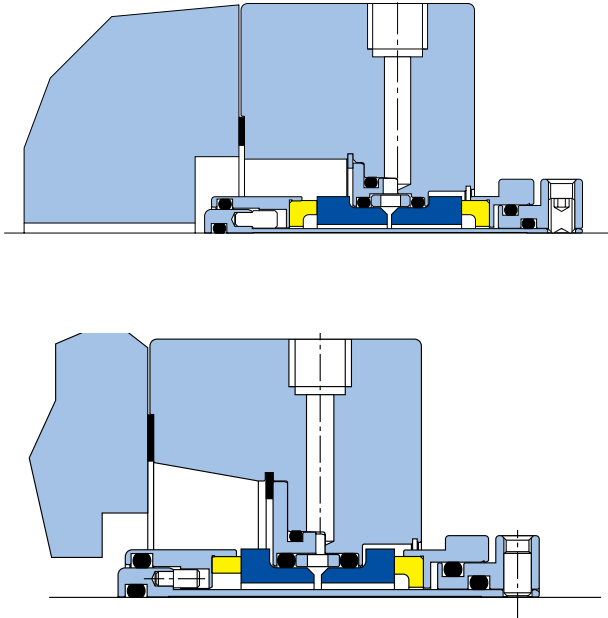
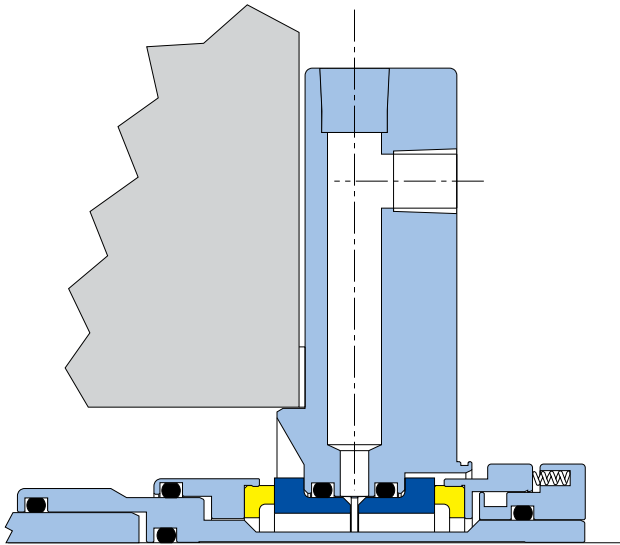
- Modular Design using standard components.
- Large internal clearances
- Cartridge design for ease of installation.



04 - Seals to Suit Centrifugal Pumps

Allis Chalmers F8N1

Escher Wyss E1K / E2K



4.500" (4.750 parts) CDSA™ seal to suit Allis Chalmers F8N1 & PWO 14x14-23.

AESSEAL® Reference: Z7002

AESSEAL® Drawing Number: 7102386

For further information see Case Histories 1263J, 1264J.

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Allis Chalmers F8N1 & PWO 14x14-23 pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Protected bare shaft design.
- Mounted to equipment shaft to eliminate tolerance stack-ups and maximize internal clearances.
- Cartridge design for ease of installation.

CDSA™ seals to suit ESCHER WYSS pumps.

For further information see Case Histories 1396K & 1446K

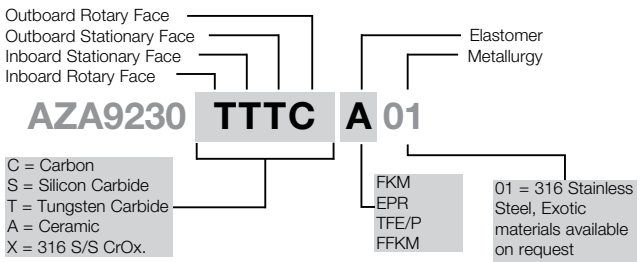
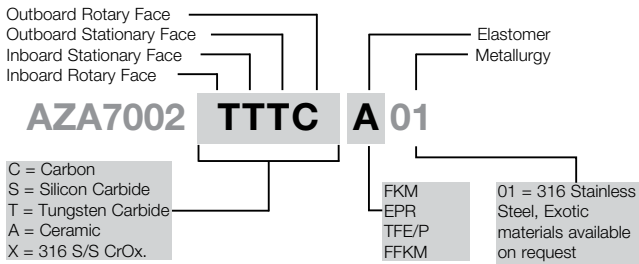
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Escher Wyss E1K / E2K pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.

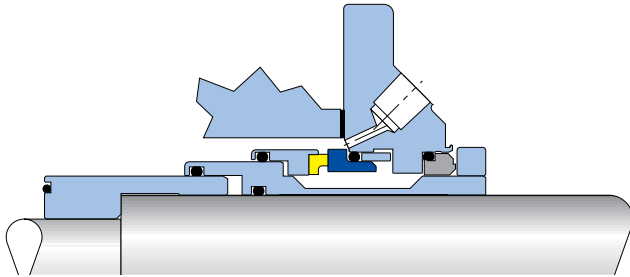
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
E1K	55mm	Z9229	7123400
E2K	95mm	Z9230	7123404



04 - Seals to Suit Centrifugal Pumps

Goulds 3175 Pumps Single Seal Designs



CURC™ to suit Goulds 3175 Range of Pumps

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Goulds 3175 Pumps.

The cross section shown above is a special design which gives the following benefit over a standard seal.

- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups

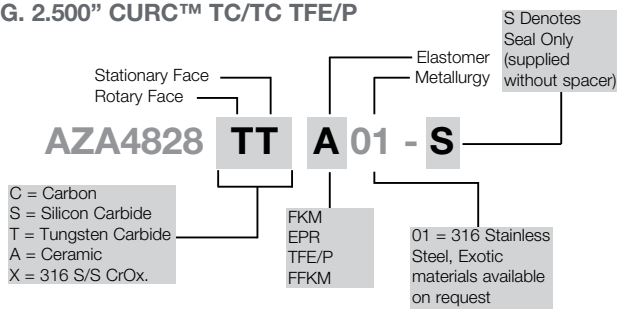
CURC™ Seal Ordering Information

Model	Sleeve size Before removal	Bare Shaft size	GA Drg. No.	Stock Code
3175 - S	3.000"	2.500"	6464561	AZA4828TTA01*
Stubshaft	-	2.500"	6464239	AZA4826
3175 - M	3.750"	3.312"	6464561	AZA4829TTA01*
Stubshaft	-	3.312"	6461621	AZA4330
3175 - L	4.750"	4.312"	6464561	AZA4830TTA01*
Stubshaft	-	4.312"	6461625	AZA4331
3175 - XL : details upon request / supplied to order				

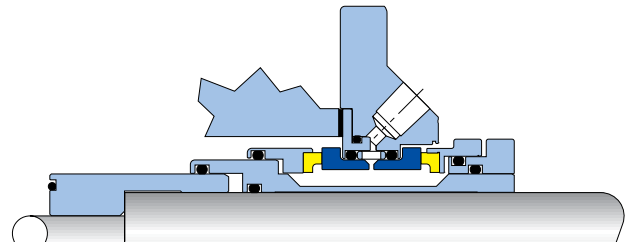
*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

Seal stock codes show TC v TC seal faces and TFE/P elastomers adjust stock code using the example below to meet your process requirements.

EG. 2.500" CURC™ TC/TC TFE/P



Goulds 3175 Pumps Double Seal Designs



CDSA™ to suit Goulds 3175 Range of Pumps

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Goulds 3175 Pumps.

The cross section shown above is a special design which gives the following benefits over a standard seal.

- Large internal clearances provide maximum barrier fluid volume to optimize seal face operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

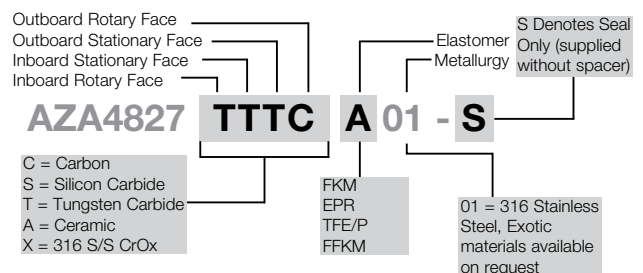
CDSA™ Seal Ordering Information

Model	Sleeve size Before removal	Bare Shaft size	GA Drg. No.	Stock Code
3175 - S	3.000"	2.500"	6464566	AZA4827TTTCA01*
Stubshaft	-	2.500"	6464239	AZA4826
3175 - M	3.750"	3.312"	6464566	AZA3871TTTCA01*
Stubshaft	-	3.312"	6461621	AZA4330
3175 - L	4.750"	4.312"	6464566	AZA4042TTTCA01*
Stubshaft	-	4.312"	6461625	AZA4331
3175 - XL : details upon request / supplied to order				

*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

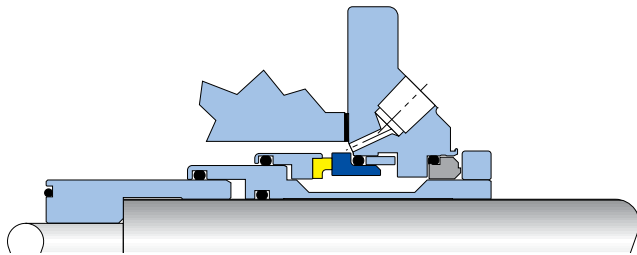
Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers adjust stock code using the example below to meet your process requirements.

EG. 2.500" CDSA™ TC/TC//TC/CARBON TFE/P



04 - Seals to Suit Centrifugal Pumps

Goulds 3196 XLT & XLT-X Special Single Designs



CURC™ to suit Goulds 3196 XLT & XLT-X

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Goulds 3196 XLT & XLT-X Pumps.

The cross section shown above is a special design which gives the following benefit over a standard seal.

- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups

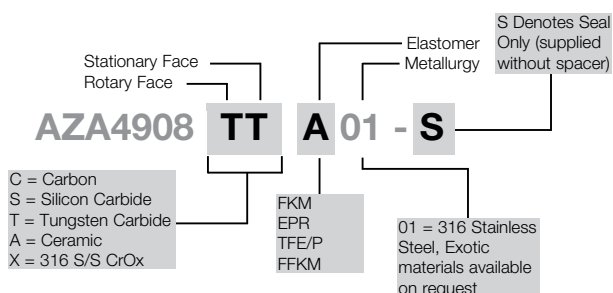
CURC™ Seal Ordering Information

Model	Sleeve size Before removal	Bare Shaft size	GA Drg. No.	Stock Code
3196 XLT / XLT-X	2.500"	2.000"	6464664	AZA4908TTA01*
Stubshaft	-	2.000"	6464614	AZA4907

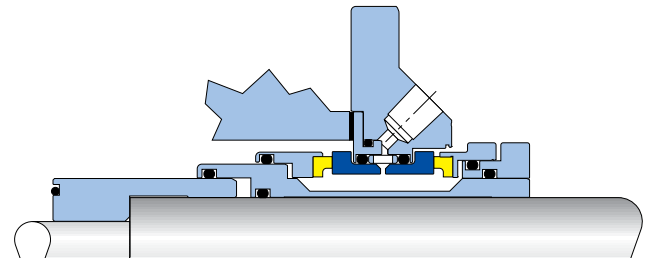
*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

This design is applicable to sleeved Goulds 3196 XLT / XLT-X pumps only - For solid shaft pump designs see standard CURC™ Literature. 3175 XL details upon request/supplied to order. Seal stock codes show TC v TC seal faces and TFE/P elastomers adjust stock code using the example below to meet your process requirements.

EG. CURC™ TC/TC TFE/P



Goulds 3196 XLT & XLT-X Special Double Designs



CDSA™ to suit Goulds 3196 XLT & XLT-X

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Goulds 3196 XLT & XLT-X Pumps.

The cross section shown above is a special design which gives the following benefits over a standard seal.

- Large internal clearances provide maximum barrier fluid volume to optimize seal face operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups

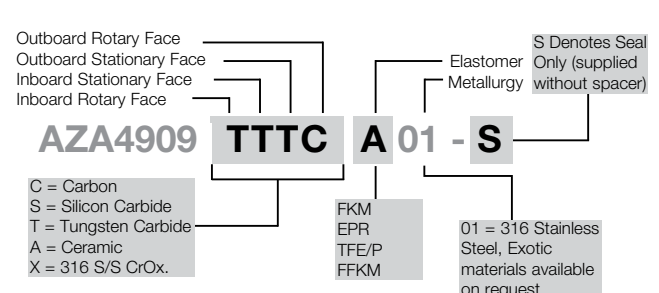
CDSA™ Seal Ordering Information

Model	Sleeve size Before removal	Bare Shaft size	GA Drg. No.	Stock Code
3196 XLT / XLT-X	2.500"	2.000"	6464665	AZA4909TTTCA01*
Stubshaft	-	2.000"	6464614	AZA4907

*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

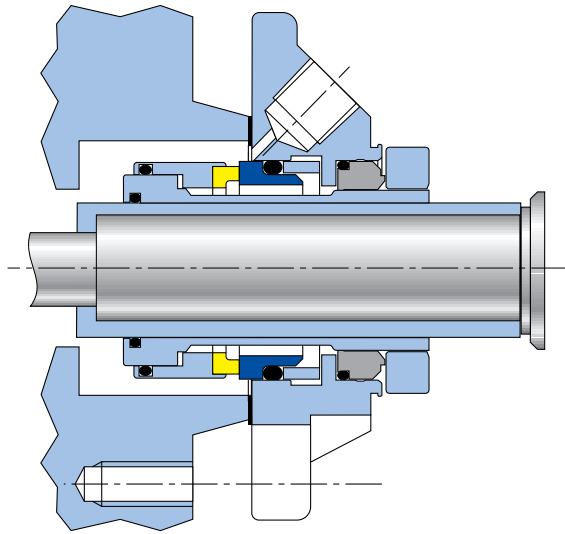
This design is applicable to sleeved Goulds 3196 XLT / XLT-X pumps only - For solid shaft pump designs see standard CDSA™ Literature or use Goulds sleeve part #B03743A with the standard CDSA™. 3175 XL details upon request/supplied to order. Seal stock codes show TC/TC//TC/CARBON seal faces and TFE/P elastomers adjust stock code using the example below to meet your process requirements.

EG. CDSA™ TC/TC//TC/CARBON TFE/P



04 - Seals to Suit Centrifugal Pumps

Goulds 3196 Std. Box Bore Standard Single Designs



CURC™ to suit Goulds 3196 Standard Box Bore Pumps.

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Goulds 3196 Standard Box Bore Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

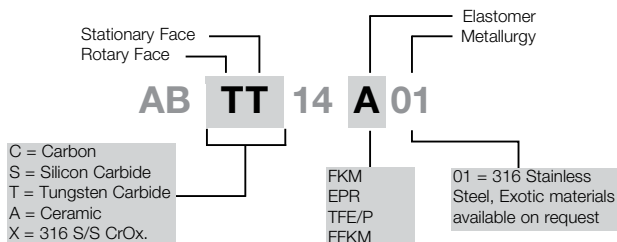
CURC™ Seal Ordering Information

Pump Model	Sleeve Size	GA Drg. No.	Stock Code
3196 - ST / STX	1.375"	-	ABTT11A01
3196 - MTX	1.750"	-	ABTT14A01
3196 - LTC / LTX	2.125"	-	ABTT17A01
3196 - XLT / XLT-X	2.500"	-	ABTT20A01
3196 - X17**	2.750"	-	ABTT22A01

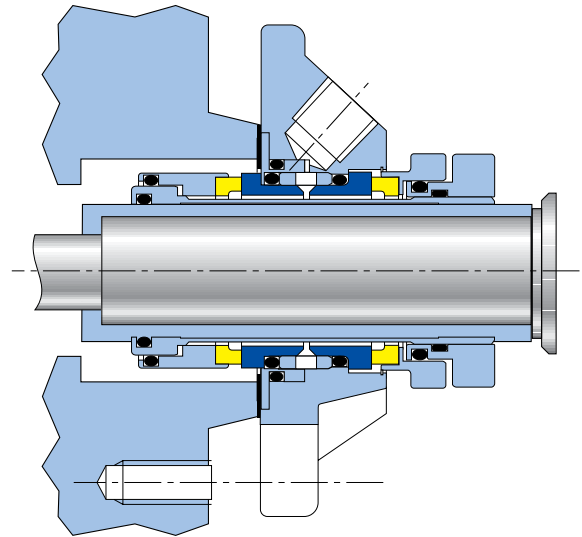
**Newer model pumps will have a 2.500" Sleeve

Note: Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers. adjust stock code as necessary using the example below.

EG. 1.750" CURC™ TC/TC TFE/P



Goulds 3196 Std. Box Bore Standard Double Designs



CDSA™ to suit Goulds 3196 Standard Box Bore Pumps.

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Goulds 3196 Standard Box Bore Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

CDSA™ Seal Ordering Information

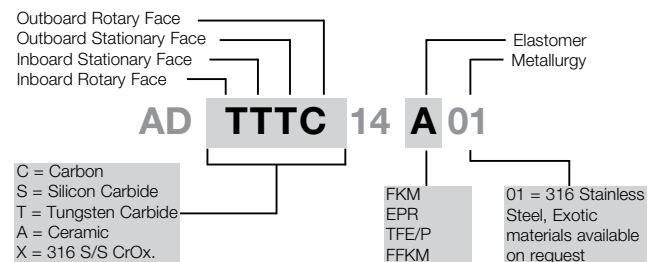
Pump Model	Sleeve Size	GA Drg. No.	Stock Code
3196 - ST / STX	1.375"	-	ADTTTC11A01
3196 - MTX	1.750"	-	ADTTTC14A01
3196 - LTC / LTX	2.125"	-	ADTTTC17A01
3196 - XLT / XLT-X	2.500"	-	ADTTTC20A01*
3196 - X17**	2.750"	-	ADTTTC22A01

* Requires Goulds Sleeve Part #B03742A

**Newer model pumps will have a 2.500" Sleeve

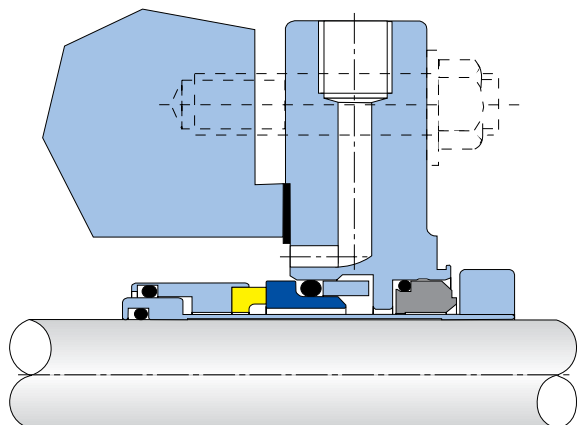
Note: Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers. adjust stock code as necessary using the example below.

