



Customer Document title:

Bill of Material

Flowserve Document title: **Bill of Material**
Flowserve Document No.: **1400944-016-1004-01**
Document Revision No.: **0**
Flowserve Order No.: **1400944**
Flowserve Serial No.: **1400944CHP016A/D**
Pump Type/Size: **MARK 3 STANDARD / 1K1.5X1-82RV**
Quantity: **4**
Customer Name: **DESMET BALLESTRA NORTH AMERICA**

Customer Tag No: **DESMET TAG#:P682H.1/1, World Energy TAG#:19-P-764A, DESMET TAG#:P682H.1/2, World Energy TAG#:19-P-764B, DESMET TAG#: P682H.2/1,World Energy TAG#:19-P-864A, DESMET TAG#: P682H.2/2,World Energy TAG#:19-P-864B**

Customer PO No.: **28493**

End User: **DESMET BALLESTRA NORTH AMERICA**

Please complete and return:**Document Reviewed by:****Document Reviewed date:**

- ☐ **APPROVED. NO ACTION REQUIRED**
☐ **APPROVED. RE-SUBMIT AS FINAL**
☐ **APPROVED WITH COMMENTS.** DOCUMENT WILL BE MODIFIED AND RESUBMITTED AS FINAL.
☐ **REJECTED.** CORRECT AND RE-SUBMIT FOR APPROVAL.
☐ **FOR INFORMATION.** REVIEW NOT REQUIRED
☐ **AS-BUILT**

- Return any documents sent for review with your comments by the stated return date. All documents not returned two weeks after requested Return date will be considered Approved, no action.
- Purchaser's comments and/or corrections within the scope of contract will be made on the first completed document submitted by Flowserve Corp. and returned.
- Corrections, alterations, additions and/or modifications outside scope of contract or made after first submittal may require an additional engineering service charge.
- Items conditionally approved or with deferred approval by purchaser must be specifically stated otherwise delivery may be affected.

Rev	Revision Description	Released	Release Date
	Final		13-Jan-22

	Customer Name:	DESMET BALLESTRA NORTH AMERICA
	Customer PO No.:	28493
	Customer Tag No.:	DESMET TAG#:P682H.1/1, World Energy TAG#:19-P-764A, DESMET TAG#:P682H.1/2,
	Flowserve Order:	1400944
	Pump Type/Size	MARK 3 STANDARD/1K1.5X1-82RV
	Flowserve Serial No.:	1400944CHP016A/D

