

MATERIALS VALIDATION FOR WELDING

SUBJECT EQUIPMENT:

Component ID: SI-873B

Quality Group/Q-level: A

Equipment Type: Piston Check Valve

ISI Class: 2

Manufacturer/Model #: Edward Valve D36174(F316)FJT4 (2")

Component Material Spec: SA-182 F316

Document how information above was validated: Validated via equipment database for Equipment tag SI-873B. New CAT ID 9220128142 shows SA-182 GR F316 material. Additionally, numerous valve drawings show SA-182 F316 body material. EDB was also used to validate piping information, materials, and wall thickness for pipe SI-64.

ATTACHED PIPING:

Upstream Piping Line Number: 2-SI-64

- Pipe class (according to CPL-HBR2-M-047): 2501R
- Material Specification/wall thickness: A376 TP316/SCH. 160

Downstream Piping Line Number: 2-SI-64

- Pipe class (according to CPL-HBR2-M-047): 2501R
- Material Specification/wall thickness: A376 TP316/SCH. 160

Reference Drawings: 5379-01082-SH00004 (P&ID), HBR2-10618 SH00112 (ISI Isometric), HBR2-12273 SH00001 (valve drawing for new CAT ID 9220128142)

COMMENTS: Existing ISI weld numbers are to be ring cut and re-established with new valve installation. Consider allowance of at least one upstream and one downstream weld beyond the valve body welds to be cut out and re-welded for ease of fit-up and installation. *****IMPORTANT NOTE***** according to CAT ID description tab, this valve is supplied with a 6" nipple welded to the inlet side of the valve for heat dissipation. Per drawing HBR2-12273-SH00001 this nipple is 2" SCH-160 SA376 T316. Due to valve beind supplied with a pipe nipple on inlet side, weld docs should include the installation of a 2" NPS SS Socket Weld coupling.

CONCLUSION:

Upstream Welds: **W47** = 2" Pipe (SCH-160 SA376 TP316; vendor supplied pipe nipple) to 2" SW coupling (SA182 F316, 6000lb)

W46 = 2" Pipe existing (SCH-160 SA376 TP316) to 2" SW coupling (SA182 F316, 6000lb)


Downstream Welds: **W27** = 2" SW Valve (1500# SA-182 F316) to 2" Pipe existing (SCH-160 SA376 TP316)

Prepared by Qualified Weld Planner: Canon McCray Date: 4/06/2014

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SCREENSHOTS/PHOTOS:


PassPort NEW CAT ID per EDB:

Catalog ID: Company: Image Address: 
 Facility:
 Category: Facility Group:
 Name: Facility Type:
 Type: Decimal Quantities:
 Item Type: Unit of Issue:
 Unique Description:
 Catalog Description:
 Total On Hand: Total Available for Allocation:
 Total Demand: Total Due In:

Facility Q Level Details

* Facility	Q	Sto	Cl	Des	Eng	Man	Ins	Ver	War	Res	Pur	RFQ	Tra	Status	On Hand	Demand	Available	Due In
HNP	1	S												NOPURCH				
RNP	1	S												READY		9		-1

PassPort NEW CAT ID Description Tab per EDB:

Catalog ID: Catalog Status: 
 Description:

Catalog Level Description

* Print	Description and Notes	Date	By
S	LCE by WKG 4/1/2010	12/02/2010	LAMBER
S	LCE by BBN 3/9/05	12/02/2010	LAMBER

