



Customer Document title:

## 2.2 Material Certificate of Compliance

Flowserve Document title: **2.2 Material Certificate of Compliance**

Flowserve Document No.: **1400944-011-1002-01**

Document Revision No.: **0**

Flowserve Order No.: **1400944**

Flowserve Serial No.: **1400944CHP011A/D**

Pump Type/Size: **MARK 3 STANDARD / 2K4X3-10HRV**

Quantity: **4**

Customer Name: **DESMET BALLESTRA NORTH AMERICA**

Customer Tag No: **DESMET TAG#: P635A.1/1, World Energy TAG#: 19-P-761A, DESMET TAG#: P635A.1/2, World Energy TAG#: 19-P-761B, DESMET TAG#: P635A.2/1, World Energy TAG#: 19-P-861A, DESMET TAG#: 635A.2/2, World Energy TAG#: 19-P-861B**

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		31-May-22



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IMPELLER

## 2.2 Certificate of Compliance European Standard EN 10204

**Material : ASTM A995 Grade 1B , CD4MCuN Stainless Steel**

Flowserve certifies that the CD4M-Cu parts supplied meet the requirements of ASTM A995.  
Below are actual typical properties for the material:

	CR	NI	MO	SI	CU	MN	FE	S	P	C	N
CD4M CUN	24.97	5.34	1.86	0.83	2.87	0.56	63.36	0.001	0.018	0.015	0.133

0.2% YIELD STRENGTH (PSI)	TENSILE STRENGTH (PSI)	%ELONGATION IN 2"
76300	111400	21

A handwritten signature in black ink, appearing to read "Tom Momtsios", is written over a horizontal line.

**Tom Momtsios**  
**Quality Assurance, Chesapeake Operations**



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Chesapeake Virginia  
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COMPONENT: CASING, COVER

## 2.2 Certificate of Compliance European Standard EN 10204

**Material: ASTM A744 CF-8M Stainless Steel**

Flowserve certifies that the cast steel parts supplied meet the requirements of ASTM A744. Below are typical properties based on historical test data for the material:

### Composition in Wt %

Cr	18.74
Ni	9.18
Mo	2.12
Si	1.37
Cu	.30
Mn	.79
S	.002
P	.024
C	.044
Fe	Bal

Yield strength	43,200 psi
Tensile strength	90,900 psi
Elongation	46 %

A handwritten signature in black ink, appearing to read "Tom Momtsios", written over a horizontal line.

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COMPONENT: SHAFT

## 2.2 Certificate of Compliance European Standard EN 10204

**Material: ASTM A276 Type 316/316L Stainless Steel**

Flowserve certifies that the 316/316L SS parts supplied meet the requirements of ASTM A276.  
Below are typical properties based on historical test data for the material:

### Composition in Wt %

Cr	16.13
Ni	10.13
Mo	2.022
Si	.564
Cu	.310
Mn	.1660
S	.024
Co	.092
P	.028
N	.065
C	.015
Fe	bal

Yield strength	42,700 psi
Tensile strength	91,300 psi
Elongation	52.4 %
RA	75.5%

A handwritten signature in black ink, appearing to read "Tom Momtsios", is written over a horizontal line.

Tom Momtsios  
Quality Assurance, Chesapeake Operations