BILL OF MATERIALS									
Job	Fsg Bubble Number	Item	Description	Qua nti ty Per Asse mbl y	Fsg Material Code	Material Type	ASTM	Drawing	Fsg Spares Class
3135187	1100	SM-DY52981A-DAAA-D4-XXGXX	CASING 1K1.5X1-8 TAP I 1/2 NPT	1	D4	CAST 316 STAINLESS STEEL	ASTM A744 GR CF8M	C52207A	3
	1220	SM-CY53429A-D4-XXGXX	COVER FML 1K	1	D4	CAST 316 STAINLESS STEEL	ASTM A744 GR CF8M	CY53429A	3
	167	95272555	PLUG SQ HD .50 ALLOY STEEL	1	D3039	Wrought alloy steel / For piping fitting	ASTM A234 Gr. WP9	30A7A5	0
	195	75360958	LABEL FOR ANSI 3A POWER END	1	MYLAR	N/A	N/A	AY59168A	0
	2100	SM-CY50682AA-316-XXGXX	SHAFT GP1K SOLID	1	316	STAINLESS STEEL	ASTM A276 AISI 316	CY50682A	3
	2200	PT007600	BALANCE IMPELLER ISO 1940 G2.5	1	N/A	N/A	N/A	N/A	0
	2200	SM-MY50754A82-D4-XXGXX	IMPELLER 1K1.5X1-82RV & 1K1.5X1.5US-82RV	1	D4	CAST 316 STAINLESS STEEL	ASTM A744 GR CF8M	DY50754A	3
	2530	AY50717A-SR	RING RTNG BCARR 1K	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	AY50717A	2
	2905	95273876	WASHER .50 TYPE A WIDE SS	2	304SS	STAINLESS STEEL	ASTM A276 AISI 304	11A5KK6	0
	2905	AY56000G-7YC	WASHER 3/8 FLAT SAE TYPE	4	7YC	HARDENED CARBON STEEL WASHER	HARDENED CARBON STEEL WASHER	A56000A	0
	2905	AY56000K-7YC	WASHER 1/2 FLAT SAE TYPE	3	7YC	HARDENED CARBON STEEL WASHER	HARDENED CARBON STEEL WASHER	A56000A	0
	3011	AY50719A-SKF	BEARING IB 1K OIL (SKF EXPLORER)	1	SKF	BEARING	BEARING	AY50719A	2
	3043	AY58148A-SKF	BEARING OB 1K OIL (SKF EXPLORER)	1	SKF	BEARING	BEARING	AY58148A	2
	3126	BY56286C015-304	SHIM MOUNTING .015	2	304	STAINLESS STEEL	ASTM A276 AISI 304	B56286A	0
	3134	AY51826D-SR	BLOCK - BRG HSG FOOT GP1	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	BY51826A	0
	3134	CY55732A-CI	FOOT BHSG GP1 5.25CL MK3A	1	CI	CAST IRON	ASTM A48 30B OR 30C	CY55732A	3
	3200	DY61587A-DCI2	HOUSING BRG GP1K MK3A BEACON MOUNT	1	DCI2	DUCTILE IRON	ASTM A536 GR 65-45-12	DY61587A	0
	3240	CY55739A-CI	CARRIER BRG GP1 MK3A	1	CI	CAST IRON	ASTM A48 30B OR 30C	CY55739A	0
	3712	95200879	LOCK NUT, BRG, N-06	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	19A19N06	0
	3856	BY55475A-SRCD	GAUGE SIGHTGLASS 1" NPT	1	SRCD	CARBON STEEL-PLATED	CARBON STEEL-PLATED	N/A	2
	4200	75723770	SEAL ISC2PP LG. GLD 1.375	1	ECCV	316SS / CARBONSILCAR / VITON	316SS / CARBONSILCAR / VITON	1802AFSISPP138	1
	4200	PT011000	NON-WITNESS ONE HOUR MECHANICAL RUN-CHESAPEAKE	1	N/A	N/A	N/A	N/A	0
	4330	BY61860C-BBV	ISOLATOR BRG FLS GARD IB MARK 3 GP1K, GP1JL, GP1 POLYCHEM-S & GP1 PRIMA3A STX	1	BBV	BRONZE BEARING GUARD WITH VITON O-RING	BRONZE BEARING GUARD WITH VITON O-RING	B61860A	2
	4330	BY61860D-BBV	ISOLATOR BRG FLS GARD OB MARK 3 GP1K, GP1J, GP1JL, GP1VK, MARK 2 GP1, POLYCHEM-S & GP1 PRIMA3A STX	1	BBV	BRONZE BEARING GUARD WITH VITON O-RING	BRONZE BEARING GUARD WITH VITON O-RING	B61860A	2
	4590	AY52763A-GTB	GASKET IMPELLER GP1K	1	GTB	FLEXIBLE GRAPHITE	FLEXIBLE GRAPHITE	AY52763A	1
	4590	Y22774EA-GHP	GASKET REAR COVER GP1 & GP2 8" (NOT FOR 8" TF PUMP)	1	GHP	GRAFOIL FLEXIBLE GRAPHITE COVER GASKET	GRAFOIL FLEXIBLE GRAPHITE COVER GASKET	B22774A	1
	4610	95086369	O-RING -152 NBR	2	NBR	BUNA N	BUNA N	20A11CM152	1
	6110	75740989	BASEPLATE 148D ECFDRM 254T 3.5 W/ GROUNDING LUG & LIFTING HOLES	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	N/A	0
	6151	BY53024A-AL-YELLOW	SUPPORT GUARD GP1 F/6-1/4 CL	2	AL	WROUGHT PLATE SHEET ALUMINUM	ASTM B209 5052 H32	N/A	0
	6160	BY56172B-SR	ADJUSTER MTR BP 254 TO 286	2	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	B56172A	0
	6160	BY56173B-SR	ADJUSTER MTR BP RH 254 & 284	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	B56173A	0
	6160	BY56174B-SR	ADJUSTER MTR BP LH 254 & 284	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	B56174A	0
	6541	95200978	LOCK WASHER BRG W-06	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	20A19W06	2
	6541	95436010	LOCKWASHER SHAKEPROOF .25 BRASS	4	BRASS	BRASS	BRASS	26A5B1114-00	0
	6551	BY55746AA-304	TAG OIL LEVEL	1	304	STAINLESS STEEL	ASTM A276 AISI 304	BY55746A	0
	6569	95249744	PLUG SQ HD .375 AISI316	2	D3060	Austenitic stainless steel bar & shapes	ASTM A276 Type 316	30A7T4	0
	6569	AY54506B-SR	PLUG PIPE 1/4"NPT - MAGNETIC	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	A54506A	0
	6570	95043766	SCREW HEX HD .38-16 X 1.25(CARBON STEEL)	2	M3030	STEEL FASTENERS	ASTM A307 GR B	35A2C113	0
	6570	95052916	SCR CAP HEX .50-13 X 1.00	1	M3030	STEEL FASTENERS	ASTM A307 GR B	35A2C217	0
	6570	95053641	SCREW HEX HD .50-13 X 2.50 CARB.STL	3	M3030	STEEL FASTENERS	ASTM A307 GR B	35A2C225	0
	6570	95075206	SCREW SET SQ HD CUP PT .38-16X1.25	3	ALLOY ST	GENERAL PURPOSE ALLOY STEEL	GENERAL PURPOSE ALLOY STEEL	103A2A51	0
	6570	95330452	SCREW, SELF-TAPPING, DRIVE, TYPE U #2 X 0.25, STAINLESS STEEL	4	SS	STAINLESS STEEL NOT A DURIRON ALLOY	STAINLESS STEEL NOT A DURIRON ALLOY	122A2R37	0
	6570	97455331	SCREW HEX HD .50-13 X .88 SS	2	D3058	STAINLESS STEEL	ASTM A276 TYPE 304	35A2S216	0
	6570	97462667	SCREW HEX HD .25-20 X .625 ALUMINUM	4	ALUMIN UM	WROUGHT PLATE SHEET ALUMINUM	ASTM B209 5052 H32	35A2X2	0
	6570	AY54022G16-18-8	HMS 3/8-16X1-3/4	8	18-8	STAINLESS STEEL FASTENERS 18-8	18 CHROMIUM 8 NICKEL	AY54022A	0
	6572	AY38338J-B7TF	STUD CSNG 1K 1/2-13X2-1/2	8	B7TF	FASTENERS	ASTM A193 GRADE B7 TEFLON COATING	B38338A	0
	6572	AY54674C-B8C1	STUD 3/8-16X2-1/4	4	B8C1	FASTENERS	ASTM A193 GRADE B8 CLASS 1	A54674A	0
	6572	Y254J-SR	STUD 3/8-16X2-1/2	4	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	AY52273A	0
	6578	95298428	PLUG SQ HD .25 ALLOY STEEL	1	D3039	Wrought alloy steel / For piping fitting	ASTM A234 Gr. WP9	30A7A3	0
	6578	95298436	PLUG SQ HD .50 AISI316	1	D3060	Austenitic stainless steel bar & shapes	ASTM A276 Type 316	30A7T5	0
	6580	95077764	NUT HEX STD .38-16 (CARBON STEEL)	4	M3041	STEEL NUTS	ASTM A563 GR A	16A4C3	0
	6580	97461982	NUT HEX STD .25-20 ALUMINUM	4	ALUMIN UM	WROUGHT PLATE SHEET ALUMINUM	ASTM B209 5052 H32	16A4X1	0
	6580	AY54058G-E8	XN 3/8-16	4	E8	304SS FASTENER	ASTM A194 GR 8 FINISHED	A54058A	0

