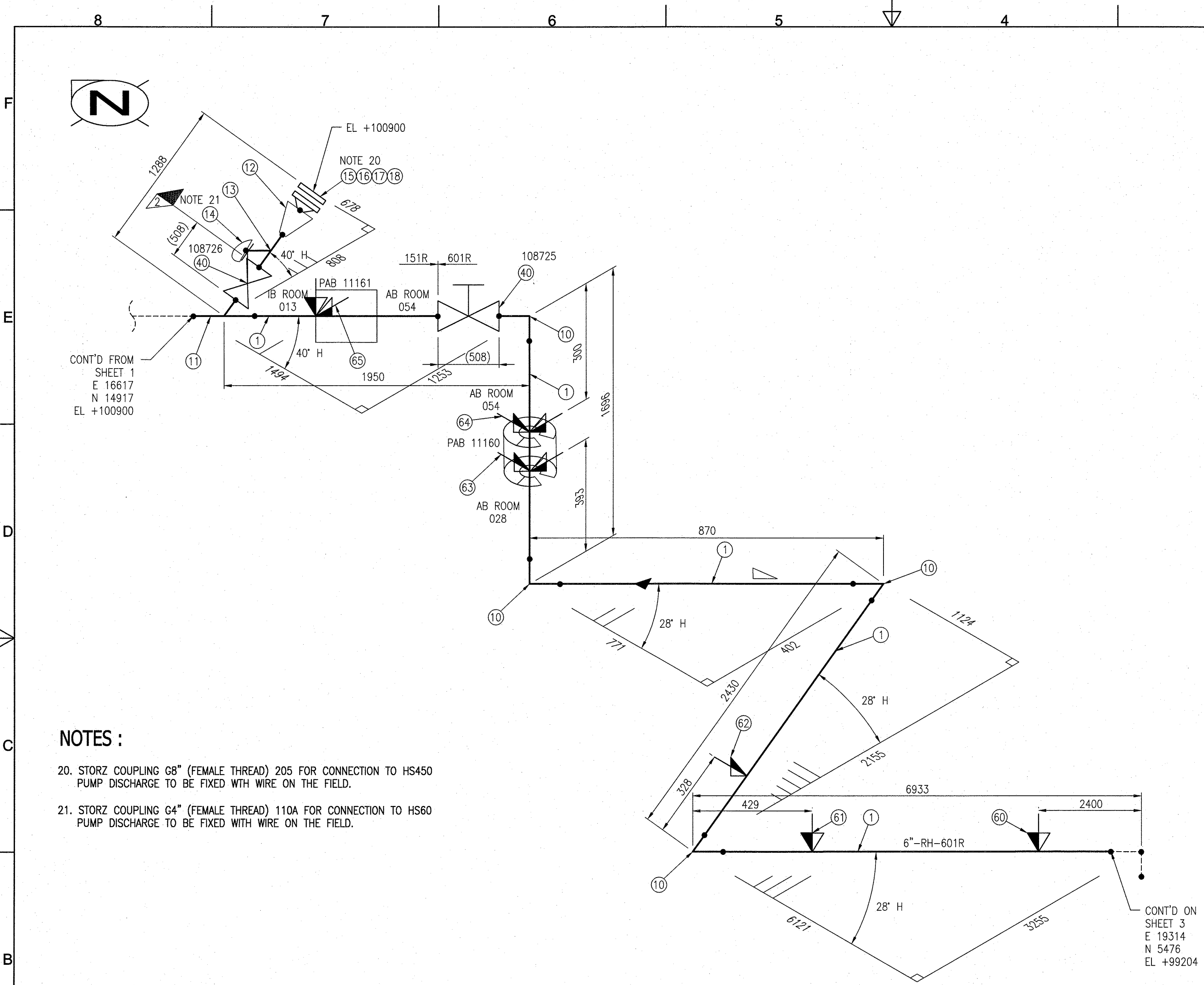


- THIRD ANGLE PROJECTION

P&ID REF DRAWING NUMBER 1W04600		LINE NR		RB SUMP DISCHARGE	
Fluid	WATER	Design press (bar)		15.2	
System	ARHR	Design temp (°C)		104	
SIGNATURES SHOWN ARE FOR CURRENT REVISION		Operating press (bar)		15	
		Operating temp (°C)		60	
		SAFETY CLASS		2	
		DESIGN CODE		ASME SECTION III NC EDITION 1971 + W72	
		CALC NOTE		ARHR-NEK-CN-00015	
		DATABASE IDENTIFICATION NUMBER: 2N00389-SH01-R02.dwg			
DRAFTER MAES L May. 17.18 <i>[Signature]</i>		 Westinghouse		WESTINGHOUSE ELECTRIC BELGIUM	
DRAFTING CHECKER JACOBS T MAY 17.18 <i>[Signature]</i>				B-1400 NIVELLES, BELGIUM	
DESIGN ENGINEER DUVEILLER B MAY. 17.18 <i>[Signature]</i>		TITLE		KRSKO ARHR	
ENGINEER VERIFIER POGGI F May. 22.18 <i>[Signature]</i>					
Q.A. ENGINEER (IF APPLICABLE) <i>[Signature]</i>		ALTERNATE RESIDUAL HEAT REMOVAL SYSTEM ISOMETRICS		RB SUMP DISCHARGE	
OTHER APPROVAL (IF APPLICABLE) NA					
OTHER APPROVAL (IF APPLICABLE) NA		SIZE A2		SCALE: NTS	
VERIFIER NA					
RESP MGR NA		DWG. NO.		REV.	
		2N00389		2	
		ESTIMATED TOTAL MASS: NA			
		SHT. 1 OF 5			



- NOTES :
20. STORZ COUPLING G8" (FEMALE THREAD) 205 FOR CONNECTION TO HS450 PUMP DISCHARGE TO BE FIXED WITH WIRE ON THE FIELD.
21. STORZ COUPLING G4" (FEMALE THREAD) 110A FOR CONNECTION TO HS60 PUMP DISCHARGE TO BE FIXED WITH WIRE ON THE FIELD.

BILL OF MATERIALS						
PIPE						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
1	11.0M	PIPE, SEAMLESS, PE, ASME SA312 GR TP 304, SCH 40S	6"	NO	310,86	
FITTINGS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
10	4	ELL 90 LR, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO	40,79	
11	1	TEE, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO	16,48	
12	1	REDUCER, BW, ASTM A403 GR WP304, SCH 40S	8"x6"	NO		
13	1	TEE (RED), BW, ASTM A403 GR WP304, SCH 40S	6"x6"x4"	NO		
14	1	PIPE CAP, THREADED, 3000 LB, ASTM A403 WP304, SCH 40S	4"	NO		
15	1	FLANGE WN, RF, 150 LB, ASTM A182 F304	8"	NO		
16	1	SPIRAL WOUND SS GASKET 304, 150 LB	8"	NO		
17	8	BOLT SET, ASTM A453 GR660 CL B	3/4"x135 mm	NO		
18	1	BLIND FLANGE WN, RF, 150 LB, ASTM A182 F304	8"	NO		
VALVES						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	REF DWG
40	2	GATE VALVE, 600 LB, BW, HAND WHEEL	6"	NO	277	
PIPE SUPPORTS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	REF DWG
60	1	MK-RHH-498	6"	NO		S-321-641-S498
61	1	MK-RHH-499	6"	NO		S-321-641-S499
62	1	MK-RHH-500	6"	NO		S-321-641-S500
63	1	MK-RHH-501	6"	NO		S-321-641-S501
64	1	MK-RHH-502	6"	NO		S-321-641-S502
65	1	MK-RHH-503	6"	NO		S-321-641-S503

P&ID REF DRAWING NUMBER 1W04600		Line nr RB SUMP DISCHARGE
Fluid WATER	Design press (bar) 42 (601R) / 15.2 (151R)	Design temp (°C) 204 (601R) / 104 (151R)
System ARHR	Operating press (bar) 15	Operating temp (°C) 60
SIGNATURES SHOWN ARE FOR CURRENT REVISION		SAFETY CLASS 2
DESIGN ENGINEER DUVEILLER B MAY 17.18		DESIGN CODE ASME SECTION III NC EDITION 1971 + W72
ENGINEER VERIFIER POGGI F MAY 22.18		CALC NOTE ARHR-NEK-CN-00015
OTHER APPROVAL (IF APPLICABLE) NA		DATABASE IDENTIFICATION NUMBER: 2N00389-SH02-R02.dwg
OTHER APPROVAL (IF APPLICABLE) NA		Westinghouse WESTINGHOUSE ELECTRIC BELGIUM B-1400 NIVELLES, BELGIUM
VERIFIER NA		TITLE KRSKO ARHR ALTERNATE RESIDUAL HEAT REMOVAL SYSTEM ISOMETRICS
RESP MGR NA		SIZE A2
DWG. REF. NEXT ASSY.		SCALE: NTS
THIRD ANGLE PROJECTION		DWG. NO. 2N00389
STATUS : <input checked="" type="checkbox"/> PRE <input type="checkbox"/> CFC <input type="checkbox"/> CAE <input type="checkbox"/> DES <input type="checkbox"/> OPEN ITEMS		REV. 2
ESTIMATED TOTAL MASS: NA		SHT. 2 OF 5