EG. 1.750" CDSA™ TC/TC//TC/CARBON TFE/P



04 - Seals to Suit Centrifugal Pumps

Goulds 3196 Big/Taper Bore Standard Single Designs



CURC™ to suit Goulds 3196 Big / Taper Box Bore Pumps.

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Goulds 3196 Big / Taper Box Bore Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

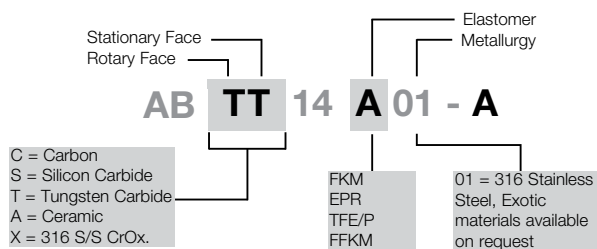
CURC™ Seal Ordering Information

Pump Model	Sleeve Size	GA Drg. No.	Stock Code
3196 - STX	1.375"	-	ABTT11A01-A
3196 - MTX	1.750"	-	ABTT14A01-A
3196 - LTX	2.125"	-	ABTT17A01-A
3196 - XLT-X	2.500"	-	ABTT20A01-A
3196 - X17*	2.750"	-	ABTT22A01-A

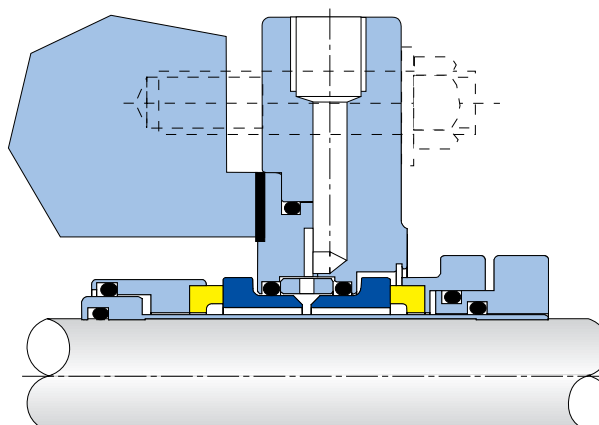
*From 2000 onwards Sleeve size is 2.500"

Note: Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers. adjust stock code as necessary using the example below.

EG. 1.750" CURC™ TC/TC TFE/P



Goulds 3196 Big/Taper Bore Standard Double Designs



CDSA™ to suit Goulds 3196 Big / Taper Box Bore Pumps.

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Goulds 3196 Big / Taper Box Bore Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

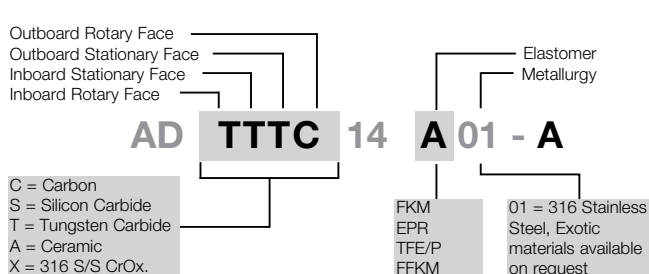
CDSA™ Seal Ordering Information

Pump Model	Sleeve Size	GA Drg. No.	Stock Code
3196 - STX	1.375"	-	ADTTTC11A01-A
3196 - MTX	1.750"	-	ADTTTC14A01-A
3196 - LTX	2.125"	-	ADTTTC17A01-A
3196 - XLT-X	2.500"	-	ADTTTC20A01-A
3196 - X17*	2.750"	-	ADTTTC22A01-A

*From 2000 onwards Sleeve size is 2.500"

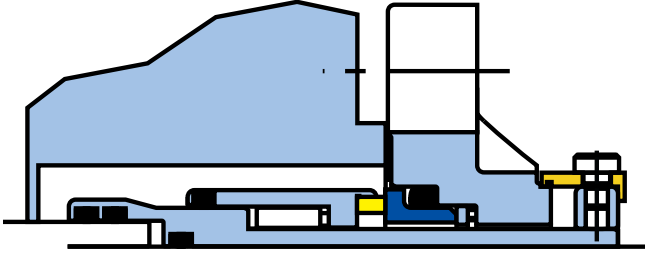
Note: Seal stock codes show TC/TC//TC/C seal faces and TFE/P elastomers. adjust stock code as necessary using the example below.

EG. 1.750" CDSA™ TC/TC//TC/CARBON TFE/P



04 - Seals to Suit Centrifugal Pumps

Goulds 3175



CMAX™ type B seal arrangement to suit GOULDS 3175 pump used in a knotter application.

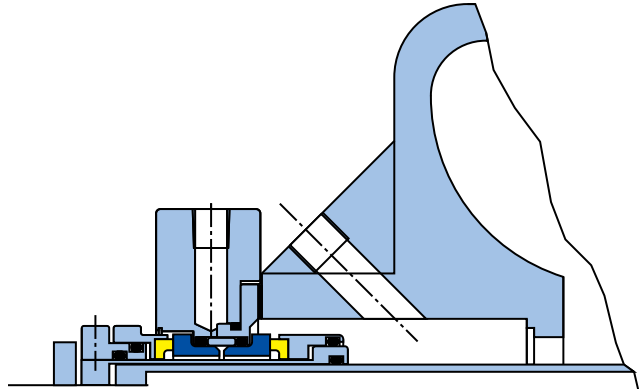
For further information see Case Histories 1834K & 1835K

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit a 3175 Goulds pump.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Protected shaft design
- Accepts axial movement
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.
- Cartridge design for ease of installation.

Goulds 3410L



2.750" CDSA™ Double seal c/w FMG to suit Goulds 3410L pumps.

AESSEAL® Reference: Z4925

AESSEAL® Drawing Number: 6464700

For further information see Case History 927H.

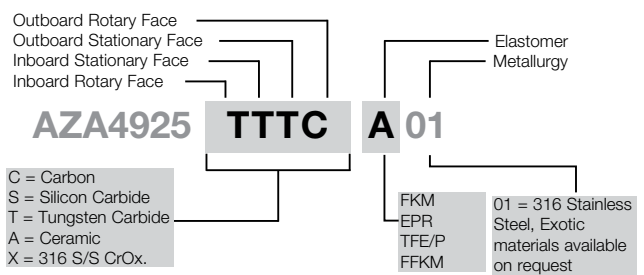
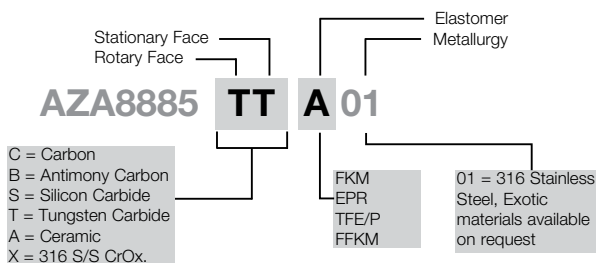
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Goulds 3410L pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.

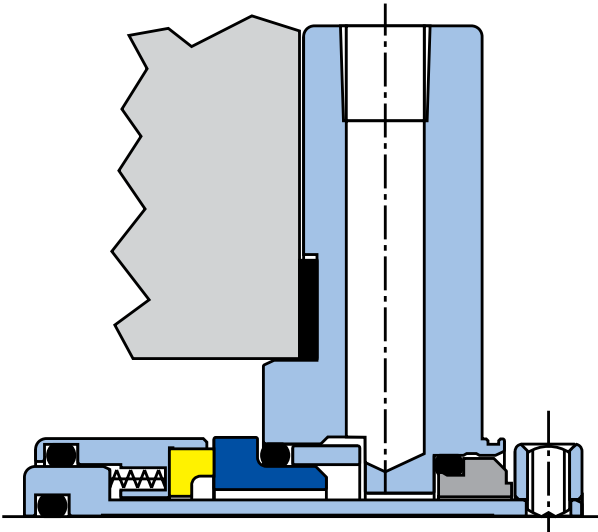
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
3175-M	3.312"	8885	7119024
3175-L	4.312"	8928	7119542



04 - Seals to Suit Centrifugal Pumps

Mather & Platt Split Case Pump



100mm CURC™ to suit a Mather & Platt Split Case Pump

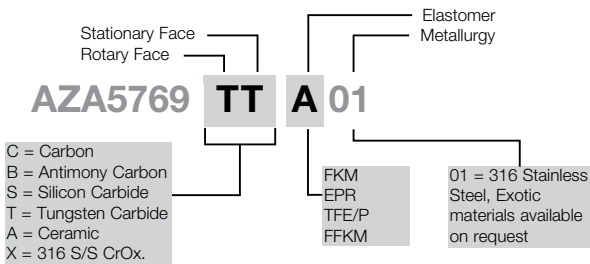
AESSEAL® Reference: Z5769

AESSEAL® Drawing Number: 6469739

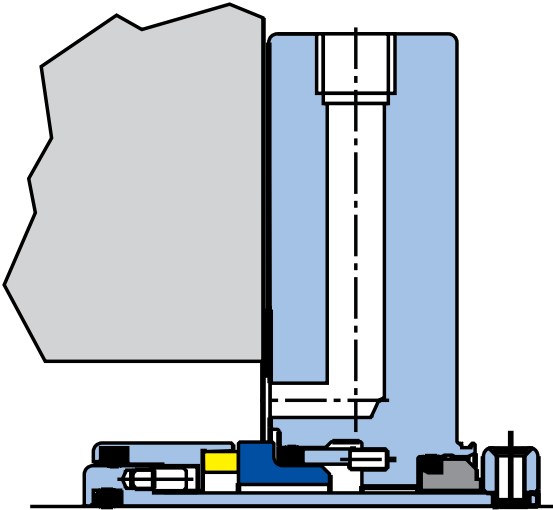
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Mather & Platt Split Case Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.



Nagle Pump



3.937" CURC™ seal arrangement to suit Nagle pump.

AESSEAL® Reference: Z8045

AESSEAL® Drawing Number: 7112007

For further information see Case History 1385K

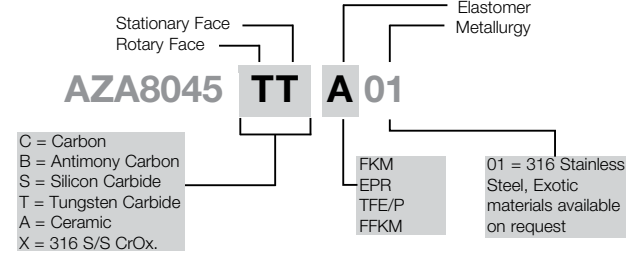
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Nagle pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.

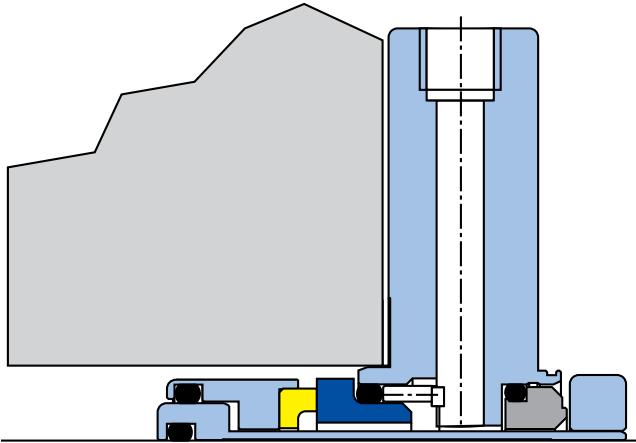
Z Reference Details

Model	Shaft	Z Ref	Drawing Number
-	3.000"	Z7775	7110574
-	3.937"	Z8045	7112007
FVH Fr. 190-F40	4.375"	Z7880	7111088



04 - Seals to Suit Centrifugal Pumps

NAGLE Horizontal End Suction Pump



3.000" CURC™ to suit a NAGLE Horizontal End Suction Pump

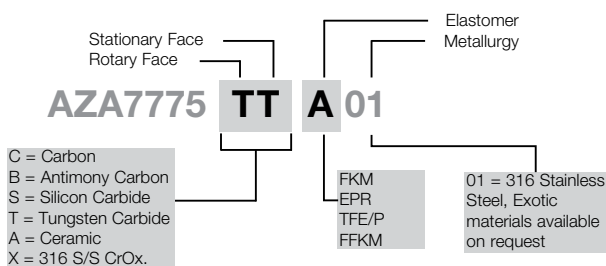
AESSEAL® Reference: Z7775

AESSEAL® Drawing Number: 7110574

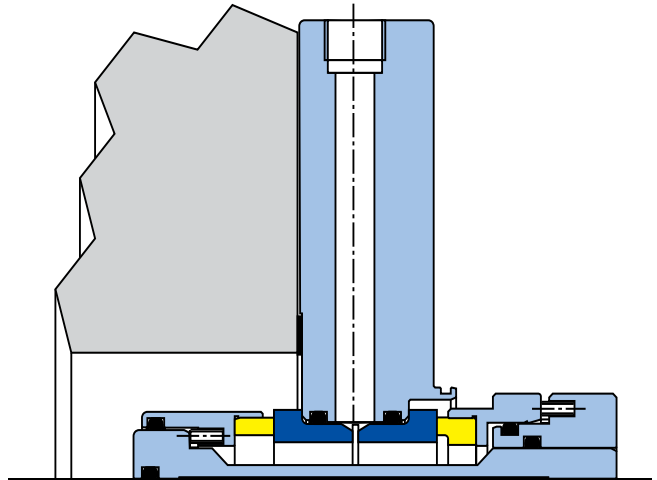
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit NAGLE Horizontal End Suction Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



NAGLE NRU Pump



130mm CDSA™ to suit a NAGLE NRU Pump

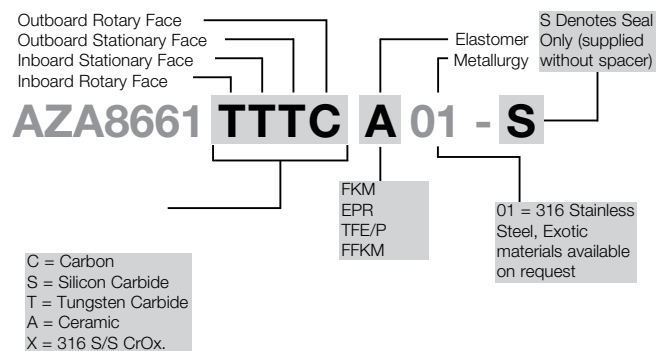
AESSEAL® Reference: Z8661

AESSEAL® Drawing Number: 7116265

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit NAGLE NRU Pumps.

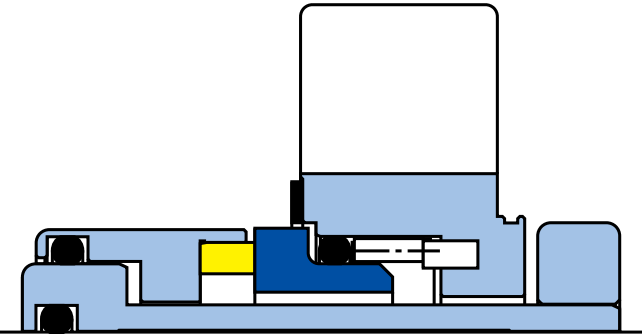
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



04 - Seals to Suit Centrifugal Pumps

NAGLE 8" MDL. FVH Fr.190-F40 Vertical Pump T,E,D Egger Pump



4.375" CURC™ to suit a NAGLE 8" MDL. FVH Fr.190-F40 Vertical Pump

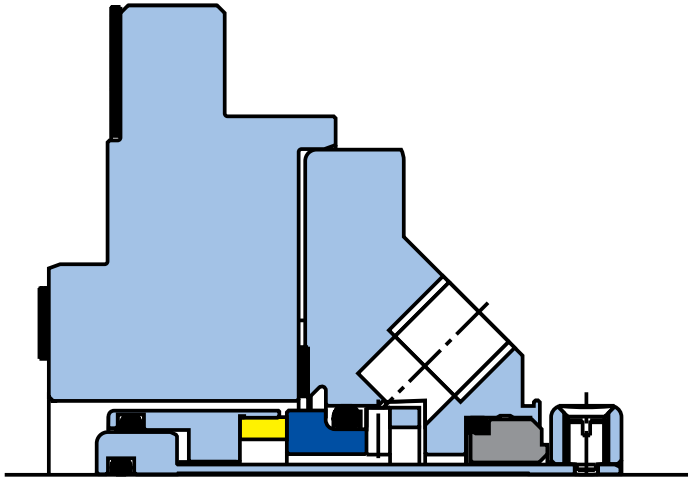
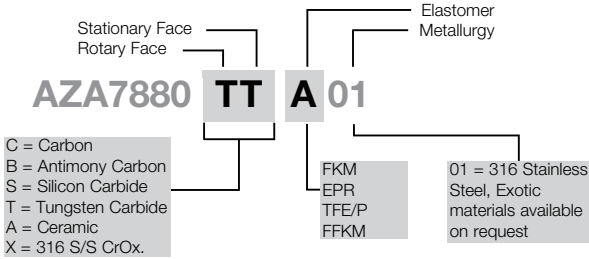
AESSEAL® Reference: Z7880

AESSEAL® Drawing Number: 7111088

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit NAGLE 8" MDL. FVH Fr.190-F40 Vertical Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



48mm CURC™ seal to suit a T,E,D Egger Pump

AESSEAL® Reference: Z9307

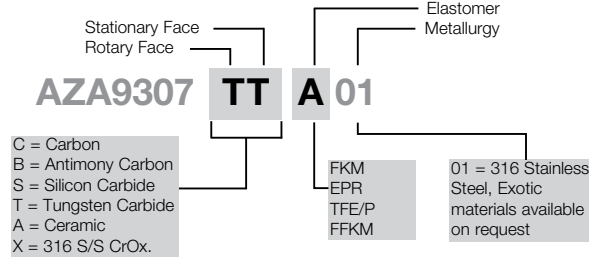
AESSEAL® Drawing Number: 7124500

For further information see Case History 1569K

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit a T,E,D Egger Pump.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



05 - Seals to Suit Progressing Cavity Pumps

PCP seals are used extensively in the Coatings Kitchens area of Paper mills where AESSEAL® have extensive sealing experience.

AESSEAL plc have designed 'flared' and 'big bore' seal housings in full co-operation with leading PC pump manufacturers, and as acknowledged by recognized institutions. These designs maximize radial and axial clearances, encourage solids transfer away from the seal faces, reduce heat build up and EXTEND SEAL LIFE.

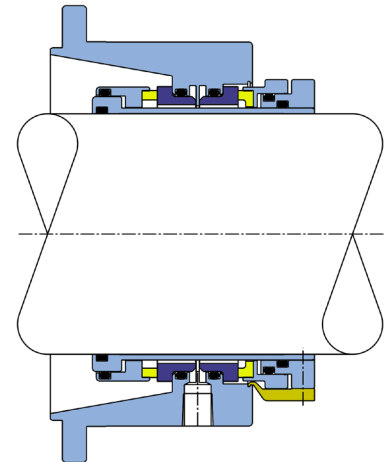
The examples shown on these pages are a small example of the range of PCP seals available from AESSEAL®.