Facility Level Description

* Facility	Print	Facility Specific Description and Notes	Date	By
RNP	B	VALVE SHALL COMPLY WITH PROGRESS ENERGY	12/02/2010	LAMBER
RNP	B	SPEC CPL-HBR2-M-019, REV. 1 EXCEPT THE	12/02/2010	LAMBER
RNP	B	MATERIALS FOR THE SEAT AND DISC SHALL	12/02/2010	LAMBER
RNP	B	BE MADE OUT OF MATERIALS SPECIED	12/02/2010	LAMBER
RNP	B	HEREIN: SEAL WELDED COVER (SA-479	12/02/2010	LAMBER
RNP	B	T316), BODY (SA-182 GR F316), INTEGRAL	12/02/2010	LAMBER
RNP	B	SEAT HARDFACED WITH STOODY 110, AND	12/02/2010	LAMBER
RNP	B	DISK (A565, GR616). VALVE WILL ALSO BE	12/02/2010	LAMBER
RNP	B	EQUIPPED WITH 6" NIPPLE WELDED TO THE	12/02/2010	LAMBER
RNP	B	INLET END FOR HEAT DISSIPATION (REF.	12/02/2010	LAMBER

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PassPort EDB for PIP SI-64:

Facility: RNP Unit: 2

Operating System: Division:

System: 2080 Class:

Equipment: PIP SI-64 Component: Revision: 1000

UTC: Template:

Sequence	Parameter Name	Value	UOM	Print	Updated	Notes
	GEN DESIGN PRESSURE	2485	PSIG	☑	10/28/2000	
	GEN DESIGN TEMPERATURE	650	DEG F	☑	10/28/2000	
	GEN ENGINEERING DESIGN NOTES	Y		☑	10/28/2000	
	GEN MAX OPERATING PRESSURE	2235	PSIG	☑	10/28/2000	
	GEN MAX OPERATING TEMPERATURE	555	DEG F	☑	10/28/2000	
	Q-CLASS A-01	P		☑	10/28/2000	

PassPort GEN ENGINEERING DESIGN NOTES (for SI-64; PIP):

Owner Key: GEN ENGINEERING DESIGN NOTES

From Panel: D071

Description: DOWNSTREAM VALVE SI-868B TO SI-48

Update Basis: EPARM

Last Updated By: CONVR5

Last Updated Date: 10/28/2000

Text Status: UNLOCKED

Text Update

PIPE SCH 160; CODE ASA; PIP SPEC A376 TP316;
 VLV/FLG RATING 1500# RF;
 INSUL CLASS HI, 1" THK; EBASCO SPEC 2501R

Piping Specification 2501 (CPL-HBR2-M-047):