SO. NA  
WB-RFDS-18-63

-IN TITLE BLOCK: MODIFIED DESIGN  
CODE.  
-IN BOM IT:17:135mm WAS 110mm  
IT:14: ADDED "THREADED"  
-LOC D5: ADDED SLOPE SYMBOL  
-LOC D6: ADDED FLOW SYMBOL  
-ADDED NOTES 20 AND 21.

TOLERANCE & MACHINE NOTES  
(UNLESS OTHERWISE SPECIFIED)

DRAWING PRACTICES, GEOMETRIC SYMBOLS,  
DIMENSIONING, TOLERANCING & INTERPRETATION  
BASED ON ASME Y 14.5 STANDARD.

DIMENSIONS IN mm BASED ON 20°C

TOLERANCES:

NO DECIMAL	± 2
ONE PLACE DECIMAL	± 0.2
TWO PLACE DECIMAL	± 0.02
RADIUS OR CHAMFER ALL EDGES	0.1 - 0.5
FILET RADIUS	0.8 ± 0.2
CHAMFERS	± 2°
ANGLES	± 0.5°
MAXIMUM MACHINED SURFACE - 3.2µ Ra	
MAXIMUM SURFACE ROUGHNESS - 6.3µ Ra	

© 2018 Westinghouse Electric Company LLC  
All Rights Reserved

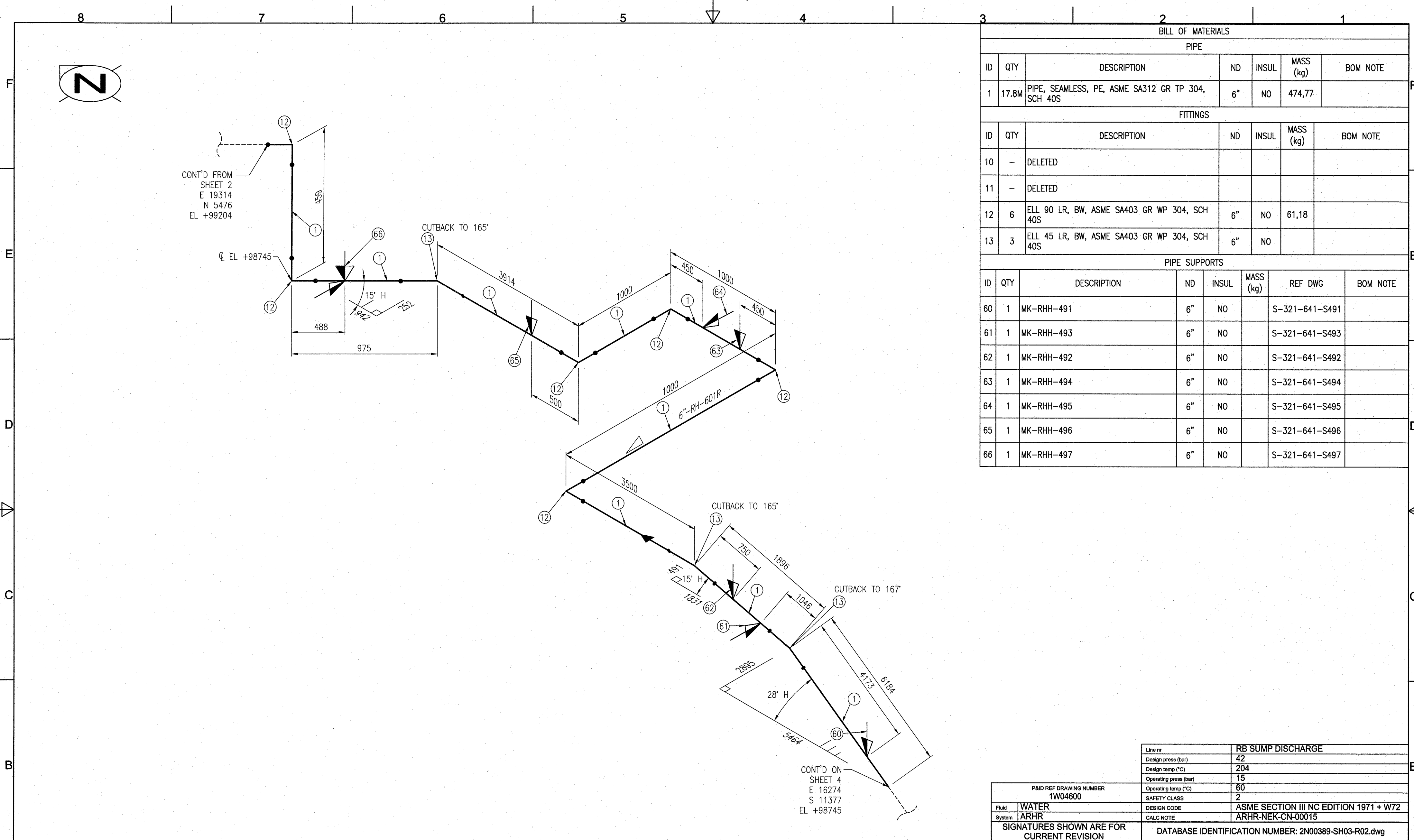
WESTINGHOUSE PROPRIETARY CLASS 2

THIS DOCUMENT IS THE PROPERTY OF AND CONTAINS PROPRIETARY  
INFORMATION OWNED BY WESTINGHOUSE ELECTRIC COMPANY LLC  
AND/OR ITS AFFILIATES, SUBCONTRACTORS AND/OR SUPPLIERS.  
IT IS TRANSMITTED TO YOU IN CONFIDENCE AND TRUST, AND  
YOU AGREE TO TREAT THIS DOCUMENT IN STRICT ACCORDANCE  
WITH THE TERMS AND CONDITIONS OF THE  
AGREEMENT UNDER WHICH IT WAS PROVIDED TO YOU.  
ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.

DWG. REF.  
NEXT ASSY.

THIRD ANGLE PROJECTION

STATUS : ☒ PRE ☐ CFC ☐ CAE ☐ DES ☐ OPEN ITEMS



BILL OF MATERIALS						
PIPE						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
1	17.8M	PIPE, SEAMLESS, PE, ASME SA312 GR TP 304, SCH 40S	6"	NO	474,77	
FITTINGS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
10	-	DELETED				
11	-	DELETED				
12	6	ELL 90 LR, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO	61,18	
13	3	ELL 45 LR, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO		
PIPE SUPPORTS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	REF DWG
60	1	MK-RHH-491	6"	NO		S-321-641-S491
61	1	MK-RHH-493	6"	NO		S-321-641-S493
62	1	MK-RHH-492	6"	NO		S-321-641-S492
63	1	MK-RHH-494	6"	NO		S-321-641-S494
64	1	MK-RHH-495	6"	NO		S-321-641-S495
65	1	MK-RHH-496	6"	NO		S-321-641-S496
66	1	MK-RHH-497	6"	NO		S-321-641-S497

SO. NA

WB-RFDS-18-63

-IN TITLE BLOCK: MODIFIED DESIGN CODE.

-IN BOM: DELETED ITEMS 10 & 11.

-LOC D5: ADDED SLOPE SYMBOL.

-LOC C5: ADDED FLOW SYMBOL.

TOLERANCE & MACHINE NOTES  
(UNLESS OTHERWISE SPECIFIED)

DRAWING PRACTICES, GEOMETRIC SYMBOLS, DIMENSIONING, TOLERANCING & INTERPRETATION BASED ON ASME Y 14.5 STANDARD.

DIMENSIONS IN mm BASED ON 20°C

TOLERANCES:

NO DECIMAL ± 2

ONE PLACE DECIMAL ± 0.2

TWO PLACE DECIMAL ± 0.02

RADIUS OR CHAMFER ALL EDGES 0.1 - 0.5

FILET RADI 0.8 ± 0.2

CHAMFERS ± 2°

ANGLES ± 0.5°

MAXIMUM MACHINED SURFACE - 3.2µ Ra

MAXIMUM SURFACE ROUGHNESS - 6.3µ Ra

© 2018 Westinghouse Electric Company LLC  
All Rights Reserved

WESTINGHOUSE PROPRIETARY CLASS 2

THIS DOCUMENT IS THE PROPERTY OF AND CONTAINS PROPRIETARY INFORMATION OWNED BY WESTINGHOUSE ELECTRIC COMPANY LLC AND/OR ITS AFFILIATES, SUBCONTRACTORS AND/OR SUPPLIERS. IT IS TRANSMITTED TO YOU IN CONFIDENCE AND TRUST, AND YOU AGREE TO TREAT THIS DOCUMENT IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE AGREEMENT UNDER WHICH IT WAS PROVIDED TO YOU. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.

DWG. REF.

NEXT ASSY.

THIRD ANGLE PROJECTION

STATUS: ☒ PRE ☐ CFC ☐ CAE ☐ DES ☐ OPEN ITEMS

Line nr

Design press (bar)

Design temp (°C)

Operating press (bar)

Operating temp (°C)

SAFETY CLASS

DESIGN CODE

CALC NOTE

RB SUMP DISCHARGE

42

204

15

60

2

ASME SECTION III NC EDITION 1971 + W72

ARHR-NEK-CN-00015

P&ID REF DRAWING NUMBER

1W04600

Fluid

System

WATER

ARHR

SIGNATURES SHOWN ARE FOR CURRENT REVISION

DRAFTER MAES L May. 17.18

DRAFTING CHECKER JACOBS T MAY 17.18

DESIGN ENGINEER DUVEILLER B May. 17.18

ENGINEER VERIFIER POGGI F MAY. 22.18

Q.A. ENGINEER (IF APPLICABLE)

OTHER APPROVAL (IF APPLICABLE)

OTHER APPROVAL (IF APPLICABLE)