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	Flowserve Order:	1400944
	Pump Type/Size	MARK 3 STANDARD/1K1.5X1-82RV
	Flowserve Serial No.:	1400944CHP016A/D

BILL OF MATERIALS

Job	Fsg Bubble Number	Item	Description	Qua ntity Per Asse mbly	Fsg Material Code	Material Type	ASTM	Drawing	Fsg Spares Class
	6580	AY54058K-SRTF	XN 1/2-13	8	SRTF	FASTENER BLACK TEFLON COATED	ASTM A194 GR 2H TFL BLACK	A54058A	0
	6700	95264008	KEY .19 X .19 X 1.25	1	CS	CARBON STEEL	CARBON STEEL	11A9C38	2
	7112	75732432	THOMAS SERIES XTSR71 SIZE 726	1	N/A	N/A	N/A	N/A	0
	8100	DRIVER	DRIVER ALL TYPES	1	MOTOR	GENERIC MOTOR	MOTOR	N/A	0
	9071	RESERVOIR	SEAL FLUSH RESERVOIR	1	N/A	N/A	N/A	N/A	0
	9322	AY51851A-304	PLATE, NAME, PUMP, STANDARD, ASTM A240 Type 304 UNS S30400	1	304	STAINLESS STEEL	ASTM A276 AISI 304	AY51851A	0
	N/A	71569102	USER INSTRUCTION MANUAL MK3 ENGLISH	1	N/A	N/A	N/A	N/A	0
	N/A	AY61657A-SR	SCREW FOR BEACON FILL .25-28UNF X .250	1	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	AY61657A	0
	N/A	BY52851A-22-SR	BLOCK-MTR 3SQ X 1-1/8L	2	SR	COMMERCIAL GR QLTY STEEL	COMMERCIAL GR QLTY STEEL	B52851A	0
	N/A	DY53641AX-AL-YELLOW	GUARD CPLG MALE GP1 W/WINDOW, PAINTED YELLOW	1	AL	WROUGHT PLATE SHEET ALUMINUM	ASTM B209 5052 H32	N/A	0
	N/A	DY53642AX-AL-YELLOW	GUARD CPLG FMLE GP1 W/WINDOW, PAINTED YELLOW	1	AL	WROUGHT PLATE SHEET ALUMINUM	ASTM B209 5052 H32	N/A	0
	N/A	PCS0600	PAINT COATING SYSTEM 6.0, EPOXY PRIMER, EPOXY TOPCOAT	1	N/A	N/A	N/A	N/A	0
	N/A	PCS0MFG	PAINT COATING SYSTEM MFG REVIEW REQUIRED	1	N/A	N/A	N/A	N/A	0
	N/A	PT008100	VIBRATION NON-WITNESS TEST-CHESAPEAKE	1	N/A	N/A	N/A	N/A	0
	N/A	PT018570	HI-14.6.3.4.1, NON-WITNESS PERFORM TEST <10KW	1	N/A	N/A	N/A	N/A	0
	N/A	PT020650	VARIABLE SPEED TEST (REFER TO HYDRAULIC DATASHEET)	1	N/A	N/A	N/A	N/A	0