Piping Specification Class 2501

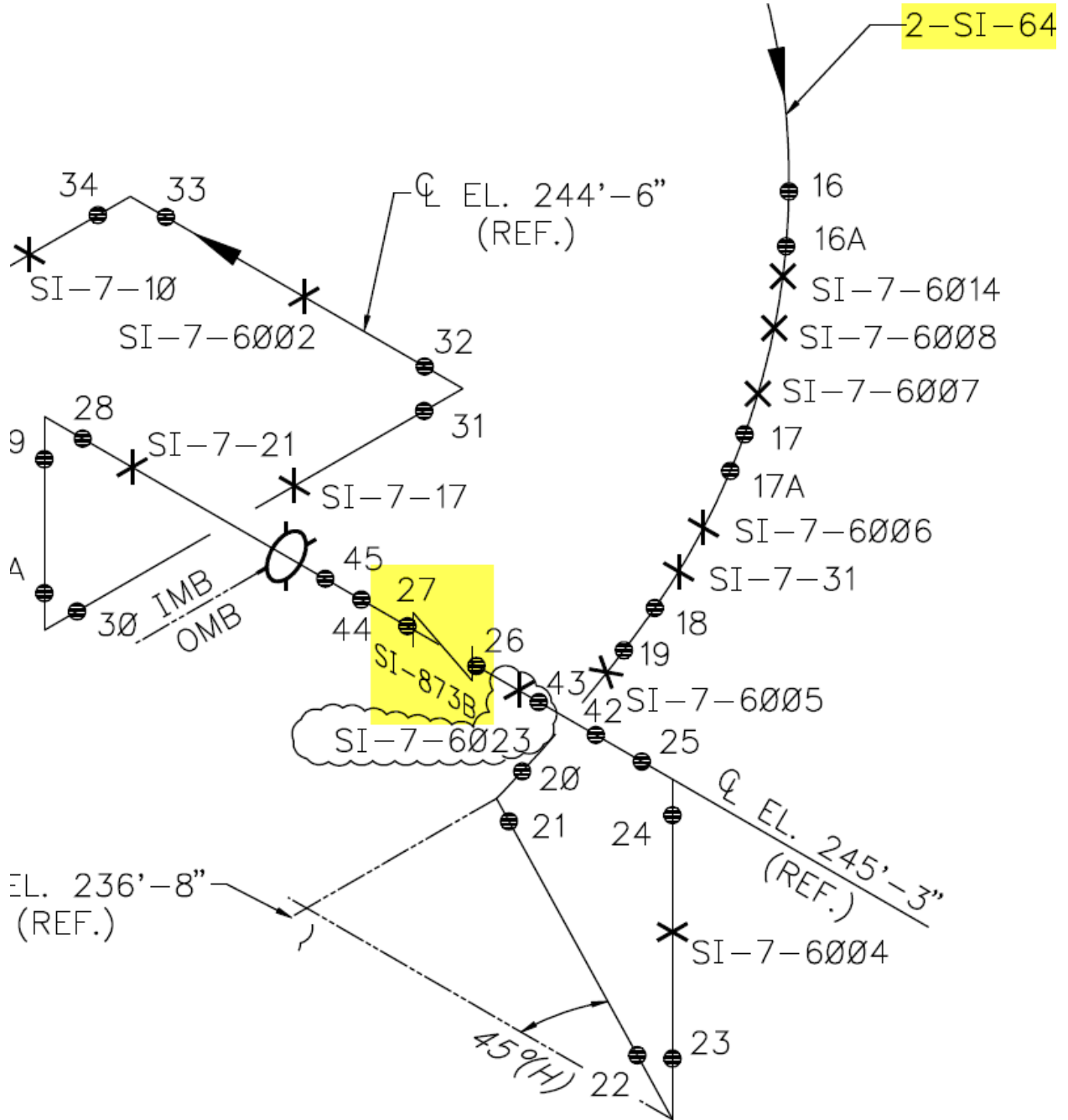
<u>Design Temperature (°F)</u>	<100	200	300	400	500	600	650	700
<u>Design Pressure (Psig)</u>	2905	2711	2618	2525	2479	2479	2479	2465

Pipe

10" through 16"	A376 TP316, Seamless, Sch. 140
4" through 8"	A376 TP316, Seamless, Sch. 120
½" through 3"	A376 TP316, Seamless, Sch. 160

MATERIALS VALIDATION FOR WELDING

HBR2-10618-SH00112:



MATERIALS VALIDATION FOR WELDING

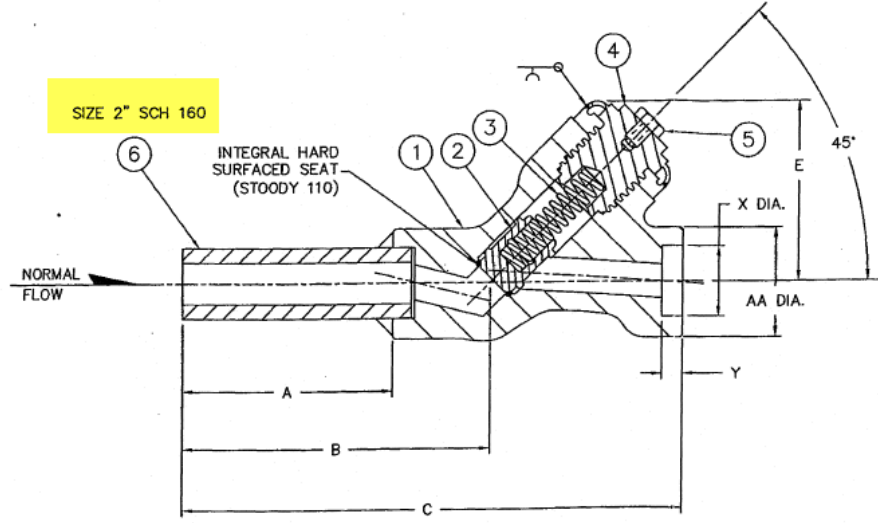
NEW VALVE DRAWING HBR2-12273 SH00001 for CAT ID 9220128142:

MAXIMUM NON-SHOCK SERVICE PRESSURE RATING	
°F	PSIG
100	3600
200	3095
300	2795
400	2570
500	2340
600	2255
650	2220
700	2160
750	2110
800	2075

LIST OF MATERIALS				
WHERE ASTM OR ASME SPECS ARE INDICATED THE LATEST REVISION APPLIES.				
NO.	NAME	QTY	MATERIAL	SPECIFICATION
1	BODY (PT)	1	STAINLESS STEEL	SA182 GR F316
2	DISK (PT)	1	STAINLESS STEEL	A565 GR 616
3	SPRING	1	STAINLESS STEEL	A313 T302
4	COVER (PT)	1	STAINLESS STEEL	SA479 T316
5	SCREW	1	CARBON STEEL ZINC PLATED	COMMON STEEL
6	EXTENSION (PT)	1	STAINLESS STEEL	SA376 T316

NON-DESTRUCTIVE EVALUATION (N.D.E.)
PT- LIQUID PENETRANT TEST

● - INDICATES PRESSURE RETAINING PART
■ - INDICATES CRITICAL PART (10CFR21)



DIMENSIONS	ENGLISH (IN)	METRIC (MM)
VALVE SIZE	2	50
A	6.0	152
AA	3.64	92
B	8.16	207
C	14.24	361.7
E	5.8	147
X	2.406	61
Y	.62	16
Cv	68	68
WEIGHT, LBS/KGS	35	16

- NOTE:
- DIMENSIONS SHOWN ARE NOMINAL AND PROVIDED FOR GENERAL INFORMATION AND AS SUCH ARE WITHOUT TOLERANCE.
 - VALVE(S) MEET ALL APPLICABLE REQUIREMENTS OF A.S.M.E. B. & P.V. CODE, SECTION III, 1977 EDITION INCLUDING WINTER 1977 ADDENDA, CLASS 1, EXCEPT "N" STAMP IS NOT REQUIRED.
 - DIMENSIONS ARE IN INCHES AND IN MILLIMETERS.
 - SOCKET WELD ENDS CONFORM TO ANSI B16.11.
 - FOR TAG INFORMATION SEE SHEET 2 OF 2.

PROGRESS ENERGY CAROLINAS, INC
ROBINSON NUCLEAR PLANT

CLASS 1500	FORGED STAINLESS STEEL 3600 CWP 2075 PSIG AT 800 °F
FLOWSERVE EDWARD VALVES Flow Control Division RALEIGH, NC	
EDWARD FORGED STEEL UNIVALVE GLOBE CHECK VALVE SOCKET WELD ENDS W/NIPPLE SIZE 2 FIG. D36174(F316)FJT4	
APPROVATE	DATE
DESIGNED	DATE
DRAWN	DATE
REV	DATE
DATE	DATE

REV	ADCN NO.	QAP REV	BIM DATE	DWH / DATE	CHW / DATE	APV / DATE
A	3347	∅	03/15/05	YW 5/12/05	DS 5/20/05	ETG 4/11/05
∅	---	∅	03/15/05	CHW 2/23/05	DS 4/11/05	ETG 4/11/05

CP & L DWG No. HBR2-12273S11		
CP & L P.O. No.		
DATE	BY	DATE
03/15/05	ETG	03/15/05

Prepared by Qualified Weld Planner: Canon McCray Date: 4/06/2014

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PROPOSED WELD MAP:

