ALLEGHENY BRADFORD CORPORATION			F	REFERENCE DOCUMENT
ABC-80-RF-1183	ISS: 2 REV: 1	June 7, 2023	Process Owner	Engineer Manager

Vendor Documentation Requirements

VDR Code	Document	Course	Submis Quote	Manufacturing Submit Prior to Shi Prior .	for apply to	Shibment Via Email at	Tomon
A01	CMTR				x		
A02	BPE MTR				х		
A03	EN10204 Type 3.1				х		
B01	C of A				x		
B02	C of C				x		
B03	C of C Elastomers				x		
B04	Weld Purge Gas Certificates of Analysis				x		
B05	TDS				x		
B06	SDS				x		
B07	C of C (code Fasteners)				x		
B08	C of C				x		
C01	CE Material Certs				x		
C02	Canadian Registration Number (CRN)				x		
C03	ASME Head Forming Cert				x		
C04	Custom Stainless Steel Forgings for ASME BPVC Section VIII, Div. 1				x		
C05	UG-14				x		
C06	ASME Partial Data Report				х		
C07	Pressure Relief Devices				х		
D01	Markings of BPE Fittings & Process Components				x		
E01	Surface Finish Certification				x		
E02	Passivation Certification				х		
E03	Electropolish Certification				x		
E04	Borescope Video					х	
E05	Calibration Certification				x	x	
F01	IOM				x	х	
G01	Welded component reports				x		

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G02	CMM Report			X		
G03	Radiography Report			х		

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VDR Code	Document	Course	Submit Quote	manuscruring Submir Drior to Shir Drior +	for poproval International	Unibrent Via Email ar	inoment.
H01	Procedure Qualification Records (PQR)				х		
H02	Welding Procedure Specification (WPS)				х		
H03	ASME Welder/Welding Operator Performance Qualification (WPQ/WOPQ)				x		
H04	PED Welding Certifications				x		
H05	PED Non-Destructive Examination (NDE) Personnel Certifications				x		
H06	Non-Destructive Examination (NDE) Personnel Certifications				x		
J01	Spare Parts List				х	х	
K01	Banned Countries				х		
K02	Banned Countries				х		
К03	Banned Countries				х		

**Do not use the letter "N". The Dynamics classes will contain the word "none" and we need to avoid confusion.

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V/DP Definitions					

VDR Code	Document	Definitions
A01	CMTR	Material must have complete original markings as required by ASME Specification. These markings include the unique identification such as heat number, lot number, coil number, batch number, etc. as applicable per required material specification. A <u>legible</u> copy of the Mill Test Report, as prepared by the material manufacturer, is required. *If ASME material is not required, verify MTR to material only.
A02	BPE MTR	Valves and fittings having process contact surfaces shall have the following information as a minimum: ASME BPE standard, including year material type heat number chemical composition AWS classification of filler metal, if used alloy designation and material specification of insert, if used post-weld heat treatment documentation, if applicable
A03	EN10204 Type 3.1	CMTR's must comply with Inspection certificate EN10204:2004 Type 3.1 requirements. Reference to this certification must be listed on the CMTR.
B01	C of A	Certificate of Analysis
B02	C of C	Certificate of Compliance required for all items/materials
B03	C of C Elastomers	Certificate of Compliance required. Must comply with FDA CFR Title 21 part 177 and USP Section 88, Class VI All elastomers must be ADI free
B04	Weld Purge Gas Certificates of Analysis	Certificate for the weld purge gas indicating chemical analysis percentage the bulk gas, maximum PPM percentages of trace elements and dew point
B05	TDS	Technical Data Sheet
B06	SDS	Safety Data Sheet
B07	C of C	Test reports for completed nuts and/or bolts required with shipment
B08	Cof C	Cleaning Certification required with specification identification noted on document.

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VDR Code	Document	Definitions
C01	CE Material Certs	 When C01 is required, A03 is also a requirement: Material must be from a Manufacturer on ABC's CE/PED Approved Manufacturers List. (If you do not have this list, you must contact the purchasing agent immediately) SPECIAL NOTES Address listed on the MTR must match exactly to the address noted on ABC's List. The Manufacturing date on the MTR must be within the Expiration dates of the Cert. If you have questions concerning material conformance please contact the Purchasing Department for clarification
C02	Canadian Registration Number (CRN)	Supplier to provide CRN Registration Letter from the Canadian Notified Body for <u>each</u> shipment. Canadian Province will be defined on the PO. Purchased items to be physically marked with identification trace able to the registration document.
C03	ASME Head Forming Cert	Circumference Tolerance -1/8", +0 Not to Exceed the Requirements of UG 79 AND UG 81. Formed Heads Must be Manufactured According to ASME Section VIII, Division 1, UG 79, UG 80 & UG 81 where applicable
C04	Custom Stainless Steel Forgings for ASME BPVC Section VIII, Div. 1	Dimensions are finished dimensions. Allow material for machining. The finished part shall be machined from material forged as close as practicable to the specified shape and size. SA-182 Certification is required. Certification to include post-anneal Tensile Strength test reports. Tensile strength specimens shall be obtained from production forgings or from separately forged test blanks prepared from the stock used to make the finished product. Test specimens shall not be removed until after all the heat treatment is complete. Parts shall not be machined directly from bar without additional hot working and annealing operations.

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VDR Code	Document	Definitions		
C05	UG-14	In addition to the testing required by the material specification, the following supplementary tests shall be completed with acceptable results when starting stock is greater than 5.5": 1. Two transverse tension test specimens that have the same diameter shall be taken from each lot (as defined in the material specification) of rod material. a. The second specimen shall be taken at 90 degrees around the perimeter from the first specimen. b. The axis of the tension test specimen shall be located, as nearly as practicable, midway between the center thickness and the surface of the rod. c. Both specimens shall meet the mechanical property requirements of the material specification. 2. Each rod shall be 100% ultrasonically examined perpendicular to the longitudinal axis by the straight beam technique in accordance with SA-388. The rod shall be unacceptable if either of the following occurs: a. The examination results show one or more indications accompanied by loss of back reflection larger than 60% of the reference back reflection. b. The examination results show indications larger than 40% of the reference back reflection when accompanied by a 40% loss of back reflection.		
C06	ASME Partial Data Report	ASME Section VIII, D1 Form U-2 or U-2(a) Partial data report required. Part specific details, as required, will be defined on the purchase order		
C07	Pressure Relief Devices	Per ASME, BPVC section VIII, Div. 1 UG-130 - Each pressure relief device shall be fabricated or assembled by a manufacturer or assembler holding a valid Certificate of Authorization. In addition, a Certificate of Conformance shall be documented on UD-1 Manufacturers Certificate of Conformance for Nonreclosing Pressure Relief Devices.		

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VDR Code	Document	Definitions
D01	Markings of BPE Fittings & Process Components	Per BPE, DT-11 Each fitting and process component shall be permanently marked by any suitable method to show the following: Heat number that is traceable to the MTR Material type Manufacturer's name, logo, or trademark Reference to the standard (BPE)
E01	Surface Finish Certification	Certification must include a reference to the profilometer readings and map to show the locations at which the readings were taken.
E02	Passivation Certification	Cleaning, Descaling (Pickling), and Passivation shall be conducted in accordance with ASTM standards A380 and A967. Passivated parts and equipment shall meet ASME BPE surface finish table SF-2.6-1 Acceptance Criteria for Metallic Passivated Process Contact Surface Finishes. Certification must include a reference to the procedure used and the date performed.
E03	Electropolish Certification	Electropolished parts and equipment shall meet ASME BPE surface finish table SF-2.2-2 Acceptance Criteria for Electropolished Metallic Process Contact Surface Finishes. Must include a reference to the procedure used, technician identification and date performed.
E04	Borescope Video	Provide video for 100% of the borescope inspection unless a lower percentage is specifically permitted per the purchase order.
E05	Calibration Certification	A NIST traceable calibration certificate is required for the instrument or gage
F01	IOM	Installation, Operation, & Maintenance manuals required with shipment
G01	Welded component reports	Weld maps, weld logs, and inspection report required
G02	CMM Report	CMM report of required features must be provided with shipment. Features to be identified on PO.
G03	Radiography Report	Radiography report of defined area required

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VDR Code	Document	Definitions			
H01	Procedure Qualification Records (PQR)	For all types of welds to be used, qualified to section IX of the ASME Boiler and Pressure Vessel Code (BPVC), formatted in acccordnace with ASME form QW-482.			
H02	Welding Procedure Specification (WPS)	For all types of welds to be used, qualified to section IX of the ASME Boiler and Pressure Vessel Code (BPVC), formatted in acccordnace with ASME form QW-482.			
Н03	ASME Welder/Welding Operator Performance Qualification (WPQ/WOPQ)	Records for each welder in accordance with section IX of the ASME Boiler and Pressure Vessel Code (BPVC), formatted in accordance with ASME form QW-484A			
H04	PED Welding Certifications	Current welder/welder operator certificates and welding procedure certificates issued by a Notified Body or Recognized Third Party Organization per 3.1.2 of PED 2014/68/EU.			
H05	PED Non- Destructive Examination (NDE) Personnel Certifications	NDE Personnel Certifications shall be the personnel shall be approved by a third-party organization per 3.1.3 of PED 2014/68/EU.			
H06	Non-Destructive Examination (NDE) Personnel Certifications	Qualification Certificates (SNT-TC-1A Level II or III) and current acceptable visual acuity records shall be included with Interpretation Sheets / Examination Reports.			
J01	Spare Parts List	Spare parts list with part number, price, and lead-time is required			
К01	Banned Countries	Material cannot be from any of the following banned countries: China, India, Taiwan, Albania, Macedonia, Bulgaria, Montenegro, Serbia, Bosnia,Herzegovina, Romanis, Moldova, Hungary, Croatia, Slovenia, Slovakia, Ukraine, Belarus, Lithuania, Estonia, and Latvia			

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VDR Definitions						
VDR Code	Document	Definitions				
К02	Banned Countries	No Finished materials from China or India				
К03	Banned Countries	Material must be of domestic origin. (U.S.A.)				