AESSEAL® has a huge range of sealing solutions for ALL major PCP pump manufacturers. This is contained in a dedicated guide to Sealing PCP Pump applications.

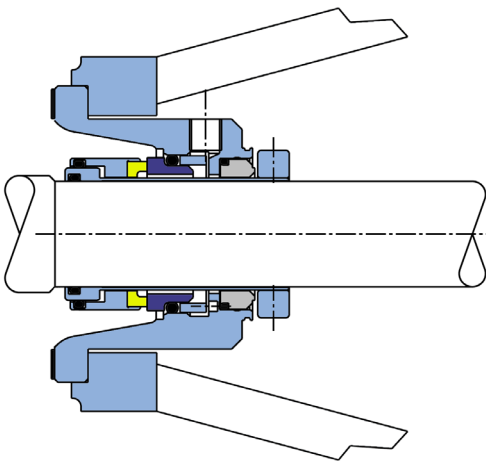
Most designs are offered with the following features:

- Cartridge design for ease of installation.
- Often produced from dedicated castings to reduce cost.
- Maximum volume around seal faces to extend seal life.

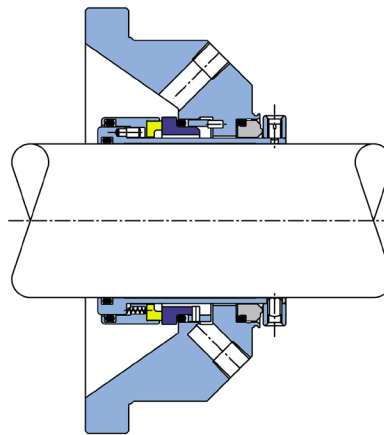
Seepex



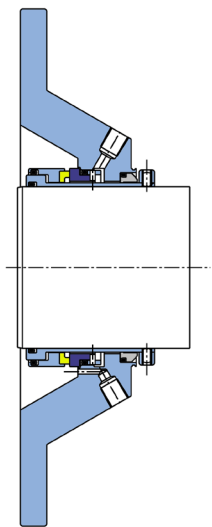
Mono B Range



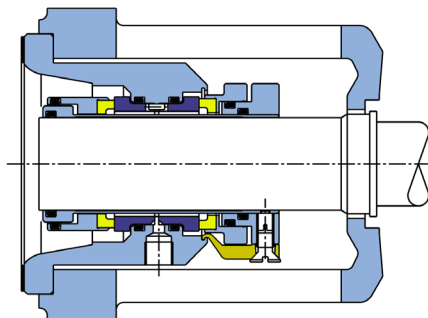
Mono M Range



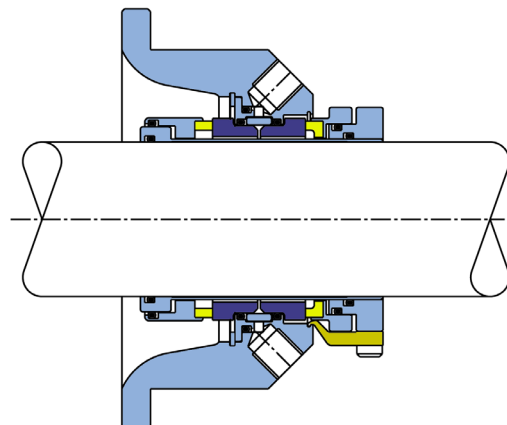
Mono C Range



Mono Merlin Range

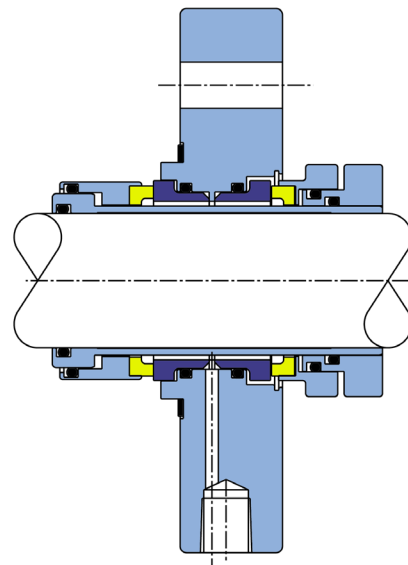
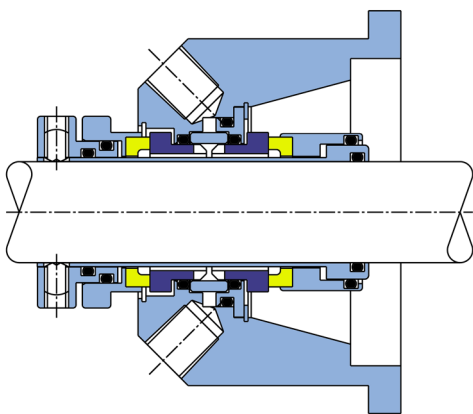
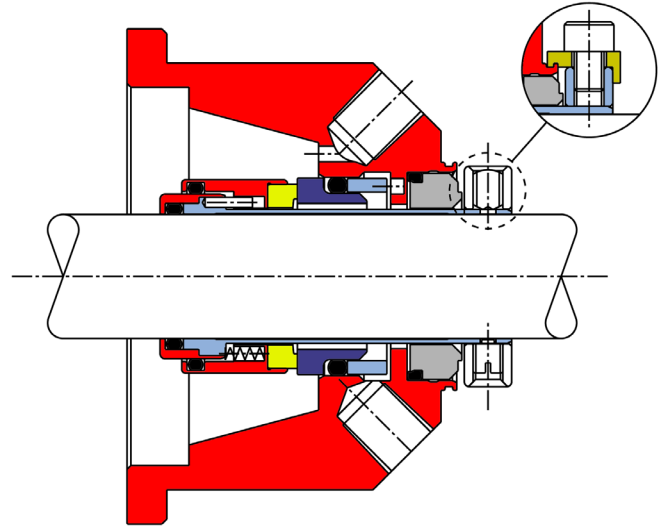
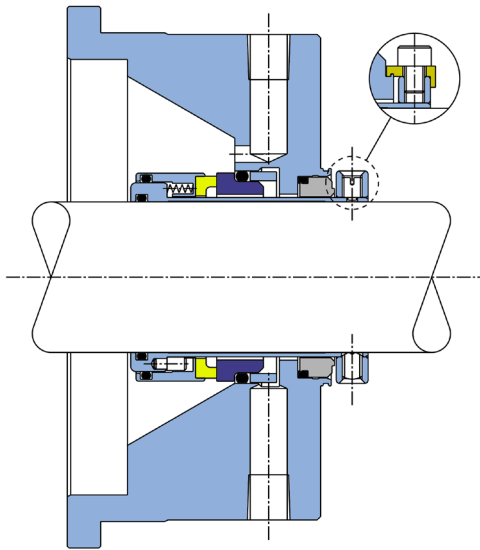


Mono E Range

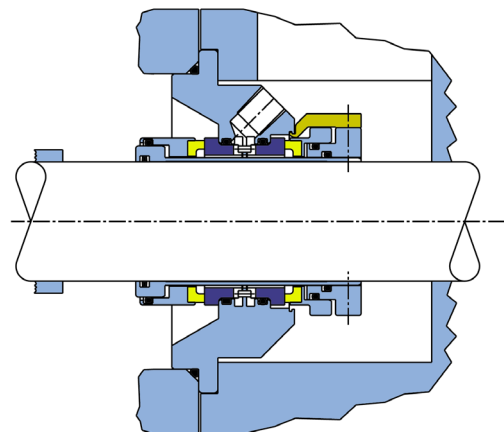
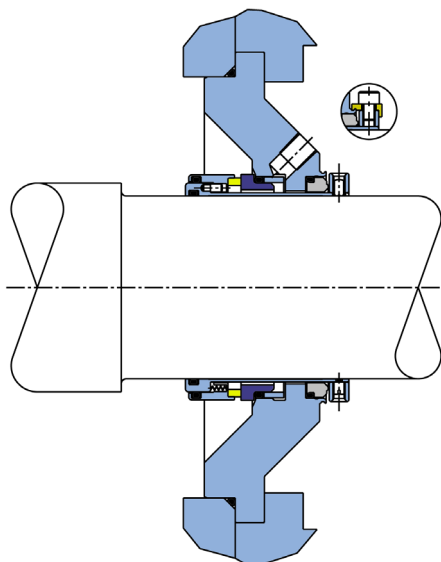


05 - Seals to Suit Progressing Cavity Pumps

Robbins & Myers / Moyno

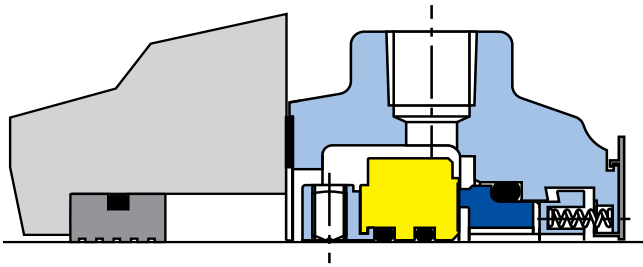


Netzsch



06 - Seal to suit Pulpers / Pulping area Equipment

Andritz Top Winder Feeder Model 486-12



5.500 RDS™ to suit Andritz Top Winder Feeder

AESSEAL® Reference: Z4492

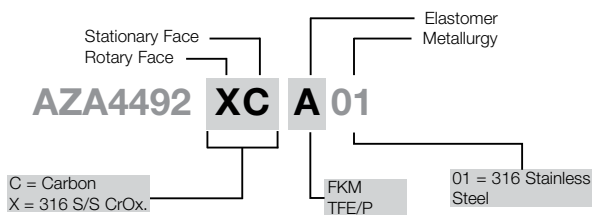
AESSEAL® Drawing Number: 6462277

For further information see Case Histories 894H

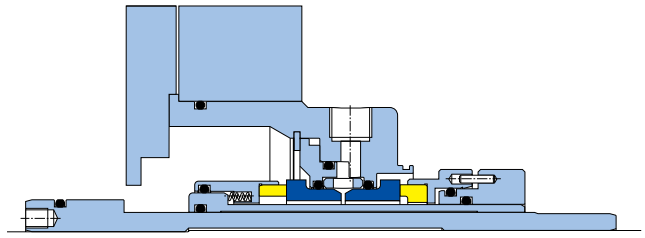
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Andritz Top Winder Feeder, including the Radially Divided Seal shown above.

The cross section shown above shows a Standard RDS™ Split seal fitted to the equipment with a special restriction bush fitted to the end of the stuffing box to improve the environment at the seal faces.

- Modular Design using standard components.
- Cartridge design for ease of installation.



BALE Pulper



5.500" CDSA™ to suit a BALE Pulper

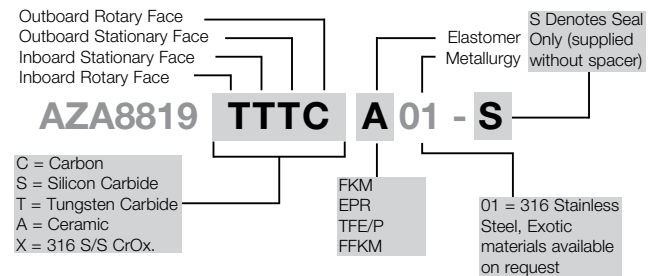
AESSEAL® Reference: Z8819

AESSEAL® Drawing Number: 7118371

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit BALE Pulpers.

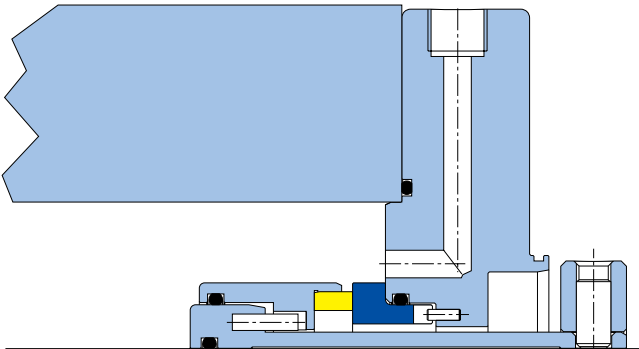
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.



06 - Seal to suit Pulpers / Pulping area Equipment

50 RCM Pulper



200mm CSM™ to suit a 50 RCM Pulper

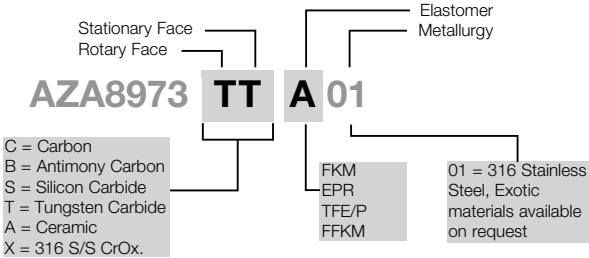
AESSEAL® Reference: Z8973

AESSEAL® Drawing Number: 7120270

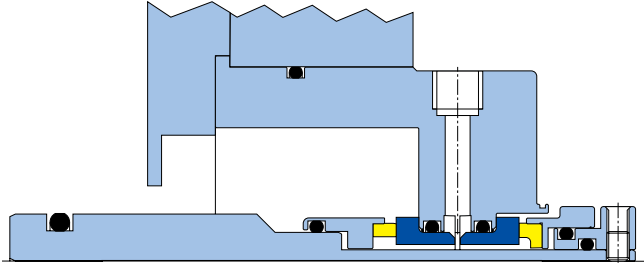
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit 50 RCM Pulpers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.



VALMET Tampella Pulper



4.878" CDSA™ to suit a VALMET Tampella Pulper

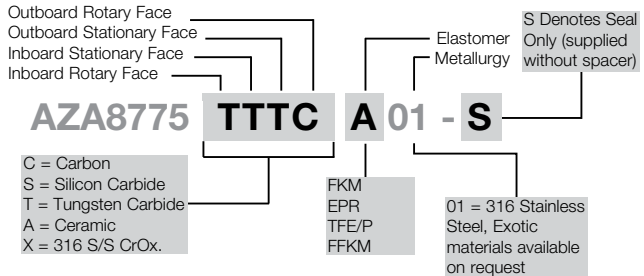
AESSEAL® Reference: Z8775

AESSEAL® Drawing Number: 7117779

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VALMET Tampella Pulpers.

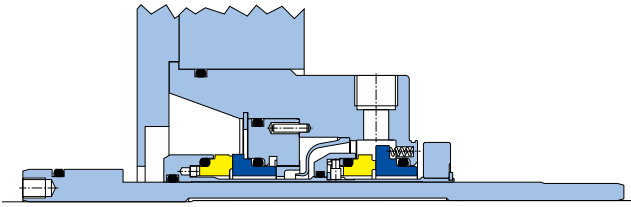
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Sleeve designed to suit the Equipment.



06 - Seal to suit Pulpers / Pulping area Equipment

VALMET HD4250 Pulper



5.500" CDMSC™ to suit a VALMET HD4250 Pulper

AESSEAL® Reference: Z8107

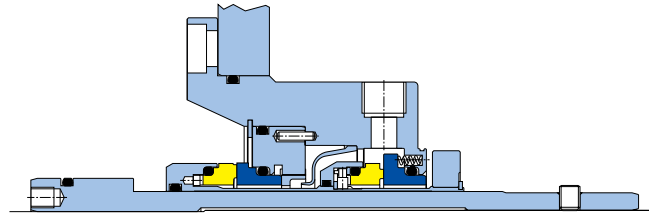
AESSEAL® Drawing Number: 7112436

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VALMET HD4250 Pulpers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.

VALMET SD-HD33 Pulper



5.500" CDMSC™ to suit a VALMET SD-HD33 Pulper

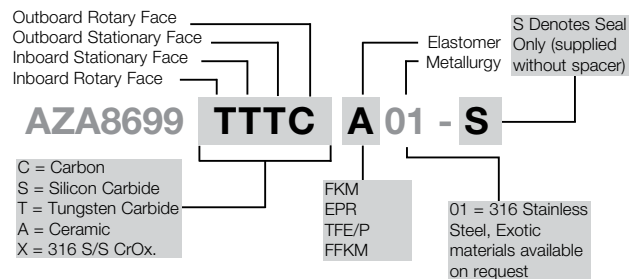
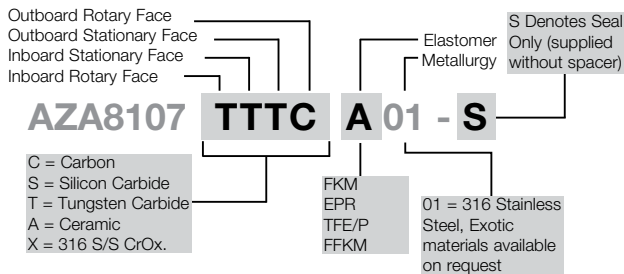
AESSEAL® Reference: Z8699

AESSEAL® Drawing Number: 7116529

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VALMET SD-HD33 Pulpers.

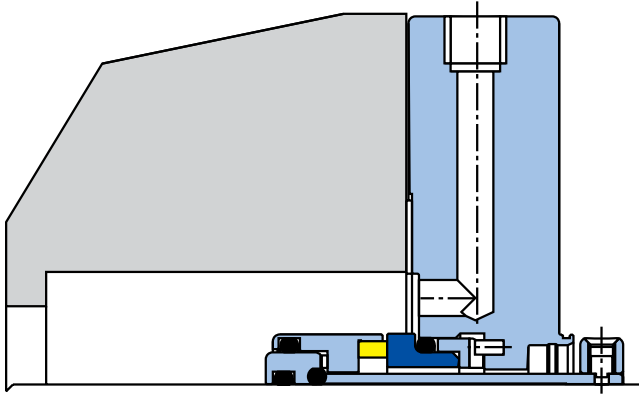
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



07 - Seals to Suit Agitators

Beloit Agitator



100mm CSM™ to suit a Beloit Agitator

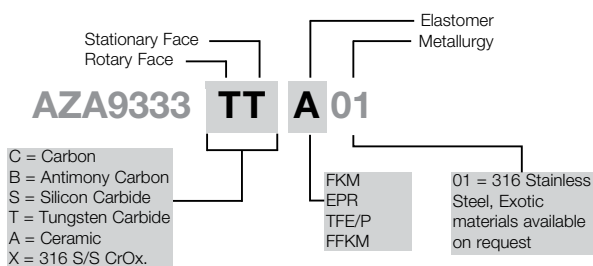
AESSEAL® Reference: Z9333

AESSEAL® Drawing Number: 7124893

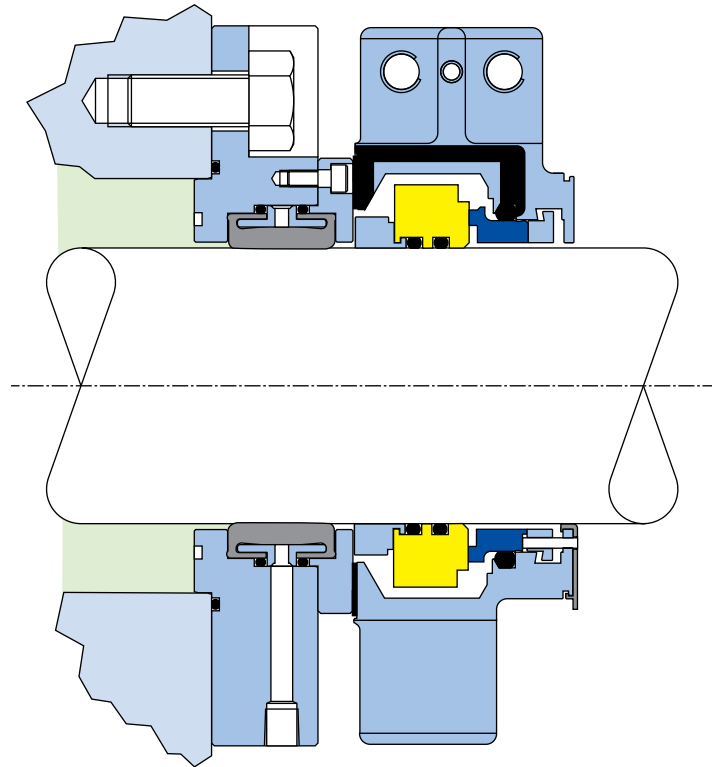
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Beloit Agitators.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Lightnin Agitator



2.500" RDS™ complete with ISOS™ Adapter plate to suit a Lightnin Agitator

AESSEAL® RDS™ Reference: 1X20A01

AESSEAL® ISOS™ Reference: Z7954

AESSEAL® Drawing Number: 7111519

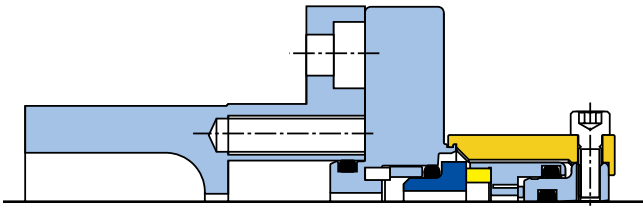
AESSEAL® have designed an innovative sealing solution to suit Lightnin Agitators.

The arrangement shown above shows an adapter plate complete with an integral inflatable shut off seal.

- Modular Design using standard components.
- Seal replacement possible without emptying Agitator Vessel.

07 - Seals to Suit Agitators

VOITH Buttenruhrwek Type 850M



80mm IASC™ to suit a VOITH Buttenruhrwek Type 850M

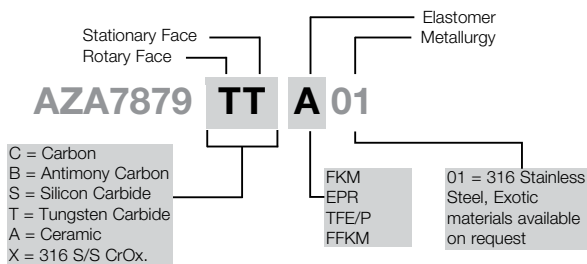
AESSEAL® Reference: Z:7879

AESSEAL® Drawing Number: 7111086

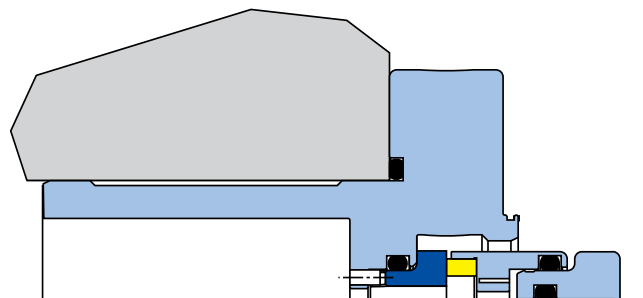
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH Buttenruhrwek Type 850M

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



VOITH M850 Agitator



80mm IASC™ to suit a VOITH M850 Agitator

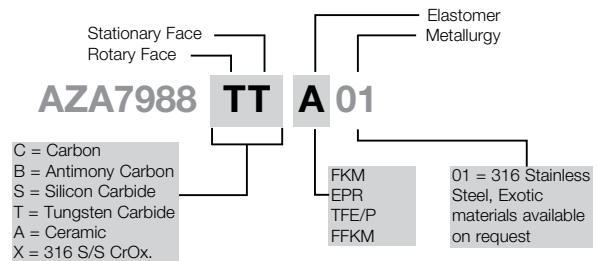
AESSEAL® Reference: Z7988

AESSEAL® Drawing Number: 7111698

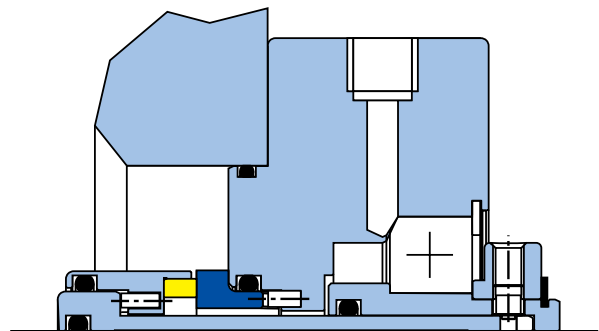
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH M850 Agitators.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



VOITH 1000M Horizontal Agitator



105mm CSWIB™ Type C to suit a VOITH 1000M Horizontal Agitator

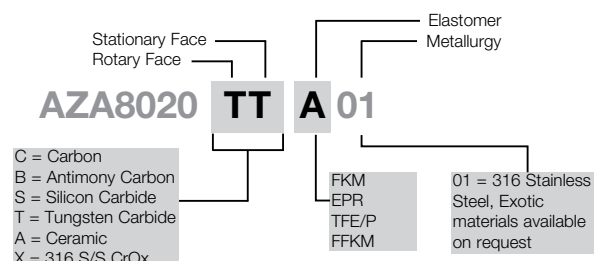
AESSEAL® Reference: Z8020

AESSEAL® Drawing Number: 7111875

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit VOITH 1000M Horizontal Agitator.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Cartridge design for ease of installation.



Pulp and Paper Industry

50

Copyright © 2022 AESSEAL plc

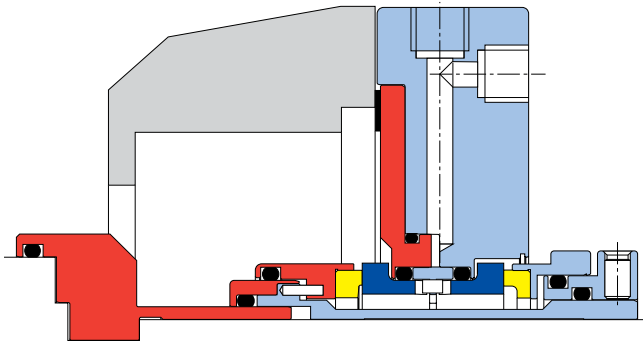
LIT-UK-L-PPG-04

www.aesseal.com



08 - Seals to Suit Mixers

Ahlstrom Ahlmix



70mm CDM™ exotic seal to suit a 40P2-14-GR Ahlstrom Ahlmix.

AESSEAL® Reference: Z9237

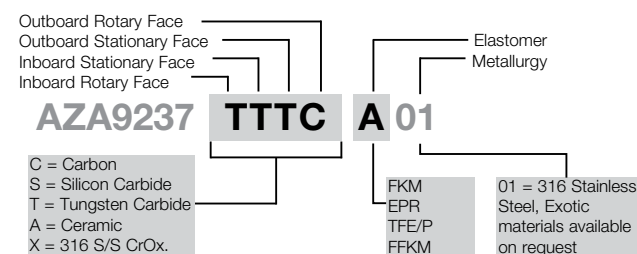
AESSEAL® Drawing Number: 7123524

For further information see Case History 1733K

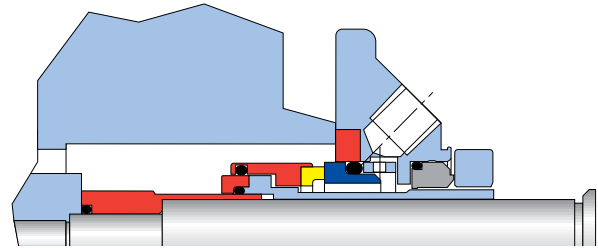
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Ahlstrom Ahlmix.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Exotic Alloy wetted components.
- Protected bare shaft design.



Ahlstrom Ahlmix 1991 & earlier Exotic Single Seals



Exotic Alloy CURC™ to suit Ahlstrom Ahlmix.

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Ahlstrom Ahlmix with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

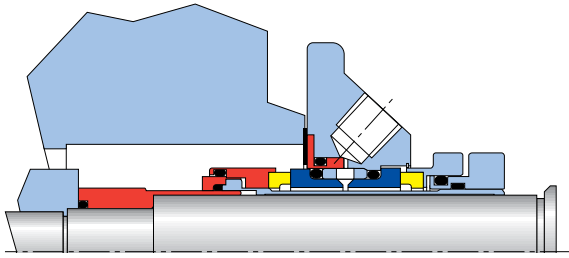
- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

Exotic Alloy CURC™ Seal Information

Ahlmix Model	Bare Shaft	GA Drg. No.	Stock Code
AM-10 / AM-15	50mm	-	Contact AESSEAL*
AM-20	70mm	-	Contact AESSEAL*

08 - Seals to Suit Mixers

Ahlstrom Ahlmix 1991 & earlier Exotic Double Seals



Exotic Alloy CDSA™ to suit Ahlstrom Ahlmix

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Ahlstrom Ahlmix with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

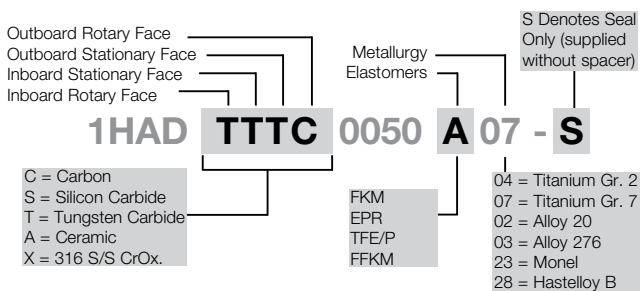
Exotic Alloy CDSA™ Seal Ordering Information

Ahlmix Model	Bare Shaft	GA Drg. No.	Stock Code
AM-10 / AM-15	50mm	6464742	1HADTTTC0050A07*
AM-20	70mm	6464742	1HADTTTC0070A07*

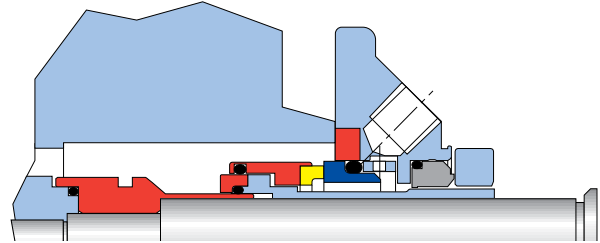
*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

Note: Seal stock codes show TC/TC//TC/C seal faces TFE/P elastomers and Ti7 wetted parts, adjust stock code as necessary using the example below.

EG. 50mm CDSA™ TC/TC//TC/CARBON TFE/P Ti7



Ahlstrom Ahlmix 1992 & later Exotic Single Seals



Exotic Alloy CURC™ to suit Ahlstrom Ahlstrom Ahlmix.

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Ahlstrom Ahlmix with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

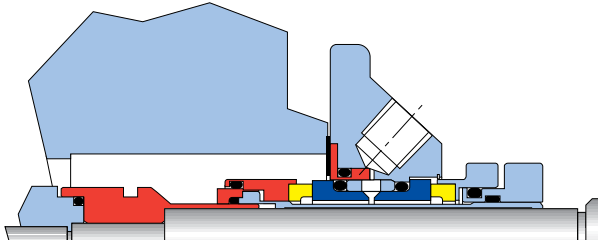
- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

Exotic Alloy CURC™ Seal Information

Ahlmix Model	Bare Shaft	GA Drg. No.	Stock Code
AM-10 / AM-15	50mm	-	Contact AESSEAL*
AM-20.15	60mm	-	Contact AESSEAL*
AM-20 / AM-25.20	70mm	-	Contact AESSEAL*
AM-30	90mm	-	Contact AESSEAL*

08 - Seals to Suit Mixers

Ahlstrom Ahlmix 1992 & later Exotic Double Seals



Exotic Alloy CDSA™ to suit Ahlstrom Ahlmix.

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Ahlstrom Ahlmix with exotic alloy wetted parts.

The design shown replaces the OEM exotic sleeve with a special exotic stubshaft. The mechanical seal is then clamped directly to the bare shaft but with the sleeve 'O' Ring sealing on the stubshaft. This gives the following benefits over a standard seal.

- Large stuffing box clearances provide greater heat dissipation to optimize seal operating environment.
- Seal is mounted directly on to the equipment shaft to eliminate potential tolerance stack ups.

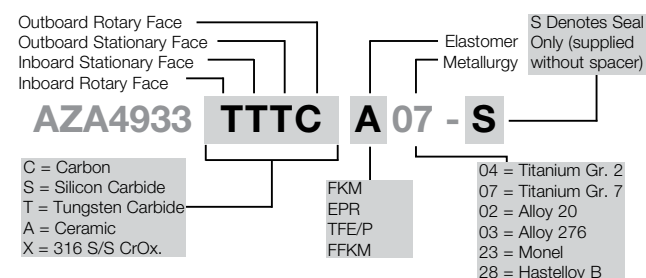
Exotic Alloy CDSA™ Seal Ordering Information

Ahlmix Model	Bare Shaft	GA Drg. No.	Stock Code
AM-10 / AM-15	50mm	6464743	AZA4932TTTCA07*
AM-20.15	60mm	6464743	AZA4933TTTCA07*
AM-20 / AM-25.20	70mm	6464743	AZA4934TTTCA07*
AM-30	90mm	6464743	AZA4935TTTCA07*

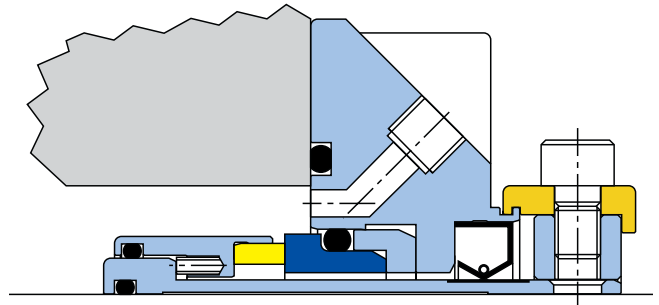
*Note: the codes shown in the table are for a Seal supplied with a stubshaft & elastomer as standard. To order a seal only add a -S suffix to the stock code as shown in the example below. When only the seal is ordered a stubshaft elastomer is supplied as standard.

Note: Seal stock codes show TC/TC//TC/C seal faces TFE/P elastomers and Ti7 wetted parts, adjust stock code as necessary using the example below.

EG. 60mm CDSA™ TC/TC//TC/CARBON TFE/P Ti7



Chemineer Mixer



6.000" CSMO™ seal arrangement suits 5HSNX Chemineer mixer.

AESSEAL® Reference: Z9204

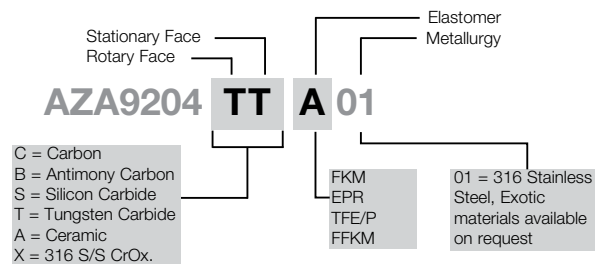
AESSEAL® Drawing Number: 7123122

For further information see Case History 1413K

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit 5HSNX Chemineer mixers.

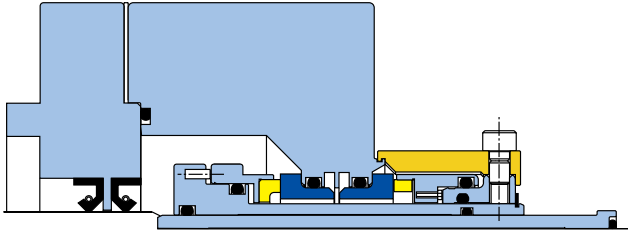
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



08 - Seals to Suit Mixers

Ahlstrom Salomix SLV-80



63mm IADC™ seal arrangement to suit a SLV-80 11T Ahlstrom Salomix Mixer.

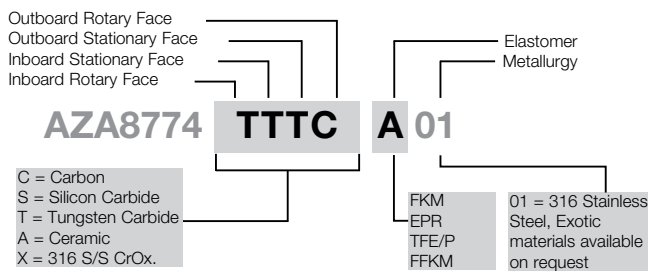
AESSEAL® Reference: Z8774

AESSEAL® Drawing Number: 7117719

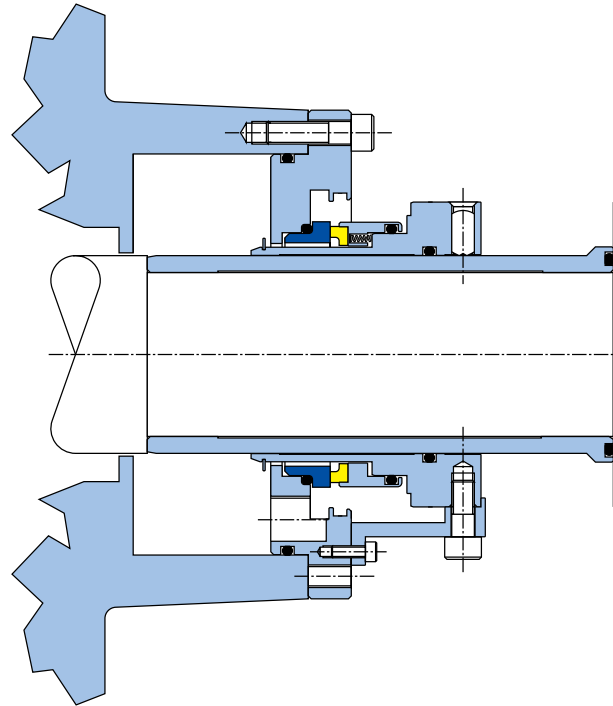
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit SLV-80 11T Ahlstrom Salomix Mixers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Ahlstrom Salomix SL Range Standard Single Seals



Single Cartridge mechanical seal to suit the Ahlstrom Salomix SL Range of Mixers.

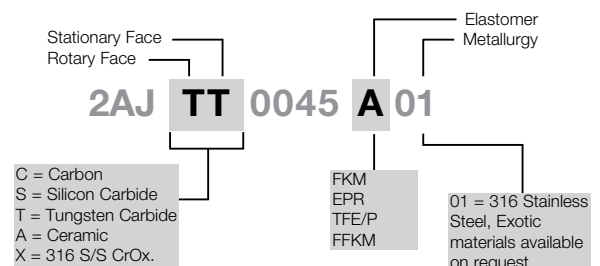
AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit the Ahlstrom Salomix SL Range of Mixers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular gland to single & double Seal.

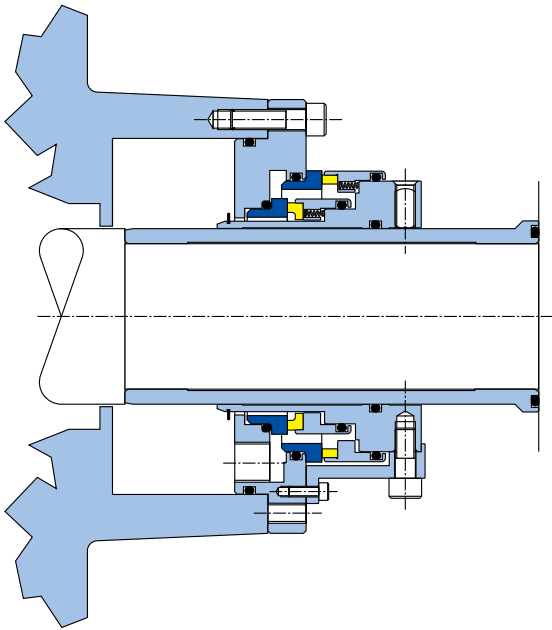
Ahlstrom Salomix single seal information

Salomix Model	Bare Shaft	GA Drg. No.	Stock Code
SL-80	45mm	-	2AJTT0045A01
SL-100	58mm	-	2AJTT0070A01
SL-125	77mm	-	2AJTT0100A01
SL-160	77mm	-	2AJTT0100A01



08 - Seals to Suit Mixers

Ahlstrom Salomix SL Range Standard Double Seals



Single Double mechanical seal to suit the Ahlstrom Salomix SL Range of Mixers.

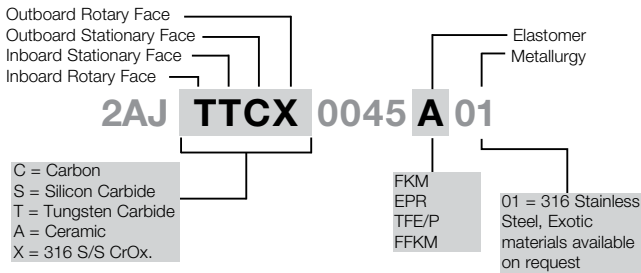
AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit the Ahlstrom Salomix SL Range of Mixers.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular gland to single & double Seal.

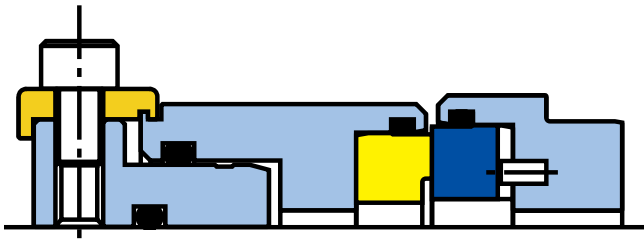
Ahlstrom Salomix Double seal information

Salomix Model	Bare Shaft	GA Drg. No.	Stock Code
SL-80	45mm	6467180	2AJTTCX0045A01
SL-100	58mm	6466884	2AJTTCX0070A01
SL-125	77mm	6467316	2AJTTCX0100A01
SL-160	77mm	6467316	2AJTTCX0100A01



09 - Seals to Suit Filters

Kvaerner Pressure Disk Filter



339mm SAI™ and Special stationary to suit a Kvaerner pressure disk filter

AESSEAL® SAI™ Reference: Z3472

AESSEAL® Stationary Reference: Z3484

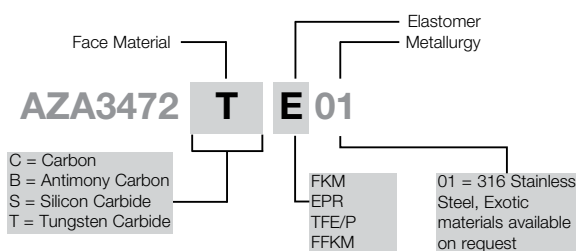
AESSEAL® Drawing Number: 6457887

For further information see Case History 487G

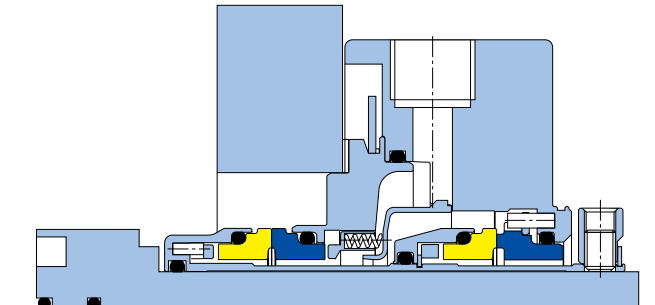
AESSEAL® have designed a range of single component mechanical seals specifically to suit Kvaerner pressure disk filters.

The cross section shown above has been chosen to illustrate a typical example of the seal design available for this type of equipment.

- 400% increase in seal life
- Designed for ease of installation
- Massive cost savings



Kamyer – Kvaerner Pulping Centrifilter CF200



2.750" DMSC™ to suit a Kamyer – Kvaerner Pulping Centrifilter CF200

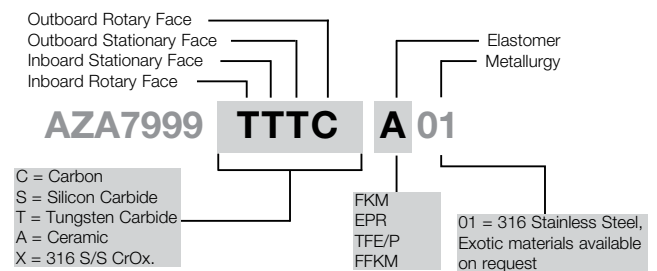
AESSEAL® Reference: Z7999

AESSEAL® Drawing Number: 7111768

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Kamyer – Kvaerner Pulping Centrifilter CF200.

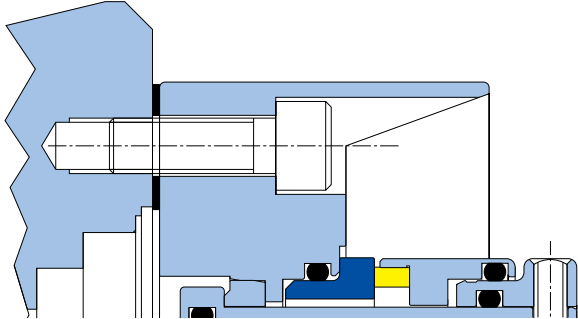
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



10 - Seals to Suit the Paper Machine

Valmet Pressurized Headbox Seal



55mm CRCO-H™ seal arrangement suits a Valmet Pressurized Headbox.

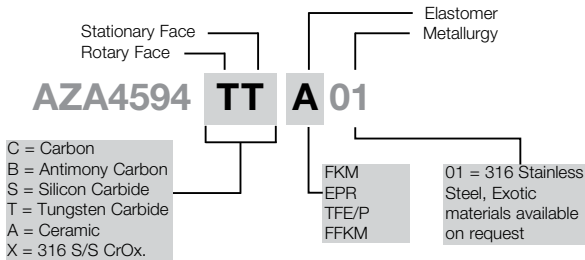
AESSEAL® Reference: Z4594

AESSEAL® Drawing Number: 6462822

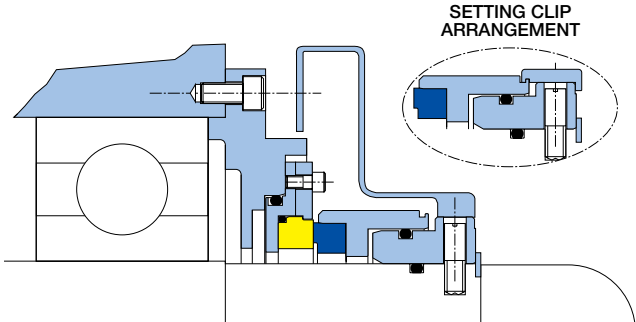
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Valmet Pressurized Headboxes, an example of which is shown above.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.



Deflection Rolls



Offered to suit large diameter shafts, typically around 260mm (10.25”), the seal design provides the benefits of a hydraulically balanced, multi-spring design with Antimony carbon against solid Tungsten Carbide seal faces.

AESSEAL® Deflection Roll Seal Design Features

- All metallic components are manufactured from 316 stainless steel.
- Resiliently mounted rotary face.
- Clipped stationary design facilitates seal installation.
- Antimony impregnated Carbon against Solid Tungsten Carbide.
- External incidental leakage “catcher” plate - Optional.

Typical manufacturers of deflection rolls include ;

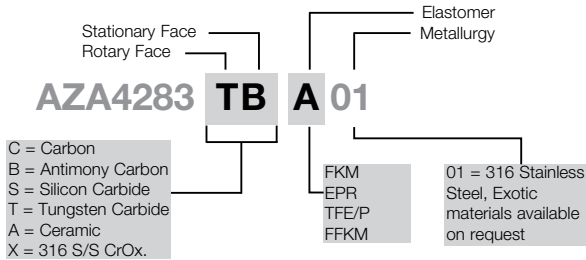
KUSTERS

VALMET Sym Rolls, Sym Z Rolls, and ZS-TELA,

BELOIT CC Rolls

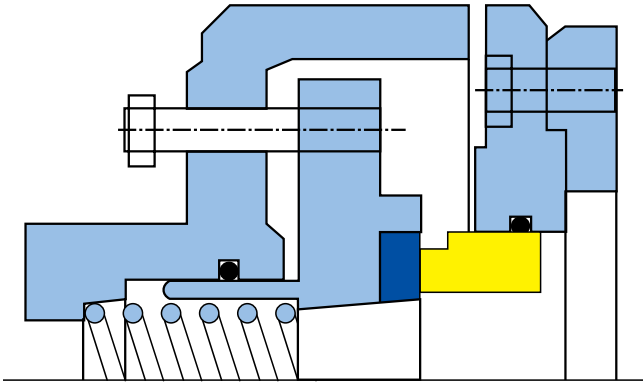
ESCHER WEISS Nepco Rolls

For further information on Kusters installation details see case history 733.



10 - Seals to Suit the Paper Machine

Steam Nozzles



SNOZ™ Steam Nozzle Seal to suit Paper Machine drying Cylinders.

AESSEAL® Drawing Number: 7110168

AESSEAL® Stock Code: 3SJ01/01

See case history 732 for further details.

Steam Nozzles are used on the drying cylinders in the paper machine.

Steam is injected in through the stationary member of the steam nozzle seal, and the rotary joint prevents steam leakage to the atmosphere.

The AESSEAL® steam nozzle seal unit supplied is termed SNOZ™ and inventoried in the stationary cast gland and Stationary face only.

The Carbon rotary face is generally sourced on site, due to site usage, however AESSEAL® can supply such seal faces if required.

Equipment Characteristics

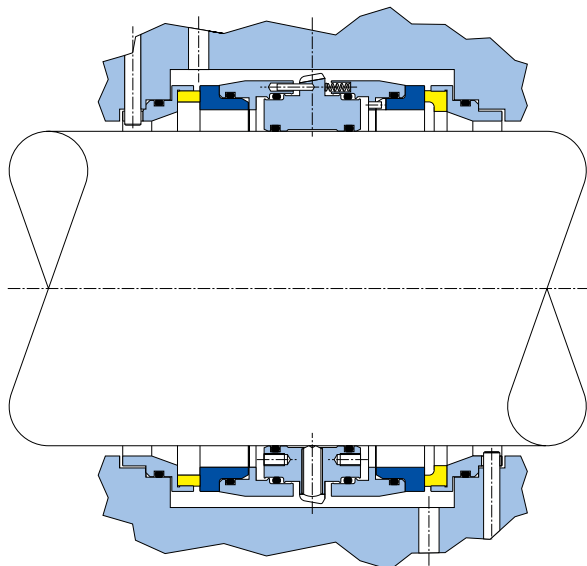
Typically this equipment has large shaft run-out and eccentricity, with angular misalignment.

Equipment Manufacturers

In particular, Mondi / Sappi mills generally use these, and they can be found on most Beloit or Beloit Warmsey equipment.

11 - Seals to Suit Other Equipment

Lamort Gyroclean Light Rejects Rotary Cleaner



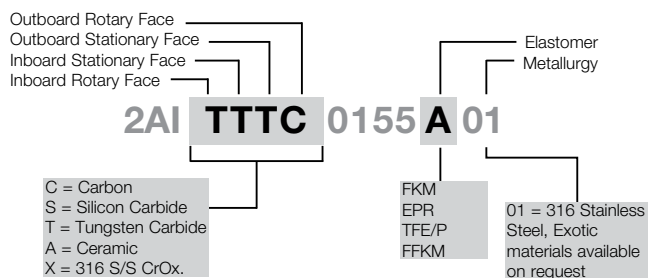
155mm GCS™ Seal to suit Lamort Gyroclean light rejects rotary cleaner

AESSEAL® Drawing Number: 6466678

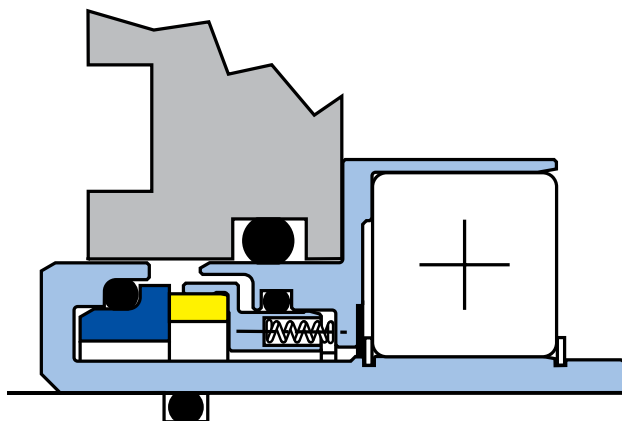
AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Lamort Gyroclean light rejects rotary cleaners.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Inventoried in double and single seal designs.
- Integral pumping scroll



Robbins & Myers RM6000 Macerator Seal



42mm RM6000 Seal

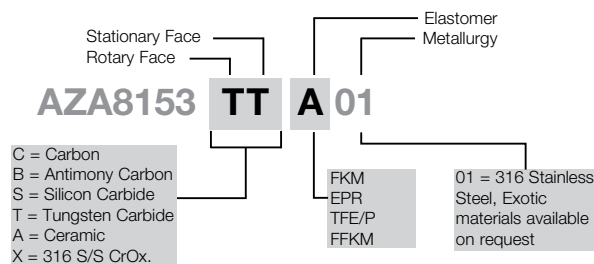
AESSEAL® Reference: Z8153

AESSEAL® Drawing Number: 7112729

AESSEAL® have designed a range of cartridge mechanical seals specifically to suit Robbins & Myers RM2000 Macerators.

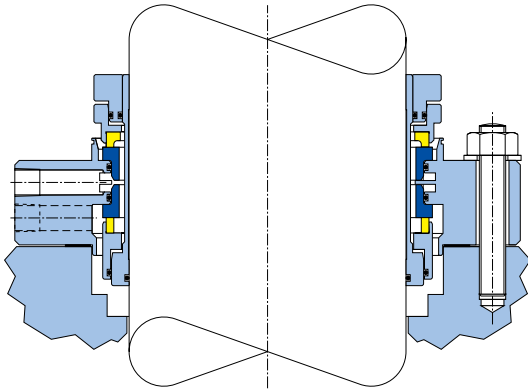
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- Robust Cartridge design



11 - Seals to Suit Other Equipment

Oxygen Reactors - Fluffer Seal



7.875" CDM™ "Fluffer" Double Cartridge Seal to Suit an Oxygen Reactor.

AESSEAL® Reference: Z4536

AESSEAL® Drawing Number: 6460948

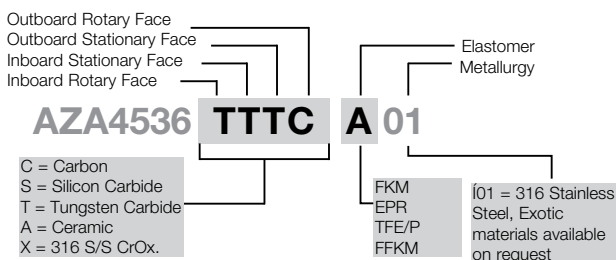
For further details see Case History 704

Fluffer Seal Design / Recommendations

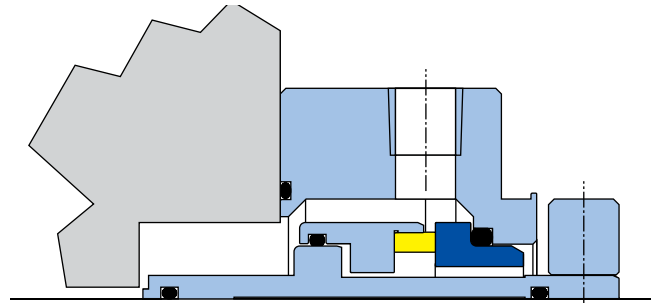
Due to the nature of the product, AESSEAL® recommend double seals for sealing the oxygen reactors. A mill water flush is recommended as stock consistency is in the region of 28%, and is generally abrasive, hence the need for hard inboard seal faces.

- Modular Design using standard components.
- Flush, Quench and Drain Environmental control Ports to optimize seal face environment.

Seal Selection Guideline - CONSULT AESSEAL®.



Warren EC 135 Screw Pump - Single Design



6.250 CURC™ Seal to suit Warren EC 135 Screw Pump

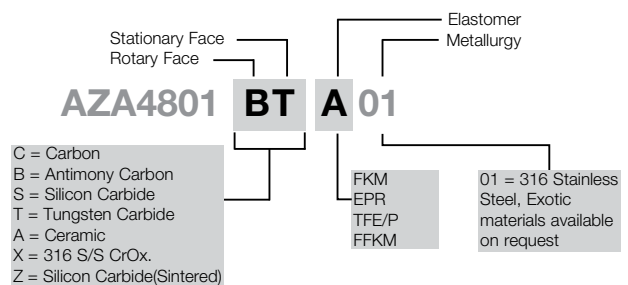
AESSEAL® Reference: Z4801

AESSEAL® Drawing Number: 6463903

AESSEAL® have designed a range of Single cartridge mechanical seals specifically to suit Warren EC 135 Screw Pumps with a hopper auger force feed.

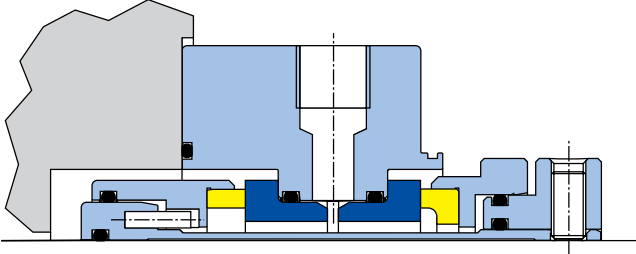
The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- 20% Consistency Paper Stock
- 18 Month+ Seal life
- For further information see Case History 1963K



11 - Seals to Suit Other Equipment

Warren EC 135 Screw Pump - Double Design



6.250" CDM™ Seal to suit Warren EC 135 Screw Pump

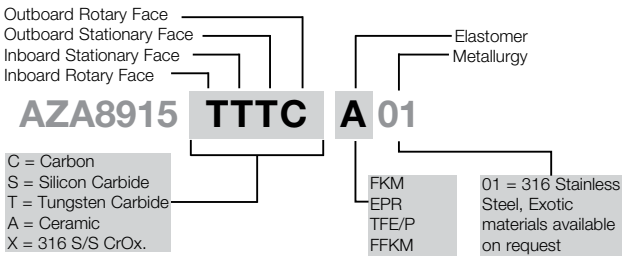
AESSEAL® Reference: Z8915

AESSEAL® Drawing Number: 7119226

AESSEAL® have designed a range of Double cartridge mechanical seals specifically to suit Warren EC 135 Screw Pumps.

The cross section shown above has been chosen to illustrate a typical example of the wide variety of designs available for this type of equipment.

- Modular Design using standard components.
- 20% Consistency Paper Stock
- For further information see Case History 1964K



12 - AESSEAL® standardization options for the Pulp and Paper Industry

Description	Mill Type	Area of Plant	S = Single D = Double	Standardization Option	Elastomer	Vessel	API Plan No.
Circulation Water (Ambient temp.)	All	ALL	(S) Converter II™	CR/CH.OX	45		
Black Liquor (Concentrated)	All	Power	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Defoamer	All	Power (Cooling Tower) and Waste Water	(S) CURC™	CR/SiC	TFE/P		
Hot Condensate	All	Power	(S) SCUSI™ or CURC™	CR/SiC	TFE/P		11 or 22
Demineralized Water	All	Power	(S) Converter II™	CR/CH.OX	TFE/P		11 or 22
Batch Digester Pump - Strong Black Liquor	All	Pulp Mill	(D) DMSF™ (D) DBDS™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Batch Digester Pump - Weak Black Liquor	All	Pulp Mill	(D) DMSF™ (D) DBDS™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Calcined Clay Pump	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR Ferralium	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Calcium Stearate Pump	Kraft	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Cationic Starch Pump (Ambient Temperature)	Kraft	Pulp Mill (used as a binder)	(S) CURC™	TC/TC	TFE/P		
Clay Filler Pump	Kraft	Pulp Mill (Interface)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Concentrated Black Liquor Pump	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
De-Inking Chemicals Pump	Recycling	Pulp Mill (Hydropulper)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Deflakers	All	Pulp Mill	(S) SAI™ & STAT	TC/TC	TFE/P		
Delaminated Clay Pump	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Digester Flash Tank Condensate Pump	All	Pulp Mill	(S) SCUSI™ or CURC™	CR/SiC	TFE/P		11/22
Heater Circulation Pump	All	Pulp Mill (Digestion)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54

12 - AESSEAL® standardization options for the Pulp and Paper Industry

Description	Mill Type	Area of Plant	S = Single D = Double	Standardization Option	Elastomer	Vessel	API Plan No.
High Pressure Feed Pump (Digester Transfer)	All	Pulp Mill	(D) DBDS™ or (D) DMSF™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard SP1™	53/54	
CONTINUOUS DIGESTION PUMPS IN FEEDER PART OF PULP AREA. FEEDERS AFTER DIGESTER (BARRIER PRESSURE 170 TO 185 PSIG IN DIGESTION VESSEL, TEMPERATURE AROUND 300° F.)							
High Temperature Digester Circulation Pump	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Hot Dispersion Pump	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP1™	53/54
Hydropulpers	All	Pulp Mill	(S) SAI™ & STAT (S) RDS™	TC/TC CR/CH.OX	TFE/P		32
Kneader / Re-pulper	All	Pulp Mill	(S) SAI™ & STAT	TC/TC	TFE/P		
Knotters	All	Pulp Mill	(D) IADC™-K	TC/TC//TC/CR	TFE/P	SW2™	53/54
Low Pressure Circulation Pump	All	Pulp Mill (Digestion)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Pressure Screen	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P	SW2™	53/54
Raw Turp Recovery Pump	All	Pulp Mill	(S) CURC™	CR/SiC	TFE/P		
Secondary Fiber Pulp Pump (>3%)	All	Pulp Mill	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Soft & Hard Wood Broke Pump	All	Pulp Mill					
Starch (Raw Slurry) Pump (140°-190°F / 60°-80°C)	All	Pulp Mill (used as a binder)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Stock Chest Agitators	All	Pulp Mill	(S) CSM™	TC/TC	TFE/P		
Vibratory Knotters	All	Pulp Mill	(S) CURC™	TC/TC	TFE/P		
Wash Circulation to Heater Pump	All	Pulp Mill	S) CURC™	TC/TC	TFE/P		32
Wash Water Feed Pump	All	Pulp Mill (Digestion)	S) CURC™	TC/TC	TFE/P		32
Weak Black Liquor Pump	All	Pulp Mill (Recovery)	S) CURC™	TC/TC	TFE/P		
White Liquor Feed Pump	All	Pulp Mill (Digestion)	S) CURC™	TC/TC	TFE/P		32
White Liquor Transfer Pump	All	Pulp Mill (Recovery)	(S) CURC™	TC/TC	TFE/P		11

12 - AESSEAL® standardization options for the Pulp and Paper Industry

Description	Mill Type	Area of Plant	S = Single D = Double	Standardization Option	Elastomer	Vessel	API Plan No.
Wood Pulp Breaker	All	Pulp Mill	(S) SAI™ & STAT	TC/TC	TFE/P		
Ansiox Pump	Kraft	Pulp Mill Chemical Area	(D) CDSA™	SiC/SiC//SiC/CR Ferralium	TFE/P - Inboard FKM - Outboard	SW2™	53/54
(ADDED TO STOCK - HAS SIMILAR CHARACTERISTICS TO TITANIUM DIOXIDE)							
Calcium Carbonate Solution Pump	Fine Paper	Pulp Mill Chemical Area (used as a pigment)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Clay Slurry Pump	All	Pulp Mill Chemical Area	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Green Liquor Agitator	All	Pulp Mill Chemical Area	(D) CDM™	TC/TC//TC/CR	TFE/P	SW2™	53/54
Hydrochloric Acid Pump	All	Pulp Mill Chemical Area	(D) CDSA™	CR/SiC//SiC/CR Alloy 276	TFE/P - Inboard FKM - Outboard	SW2™	53/54
FKM CAN BE AFFECTED BY HIGH CONCENTRATIONS (ETCHING)							
Liquor & Lime Pump	All	Pulp Mill Chemical Area	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
CONTROLS PH OF LIQUOR - INTRODUCED WHERE BLACK LIQUOR IS BEING SENT TO THE RECOVERY AREA							
White Liquor Agitator	All	Pulp Mill Chemical Area	(D) CDM™	TC/TC//TC/CR	TFE/P	SW2™	53/54
Paper Stock Pump	All	Fiber Plant	(S) CURC™	TC/TC	TFE/P		32
Brown Liquor (weak Black Liquor) Pump	All	Fiber Plant	(S) CURC™	TC/TC	TFE/P		
Calcium Hypochlorite Pump	Fine Paper	Bleaching & Washing	(D) CDSA™	SiC/SiC//SiC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Chlorine Dioxide Pump	All	Bleaching & Washing	(D) CDSA™	SiC/SiC//SiC/CR Titanium	FFKM - Inboard FKM - Outboard	SW2™	53/54
Hardwood Kraft Pump	Kraft	Bleaching & Washing	(D) CDSA™	SiC/SiC//SiC/CR Titanium	FFKM - Inboard FKM - Outboard	SW2™	53/54
Hydrogen Peroxide Pump	Kraft	Bleaching & Washing	(S) SCUSI™ or CURC™	SiC/SiC	TFE/P		
Sodium Hydroxide (caustic) Pump	All	Bleaching & Washing	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Sodium Hypochlorite Pump	All	Bleaching & Washing	(D) CDSA™	SiC/SiC//SiC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Softwood Kraft Pump	Kraft	Bleaching & Washing	(D) CDSA™	SiC/SiC//SiC/CR Titanium	FFKM - Inboard FKM - Outboard	SW2™	53/54

12 - AESSEAL® standardization options for the Pulp and Paper Industry

Description	Mill Type	Area of Plant	S = Single D = Double	Standardization Option	Elastomer	Vessel	API Plan No.	
Stock Chest Agitators	All	Bleaching & Washing	(S) CSM™ (S) RDS™	TC/TC CR/CH.OX	TFE/P		32	
Sulfuric Acid Pump	All	Bleaching & Washing	CHECK CHEMICAL COMPATIBILITY DATABASE. THE CORRECT METAL, ELASTOMER AND FACES VARY WIDELY, DEPENDING ON CONCENTRATION AND TEMPERATURE.					
White Water Pump	All	Bleaching & Washing	(S) CURC™	TC/TC	TFE/P			
Feed Transfer Pump (Digestion Stage)	All	Stock Preparation	(D) DBDS™ or DMSF™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54	
Green Liquor Agitator	All	Chemical Recovery	(D) CDM™	TC/TC//TC/CR	TFE/P	SW2™	53/54	
White Liquor Agitator	All	Chemical Recovery	(D) CDM™	TC/TC//TC/CR	TFE/P	SW2™	53/54	
Alum Pump	Kraft	Finished Products (Coating)	(D) CDSA™	SiC/SiC//SiC/CR Alloy 20	FFKM - Inboard FKM - Outboard	SW2™	53/54	
OFTEN USE SINGLE AND NO FLUSH AND ACCEPT EARLY FAILURE. NO WATER CAN BE ADDED TO THE PROCESS								
Calcium Stearate Pump	Kraft	Finished Products	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54	
Casein Pump	All	Finished Products (Soluble in weak Acids and Alkalis) Used for Paper Coating	(S) CURC™	TC/TC	TFE/P			
Clay Filler Pump	Kraft	Finished Products (Pulp Mill Interface)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54	
Coating / Coating Colour Pump	All (mostly fine paper)	Finished Products (Coating Area)	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54	
Cooked Protein Pump	All	Finished Products	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54	
Delaminated Clay Pump	All	Finished Products	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54	
Dispersant Pump	Kraft	Finished Products	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54	
Latex Pump	All	Finished Products	SPECIAL FACE GEOMETRY REQUIRED		TFE/P - Inboard FKM - Outboard	SP2™	53/54	
Plastic Pigment Pump	Fine Paper	Finished Products; Used to achieve high gloss paper coating eg. Xerox paper	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard		53/54	

12 - AESSEAL® standardization options for the Pulp and Paper Industry

Description	Mill Type	Area of Plant	S = Single D = Double	Standardization Option	Elastomer	Vessel	API Plan No.
Protein Pump	All	Finished Products	(S) CURC™	CR/SiC	TFE/P		
Retention Aid Pump	All	Finished Products; Used to improve retention of Fines and Fillers	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54
Titanium Dioxide Pump	All	Finished Products	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SP2™	53/54
ALSO FOUND IN ASSOCIATED CHEMICAL PLANT							
Stock Chest Agitators	All	Paper Machine	(S) CSM™ (S) RDS™	TC/TC CR/CH.OX	TFE/P		32
Trash Screens	All	Paper Machine	(S) IASC™	TC/TC	TFE/P		
Refiners	All	Paper Machine	(S) CMAX™	TC/TC	TFE/P		
Paper Stock (Fan Pumps)	All	Paper Machine	(S) CURC™	TC/TC	TFE/P		
White Water Pumps	All	Paper Machine (Return to Re-process)	(S) CURC™	TC/TC	TFE/P		
Paper Stock (broke stock) Pumps	All	Paper Machine	(S) CURC™	TC/TC	TFE/P		
High Temperature Condensate Pumps	All	Paper Machine	(D) CDSA™	CR/SiC//SiC/CR	TFE/P	SW3™	53/54
Bearing Oil	All	Paper Machine	(S) SAI™ & STAT	TC/ANT.CR	TFE/P		
Steam Nozzles	All	Paper Machine	(S) SNOZ™	TC/CR	TFE/P		
Recycled Fiber Pump	All	Waste paper processing	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Recycled Fiber (Latex) Pump	All	Waste paper processing	(D) CDSA™	TC/TC//TC/CR	TFE/P - Inboard FKM - Outboard	SW2™	53/54
Defoamer	All	Waste water processing	(S) CURC™	CR/SiC	TFE/P		

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

AESSEAL® have introduced a range of mechanical seals specifically designed for the arduous environments encountered in the Pulp & Paper Industry.

The Mechanical Seal range encompasses sealing solutions for the equipment typically found in the industry, and includes designs for Stock Process Pumps, Refiners, Screens, Mixers, and Knotters, to name but a few.

These product ranges have been developed only after extensive performance & field evaluation tests, conducted over several years duration.

Innovative, Patented and Patent Pending products have been introduced for specific targeted areas within the Pulp & Paper industry. These include Exotic Alloy technology for the Chemical and Bleaching mills, Axial movement seals for refining equipment, and products with the ability to withstand cyclic product pressures as encountered in hot dispersal equipment.

AESSEAL® aims to provide such a high level of SERVICE that our customers may never seek an alternative source of supply. Basically AESSEAL® will SET NEW INDUSTRY SERVICE LEVELS for the Pulp & Paper industry.

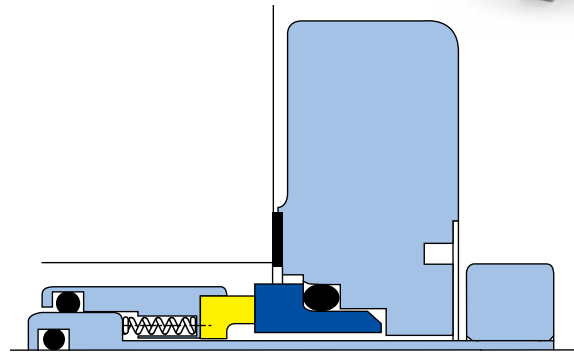
Each product is competitively designed to not only enhance the availability through modularization, but also improve installation and disassembly techniques, which can be encountered on some generic items of equipment such as pressure screens.

AESSEAL® are a major force within the sealing Industry, and have been recognized as such by numerous convergence agreements, one of which is with a major player in the Pulp & Paper industry.

The products highlighted in the following section provide an indication of the scope of AESSEAL® products which meet the needs of the Pulp & Paper Industry.

(S) Convertor II™

Cartridge Seal Designed to Replace Packing



This cartridge seal is designed to replace two part component seals and conventional packing arrangements.

- Compact gland for use on applications with limited space

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

- GUARD YOUR EQUIPMENT
- WEAR SAFETY CLOTHING

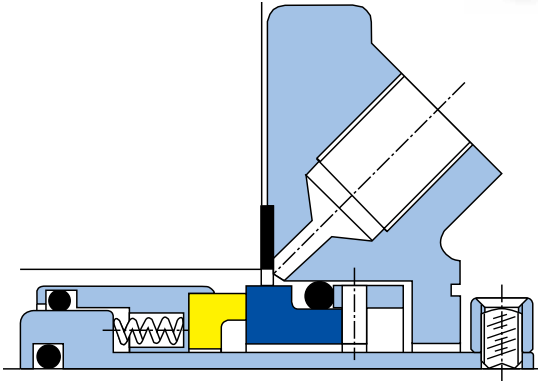


WARNING

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(S) SCUSI™

Short Cartridge Mechanical Seal



A short externally mounted cartridge seal, with flush and self aligning faces.

- Available with flush port as standard for cooling/venting to maximize seal life
- Self aligning stationary face ensures perpendicular alignment of face to shaft axis, maximizing seal life
- Stationary face drive with contacting pins eliminates damage in stop/start applications and viscous fluids
- Flush port to increase seal life in arduous situations

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

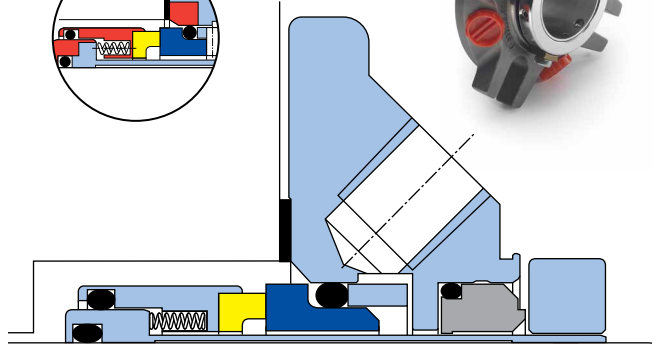
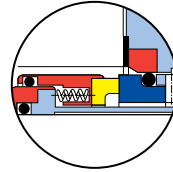
- GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



WARNING

(S) CURC™

Cartridge Single Seal with Flush, Quench & Drain ports



The Bi-Metal CURC™ (inset, above) uses exotic alloy wetted components and is available in a range of alternative alloys.

The CURC™ is the primary single cartridge seal installed by AESSEAL® in thousands of Pulp & Paper Applications.

- Self aligning stationary face ensures perpendicular alignment of face to shaft axis, maximizing seal life
- Stationary face drive with contacting pins eliminates damage in stop/start applications and viscous fluids
- Quench, drain and flush ports for cooling/heating options to maximize seal life
- Bi-Metal CURC™ option - maintains the features of the standard CURC™ but includes exotic alloy wetted components for use with corrosive chemicals

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

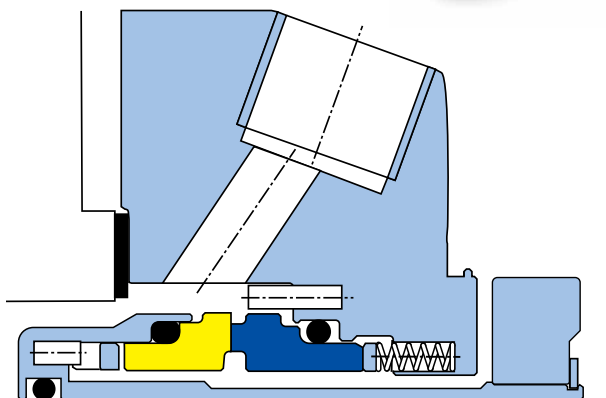
- GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



WARNING

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(S) SMSS™
Single Monolithic
Stationary Seal



A single cartridge stationary seal with modular monolithic seal faces.

- Monolithic seal faces provide maximum face stability in high pressure and high temperature applications improving seal longevity in these type of applications
- Seal face drive by large contact area preventing damage to faces in stop/start applications and viscous fluids
- Large 3/8" ports maximize cooling and extend seal life

OPERATING PARAMETERS:

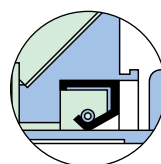
Maximum Pressure: 25barg (375psig).
Maximum Temperature: Elastomer and Seal face dependant.
Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

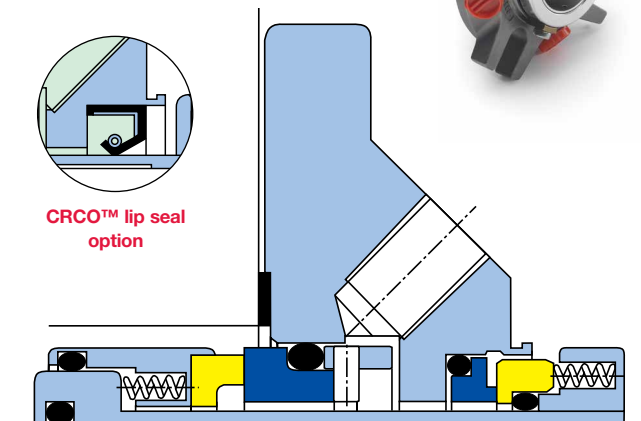
USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



(S) CURE™
Cartridge Single Seal for
Low Pressure Barrier Fluid
Applications



CRCO™ lip seal
option



Compact design with quench fluid contained by low pressure seal.

- Quench, drain and flush ports for cooling/heating options to maximize seal life
- Stationary face drive with contacting pins eliminates damage in stop/start applications and viscous fluids
- Quench prevents solidification of materials on seal faces, or for cooling/heating to maximize seal life in arduous applications
- Lip seal option for oil barrier fluids and slow shaft speeds available as CRCO™

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).
Maximum Temperature: Elastomer and Seal face dependant.
Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

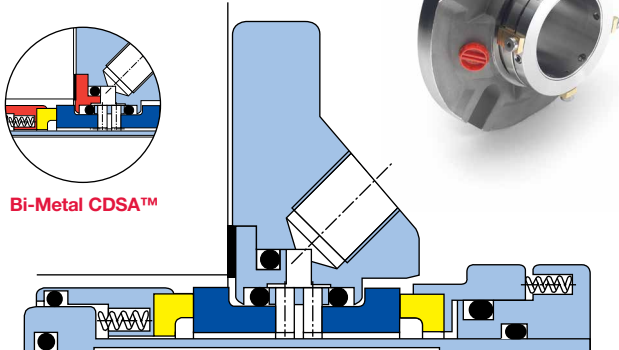
CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(D) CDSA™ Cartridge Mounted Double Seal



The Bi-Metal CDSA™ (inset, above) uses exotic alloy wetted components and is available in a range of alternative alloys.

The CDSA™ is the primary double cartridge seal installed by AESSEAL® in thousands of Pulp & Paper Applications.

- Independent seal face design enhances safety containment of process fluid in the event of damage to any individual sealing element
- Flexible design can be used as a double seal (high pressure barrier fluid) or tandem seal (low pressure barrier fluid) which reduces the necessity to inventory two designs of seals.
- Stationary face drive with contacting pins eliminates damage in stop/start applications and viscous fluids
- Fits on pumps with thin radial cross section spaces
- The Bi-Metal CDSA™ option maintains the features of the standard CDSA™ but includes exotic alloy wetted components for use with corrosive chemicals

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

On processes where leakage of the primary product being sealed cannot be tolerated, the barrier fluid pressure should normally be set at 1 barg (15 psig) above the product pressure

Based upon 25°C (77°F) operating temperature, the maximum differential pressure of the barrier fluid, to atmosphere, is 17 barg (250 psig).

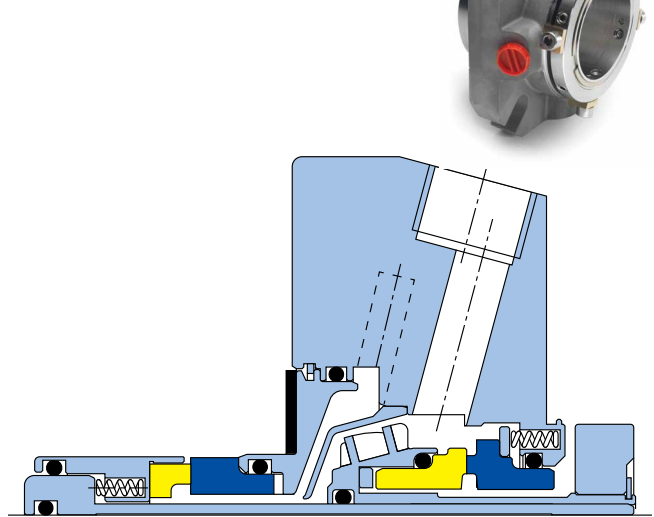
CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



WARNING

(D) CDFI™ Cartridge Double Flow Induction/Convection



- Independent seal face design enhances safety containment of process fluid in the event of damage to any individual sealing element
- Fits on pumps with thin radial cross section spaces
- Integral deflector guides cooling barrier fluid to the most essential areas and extends seal life
- Incorporates bi-directional pumping scroll to maximize cooling and increase seal life

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

On processes where leakage of the primary product being sealed cannot be tolerated, the barrier fluid pressure should normally be set at 1 barg (15 psig) above the product pressure

Based upon 25°C (77°F) operating temperature, the maximum differential pressure of the barrier fluid, to atmosphere, is 17 barg (250 psig).

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

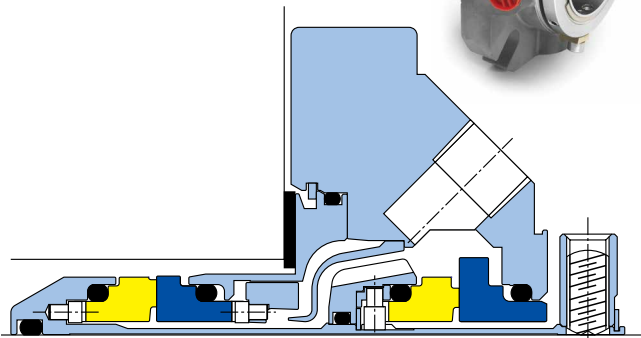
USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



WARNING

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(D) DMSF™
Double Monolithic
Stationary Flow
(Patented Design)



A double cartridge stationary seal with an integral pumping ring and monolithic seal faces. Essential for Batch digester applications and is the STANDARD double seal in at least one Major Pulp & Paper Mill.

- Seal face drive by large contact area prevents damage to faces in stop/start applications and viscous fluids
- Hydraulically double balanced and can withstand pressure fluctuations
- Incorporates bi-directional pumping scroll to maximize cooling and increase seal life
- Large 3/8" ports maximize cooling and extend seal life
- Integral deflector guides cooling barrier fluid to the most essential areas and extends seal life
- Monolithic seal faces provide maximum face stability in high pressure and high temperature applications improving seal longevity

OPERATING PARAMETERS:

Maximum Pressure: 25barg (375psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

On processes where leakage of the primary product being sealed cannot be tolerated, the barrier fluid pressure should normally be set at 1 barg (15 psig) above the product pressure

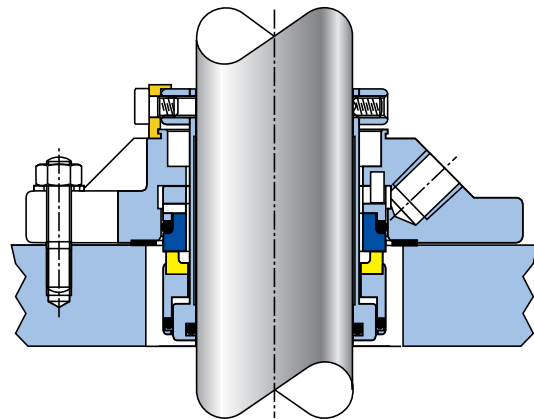
Based upon 25°C (77°F) operating temperature, the maximum differential pressure of the barrier fluid, to atmosphere, is 25 barg (375 psig).

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



(S) CSM™
Cartridge Single
for Mixers



- Can accept greater radial movement than pump seals
- Can be used on mixers with long overhang shafts
- Designed to run in vapour applications
- Suitable for top entry agitator service
- Exotic alloy wetted parts available for use with corrosive chemicals
- Smooth non-clogging profile (springs out of the product)

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

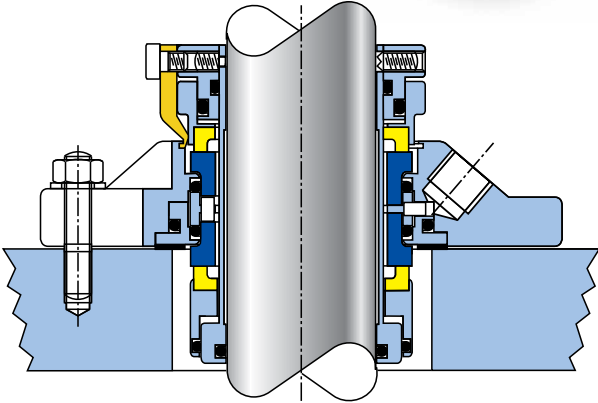
CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(D) CDM™
Cartridge Double
for Mixers



- Can accept greater radial movement than pump seals
- Can be used on mixers with long overhang shafts
- Designed to run in vapour applications
- Suitable for top entry agitator service
- Exotic alloy wetted parts available for use with corrosive chemicals
- Smooth non-clogging profile (springs out of the product)

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

On processes where leakage of the primary product being sealed cannot be tolerated, the barrier fluid pressure should normally be set at 1 barg (15 psig) above the product pressure

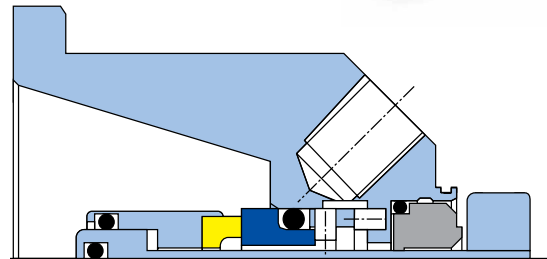
Based upon 25°C (77°F) operating temperature, the maximum differential pressure of the barrier fluid, to atmosphere, is 17 barg (250 psig).

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

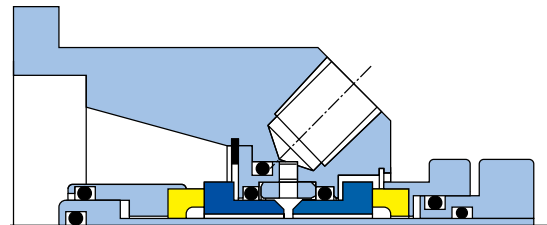
USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



(S) (D) PCPS™ Range
Progressing Cavity
Pump Seals



(S) CURC™ Seal design in PCPS™ type Gland.



(D) CDSA™ Seal design in PCPS™ type Gland.

Over 1500 PCP designs available to suit all major manufacturers across the globe, such as Mono, Robbins & Myers, Netzsch, PCM, Seepex or Orbit and many more".

- Available as single or double seal option
- No pump modification necessary, reducing cost of conversion. Seal replaces existing stuffing box seal chamber
- Modular design for improved availability and industry leading prices
- Big bore flared housing, maximizes cooling and lubrication and increases seal life. Prevents clogging when pumping slurries and liquids
- Non shaft fretting design to reduce cost in pump/equipment overhaul
- Operating parameters vary depending on design of seal, typically the same as equivalent cartridge seal

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING

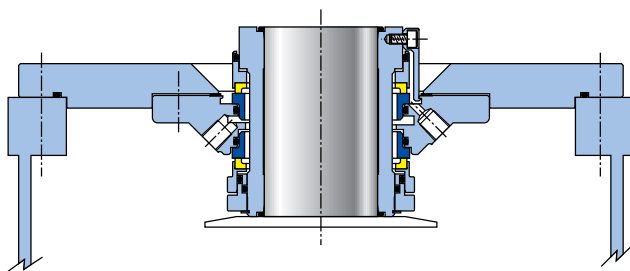
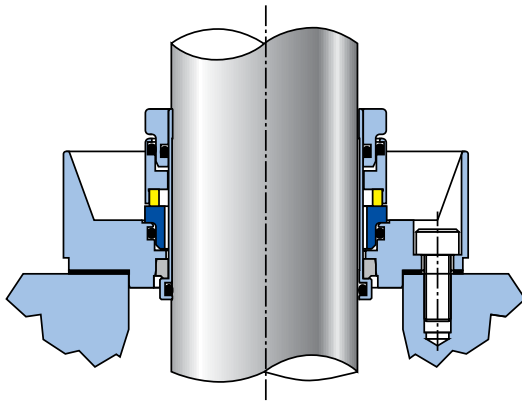


13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

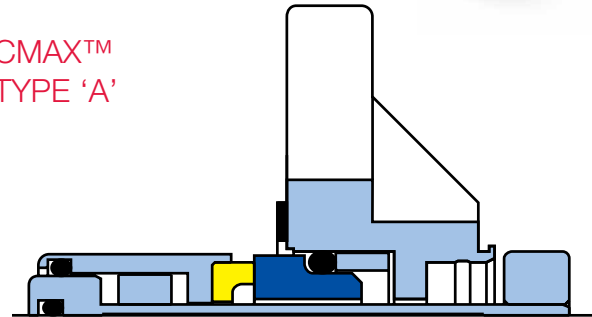
(S) IASC™ /
(D) IADC™
Single & Double
Screen Seals



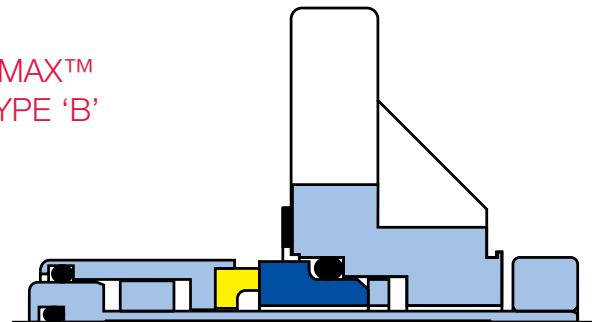
(S) CMAX™
Cartridge Single Seal
with Axial Movement



CMAX™
TYPE 'A'



CMAX™
TYPE 'B'



Standard AESSEAL® screen seals are available to suit many of the popular screen models including Voith, Impco, Hooper, Valmet and Ahlstrom.

- Available as single or double seal option
- Modular design for improved availability and industry leading prices
- Non shaft fretting design to reduce cost in pump/equipment overhaul
- Operating parameters vary depending on design of seal, typically the same as equivalent cartridge seal designed to suit pumps or mixers

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

- GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



The Standard CMAX™ design has 316L Stainless Steel wetted parts and is available in a wide range of seal face and elastomer combinations to suit individual process requirements.

- Able to accept Axial Movement / Shaft Growth
- Used on some refiner duties & Knotter Pumps

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperat: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

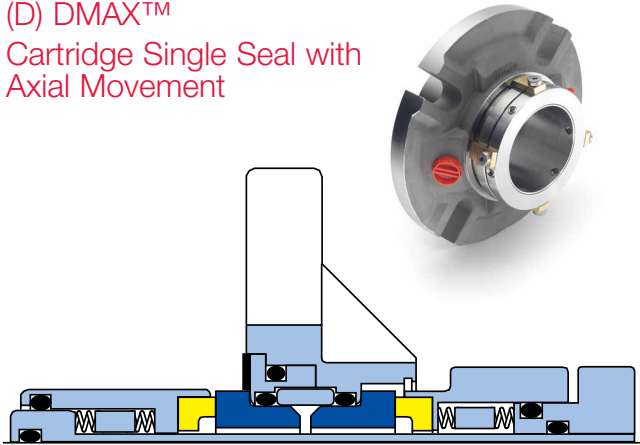
USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

- GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(D) DMAX™
Cartridge Single Seal with
Axial Movement



The Standard DMAX™ design has 316L Stainless Steel wetted parts and is available in a wide range of seal face and elastomer combinations to suit individual process requirements.

- Able to accept Axial Movement / Shaft Growth
- Used on some refiner duties

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

On processes where leakage of the primary product being sealed cannot be tolerated, the barrier fluid pressure should normally be set at 1 barg (15 psig) above the product pressure

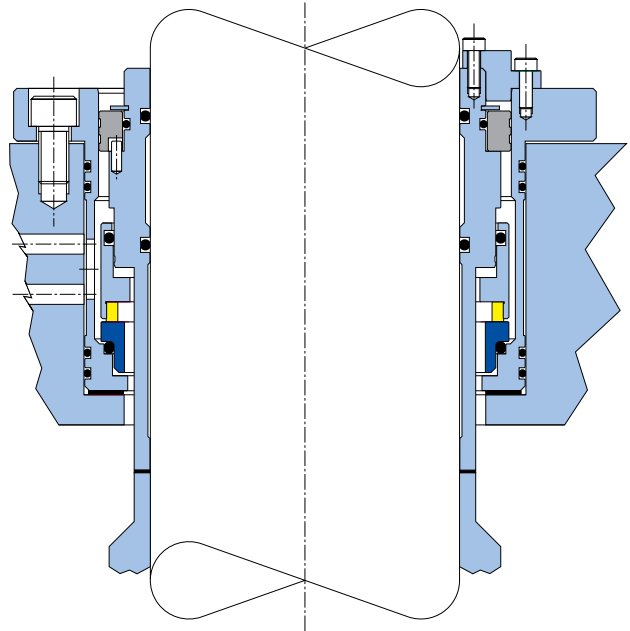
Based upon 25°C (77°F) operating temperature, the maximum differential pressure of the barrier fluid, to atmosphere, is 17 barg (250 psig).

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT
IF THE APPLICATION EXCEEDS 60% OF ALL THE
OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS
PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



(S) USFC™
Unit Seal With Flush
Cavity



The Standard USFC™ design has 316L Stainless Steel wetted parts and is available in a wide range of seal face and elastomer combinations to suit individual process requirements.

- Designed For Screens
- Optimized Seal Face environment
- Standard modular Seal Faces

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 3,600rpm (20m/s / 4,000fpm)

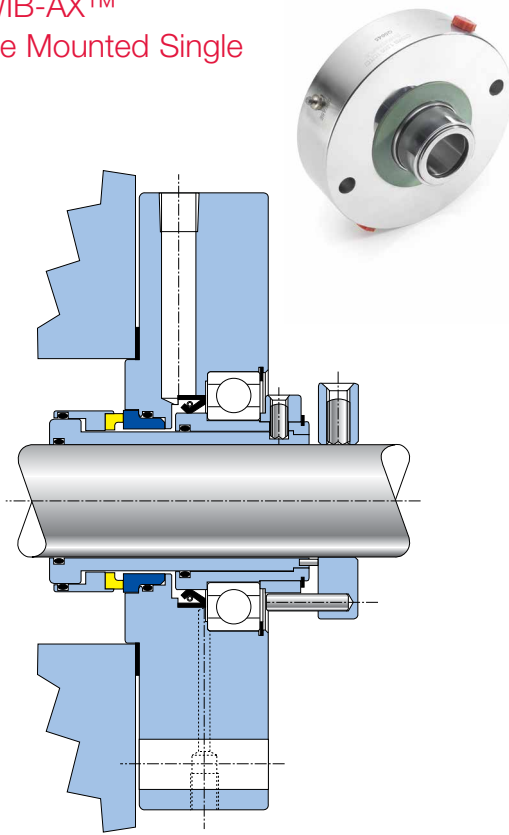
CONSULT THE AESSEAL® TECHNICAL DEPARTMENT
IF THE APPLICATION EXCEEDS 60% OF ALL THE
OPERATING LIMITS

USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS
PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.
• GUARD YOUR EQUIPMENT • WEAR SAFETY CLOTHING



13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(S) CSWIB-AX™
Cartridge Mounted Single Seal



The Standard CSWIB-AX™ design has 316L Stainless Steel wetted parts and is available in a wide range of seal face and elastomer combinations to suit individual process requirements.

These seals are offered with the following extra features:

- Designed For Refiners
- Cartridge Design
- Available with Exotic Alloy Wetted Components
- Gland Designed to suit individual equipment specifications
- Double seal versions available

OPERATING PARAMETERS:

Maximum Pressure: 20barg (300psig).

Maximum Temperature: Elastomer and Seal face dependant.

Maximum Shaft Speed: 1,800rpm (20m/s / 4,000fpm)

CONSULT THE AESSEAL® TECHNICAL DEPARTMENT IF THE APPLICATION EXCEEDS 60% OF ALL THE OPERATING LIMITS

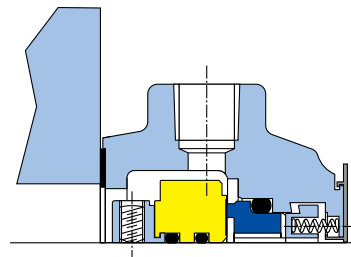
USE DOUBLE MECHANICAL SEALS WITH HAZARDOUS PRODUCTS. ALWAYS TAKE SAFETY PRECAUTIONS.

- GUARD YOUR EQUIPMENT
- WEAR SAFETY CLOTHING



WARNING

RDS™
Radially Divided Seal



The RDS™ eliminates the need to remove/strip equipment for seal replacement. This Radially Divided Seal has been designed to be the quickest to install two part seal currently available on the market place.

The standard RDS™ has 316L Stainless Steel wetted parts and is available with different seal face and elastomer combinations to suit individual process requirements.

This seal is offered with the following extra features:

- Hydraulically balanced for reduced seal face loading which maximizes seal life and allows for vacuum service capability
- External visible life indicator pin assists preventative maintenance
- Minimum parts to assemble
- Self aligning stationary face ensures perpendicular alignment of face to shaft axis, maximizing seal life
- Precision lapped (not cracked) rotary seal face provides industry leading separation technology and predictable sealing

CALCULATED PV FACTORS				
SHAFT SIZE	PRESSURE (barg/psig)	SPEED (rpm)	FACTOR (barg/m/s)	FACTOR (lbs/in2ft/min)
1.000 (25mm)	4 / 60	1450	7.7	22000
	10 / 150	1450	19.3	55000
	4 / 60	2850	15.1	43000
	10 / 150	2850	37.9	108000
2.000 (50mm)	4 / 60	1450	15.4	44000
	10 / 150	1450	38.6	110000
	4 / 60	2850	30.2	86000
	10 / 150	2850	75.8	216000
3.000 (75mm)	4 / 60	1450	23.1	66000
	10 / 150	1450	57.9	165000
	4 / 60	2850	45.3	129000
	4 / 60	1450	30.3	86000
4.000 (100mm)	10 / 150	1450	77.2	220000
	4 / 60	2850	60.4	172000
	4 / 60	1450	38.5	110000
	8 / 120	1450	77.2	220000
5.000 (125mm)	4 / 60	2850	75.5	216000
	4 / 60	2850	75.5	216000

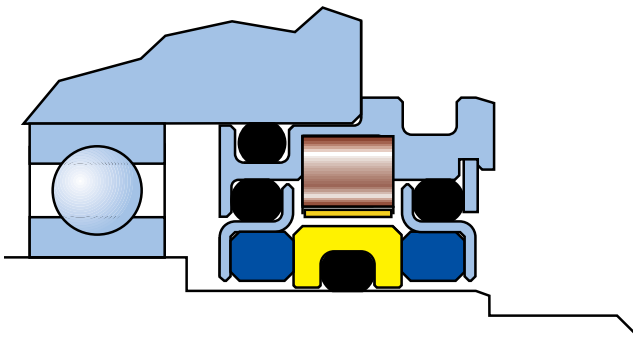


WARNING

MAXIMUM P.V. RATING IS 80 BAR M/S (230,000 PSI FT/MIN)

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

(D) MagTecta™
Double Mechanical Seal
Bearing Protector

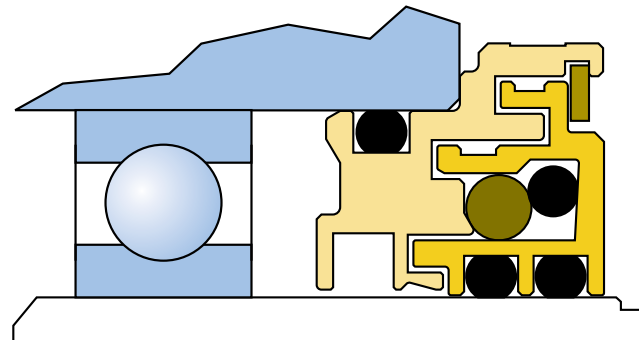


If rotating equipment bearings are inadequately protected, equipment damage, loss of fluid and ultimately catastrophic equipment failure may result. The contamination that causes bearings to fail is normally due to the use of low cost bearing seals such as lip seals and labyrinth bushes. The solution is to use the AESSEAL® MagTecta™ double mechanical seal, a product which is probably the most technologically advanced bearing protector in the world.

This seal is offered with the following extra features:

- Double faces, double protection
- Universal design
- Compact housing will fit the majority of lip seal cavities without the need for modification of equipment
- Rotary elastomer fits within existing lip seal cavity therefore our standard seal can be fitted on stepped shaft applications, reducing cost
- Reversible housing to suit two housing sizes on one shaft which reduces inventory and cost
- Suitable for use on Gear Boxes, Pumps, Rotary Valves, Conveyor Fans, Rolling Mills and many other types of rotating equipment

LabTecta®66 Non Contacting
Bearing Seal



The LabTecta®66 is a non contacting, while rotating, bearing seal that is designed for use in Oil Splash, Dry Running and Grease applications, on pieces of horizontal equipment.

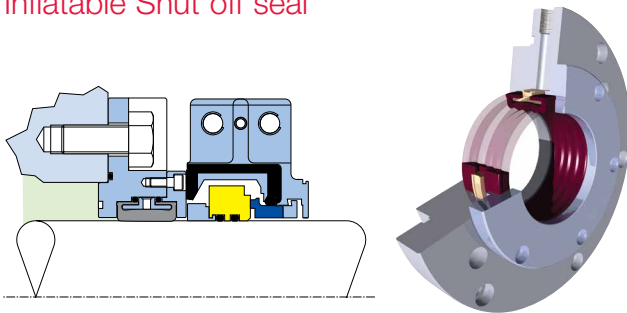
The LabTecta®66 can also be used in the vast majority of existing Oil Mist applications that comply with the now superseded API 610 7th Edition requirements and where a small quantity of Oil Mist escapes to atmosphere.

- Non contacting seal
- Ingress protection to IP55
- Easy to refurbish
- Safe - Non sparking
- Low cost
- No shaft wear
- Rotary elastomer fits within existing lip seal cavity therefore our standard seal can be fitted on stepped shaft applications, reducing cost
- Suitable for use on Gear Boxes, Pumps, Rotary Valves, Conveyor Fans, Rolling Mills and many other types of rotating equipment

13 - Standard AESSEAL® Designs used for the Pulp & Paper Industry

ISOS™

Inflatable Shut off seal



Most engineers will relate to the problems encountered when installing or removing a radially divided mechanical seal from rotating equipment.

However, the biggest single problem is that the whole system has to be drained or isolated so that liquids do not pour out when the seal is removed. This can sometimes take hours or even days depending on the application - all lost production time.

The AESSEAL® ISOS™, the Inflatable Shut Off Seal, solves this major problem.

This seal is offered with the following extra features:

- Eliminates the need for pump shut off valves when changing a seal and no pump re-priming is needed afterwards
- Fitted between the pump and seal it allows quicker and easier changing of the mechanical seal without having to drain equipment
- No re-priming of pumps needed after seal replacement
- Once inflated by a suitable and continuous supply it forms a pressurized seal for zero product leakage
- For use in conjunction with Radially Divided Seals

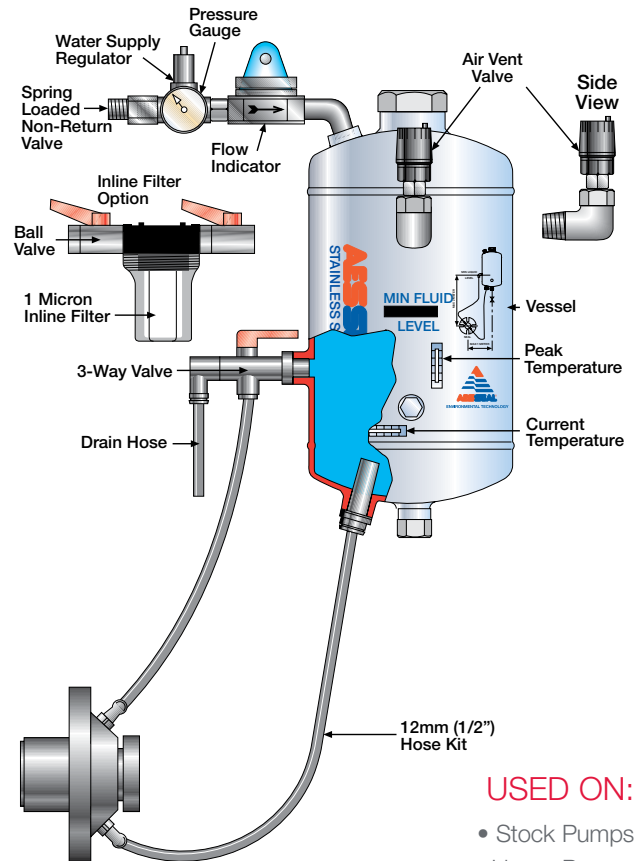
14 - Barrier Fluid Systems and Double Mechanical Seals

Seals and Systems for the Pulp & Paper Industry

- AESSEAL® have sold thousands of Water Management Systems, usually in combination with the CDSA™ Double Seal, in the Pulp and Paper Industry.
- Water Management Systems are maintenance friendly, requiring no external compressed air or gas pressurisation.
- Water Management Systems are largely self-regulating and self-operating and do not require any manual intervention for refilling.
- Although used throughout the Pulp and Paper Industry a primary application area is in heavy Black Liquor applications in the evaporation process.
- A typical 1.875" shaft black liquor pump, either packed in the traditional way or using a single flushed seal would typically introduce water into the process fluid at a rate of 1 US Gallon per minute.
- For a plant operating 24 hours a day for 350 days per year, this would amount to an annual total of 504,000 US Gallons [1.9 Million Litres] of flush water entering the process fluid. All of this would require reheating and then evaporating.
- The total annual cost of sealing, supplying water, heating water, re-evaporating the water etc., for one Black Liquor Pump is around \$4,890 for a Packed Pump with Flush and \$4,050 for a Pump sealed with a Single Mechanical Seal and Flush.
- A Sealing System can often provide a Return on Investment in a 6 to 12 month period – as well as being environmentally friendly and saving water.
- The total annual operating cost of a CDSA™ seal and SW2™ Water management system would be around \$820 on the same basis as above. This would give a typical return on investment of around 200 days.

SW2™ Standard Water Management System

Typical CDSA™ seal shown with SW2™ Standard Water Management System



USED ON:

- Stock Pumps
- Liquor Pumps
- Mixers

SW2™ Standard Water Management System (Order Code VSE/SW02)

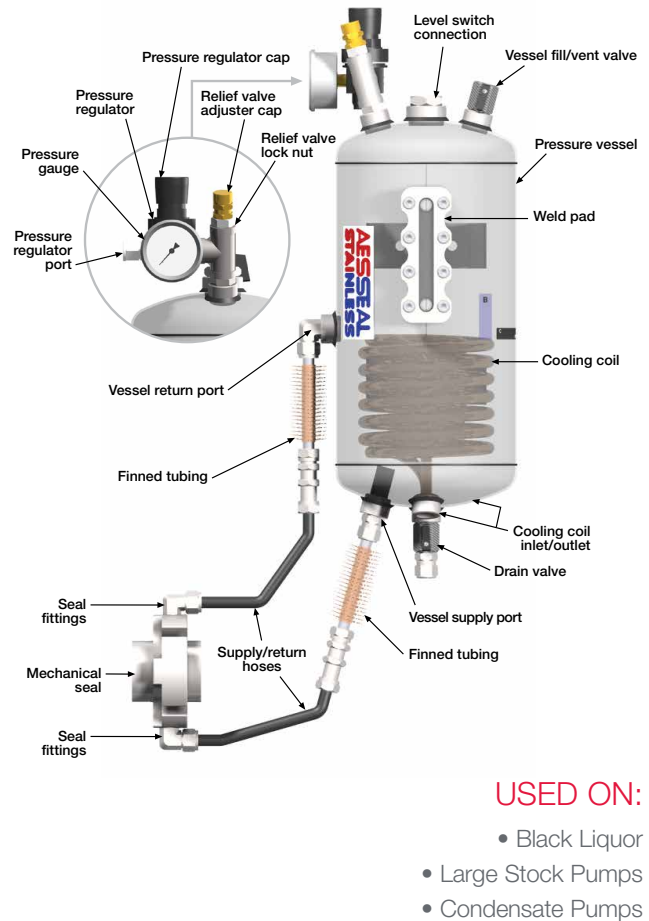
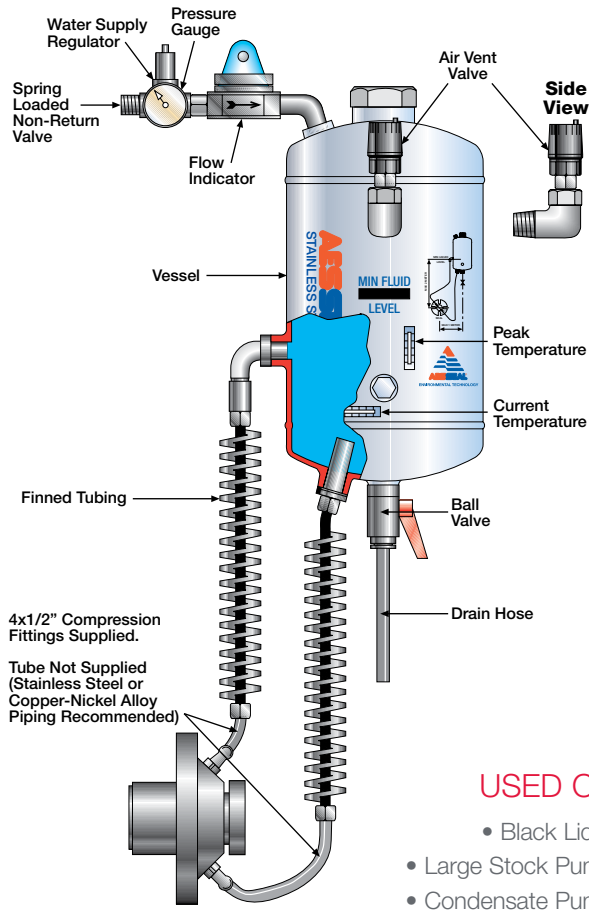
- A general purpose system with the highly recommended additions of a water pressure regulator to prevent transient or fluctuating supply pressure affecting barrier system integrity, and a 3-way valve which allows periodic purging of the seal to prevent any build up of contamination.

14 - Barrier Fluid Systems and Double Mechanical Seals

SW3™ & SP3™ Seal Support Systems for Hot Applications

Typical CDSA™ seal shown with SW3™ Hot Water Management System

SP3™ Inert Gas Pressurized System shown with optional integral cooling coil.



SW3™ Hot Water Management System (Order Code VSE/SW03)

- Intended for hot applications where high cooling capacity is needed. 2 lengths of finned tubing boost the heat dissipation to 1 Kw (1.35 hp). Stainless steel or copper-nickel alloy pipework is recommended (not supplied). Additional cooling capacity can be added using the (optional) vessel with integral cooling coil as shown above right.

SP3™ Inert Gas Pressurized System (Order Code VSE/SP03)

- The SP3™ is a inert gas pressurised system with the addition of finned tubing to remove excess heat on hot applications. The image above shows the system fitted with an optional integral cooling coil which gives the system extra cooling capacity on high heat applications.



ENVIRONMENTAL TECHNOLOGY

To experience the exceptional, please contact your local representative. Discover full details on our website:

www.aesseal.com

This brochure is fully recyclable. When laminated, a sustainable, biodegradable and recyclable lamination is used.

For further information and safe operating limits contact our technical specialists at the locations below.



UK Sales & Technical advice:

AESSEAL plc
Mill Close
Bradmarsh Business Park
Rotherham,
S60 1BZ, UK
Tel: +44 (0) 1709 369966
E-mail: enquiries@aesseeal.info
www.aesseal.com

AESSEAL plc is certified to:

ISO 9001, ISO 14001, ISO/IEC 20000, ISO/IEC 27001,
ISO/TS 29001, ISO 37001, ISO 45001 & ISO 50001



Net Zero champions globally



Use double mechanical seals with hazardous products.

Always take safety precautions:

- Guard your equipment
- Wear protective clothing



USA Sales & Technical advice:

AESSEAL Inc.
355 Dunavant Drive
Rockford,
TN. 37853,
USA

Tel: +1 865 531 0192
E-mail: usa@aesseeal.com
www.aesseal.com

Important: Since the conditions and methods of use of this product are beyond our control, AESSEAL plc expressly disclaims any and all liability resulting or arising from any use of this product or reliance on any information contained in this document - AESSEAL plc standard conditions of sale apply. All sizes are subject to manufacturing tolerances. We reserve the right to modify specifications at any time. AESSEAL® is a Registered Trademark of AES Engineering Ltd, AESSEAL plc recognizes all trademarks and trademark names as the property of their owners.