VERIFIER

RESP MGR

DATABASE IDENTIFICATION NUMBER: 2N00389-SH03-R02.dwg

Westinghouse

WESTINGHOUSE ELECTRIC  
BELGIUM  
B-1400 NIVELLES, BELGIUM

TITLE

KRSKO  
ARHR  
ALTERNATE RESIDUAL HEAT REMOVAL SYSTEM  
ISOMETRICS

RB SUMP DISCHARGE

SIZE A2

SCALE: NTS

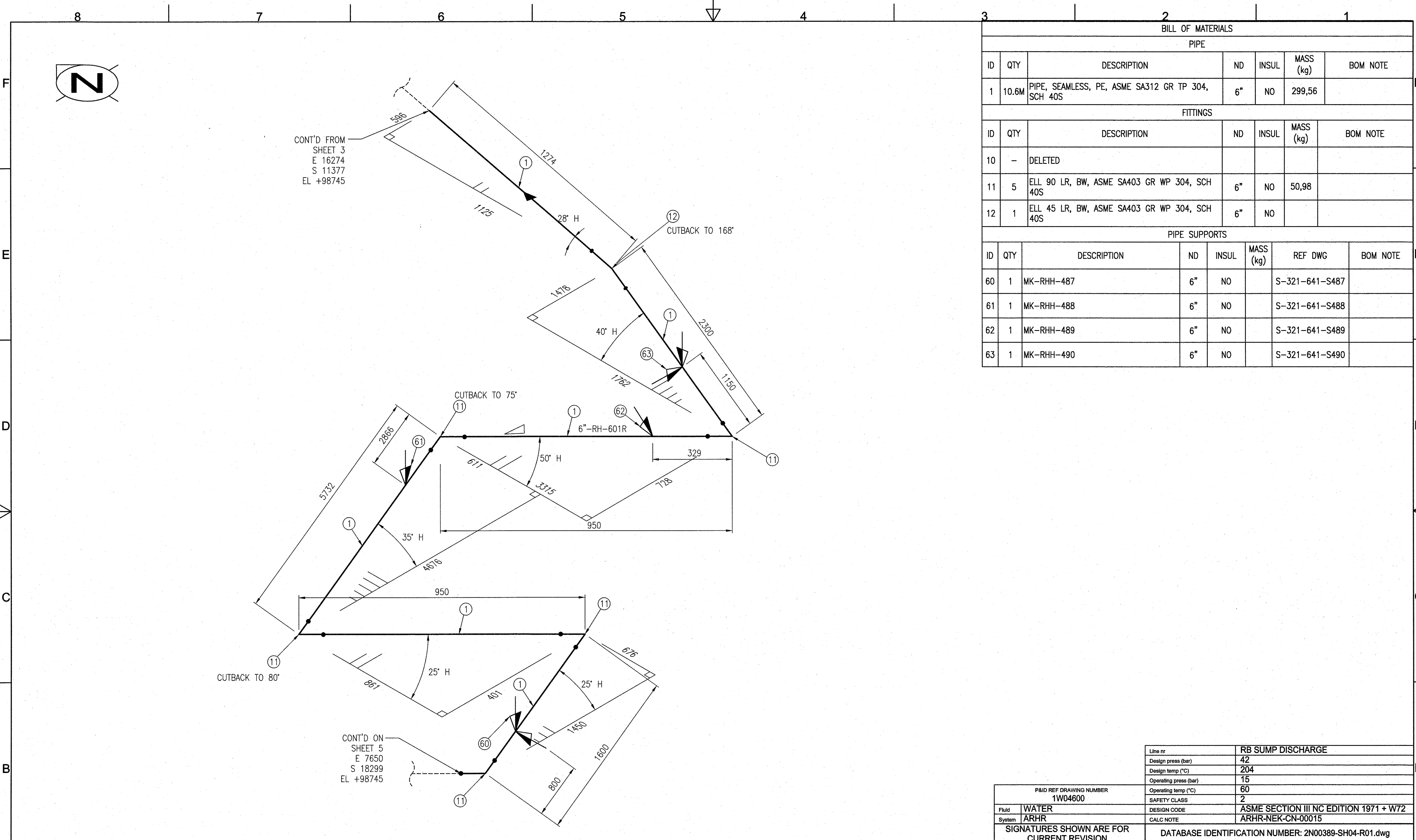
DWG. NO. 2N00389

REV. 2

ESTIMATED TOTAL MASS: NA

SHT. 3 OF 5

\*\*\* This record was final approved on 6/19/2018 3:06:35 AM. (This statement was added by the ARIME system upon its validation)



BILL OF MATERIALS						
PIPE						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
1	10.6M	PIPE, SEAMLESS, PE, ASME SA312 GR TP 304, SCH 40S	6"	NO	299,56	
FITTINGS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	BOM NOTE
10	-	DELETED				
11	5	ELL 90 LR, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO	50,98	
12	1	ELL 45 LR, BW, ASME SA403 GR WP 304, SCH 40S	6"	NO		
PIPE SUPPORTS						
ID	QTY	DESCRIPTION	ND	INSUL	MASS (kg)	REF DWG
60	1	MK-RHH-487	6"	NO		S-321-641-S487
61	1	MK-RHH-488	6"	NO		S-321-641-S488
62	1	MK-RHH-489	6"	NO		S-321-641-S489
63	1	MK-RHH-490	6"	NO		S-321-641-S490

SO. NA

WB-RFDS-18-63

2

-IN TITLE BLOCK: MODIFIED DESIGN CODE.

-LOC D6: ADDED SLOPE SYMBOL.

-LOC D5: MODIFIED SUPPORT SYMBOL.

-LOC E5: ADDED FLOW SYMBOL.

-IN BOM: DELETED IT.10

-IN BOM: ADDED IT.12.

TOLERANCE & MACHINE NOTES  
(UNLESS OTHERWISE SPECIFIED)

DRAWING PRACTICES, GEOMETRIC SYMBOLS, DIMENSIONING, TOLERANCING & INTERPRETATION BASED ON ASME Y 14.5 STANDARD.

DIMENSIONS IN mm BASED ON 20°C

TOLERANCES:

NO DECIMAL ± 2

ONE PLACE DECIMAL ± 0.2

TWO PLACE DECIMAL ± 0.02

RADIUS OR CHAMFER ALL EDGES 0.1 - 0.5

FILET RADIUS 0.8 ± 0.2

CHAMFERS ± 2°

ANGLES ± 0.5°

MAXIMUM MACHINED SURFACE - 3.2µ Ra

MAXIMUM SURFACE ROUGHNESS - 6.3µ Ra

© 2018 Westinghouse Electric Company LLC  
All Rights Reserved

WESTINGHOUSE PROPRIETARY CLASS 2

THIS DOCUMENT IS THE PROPERTY OF AND CONTAINS PROPRIETARY INFORMATION OWNED BY WESTINGHOUSE ELECTRIC COMPANY LLC AND/OR ITS AFFILIATES, SUBCONTRACTORS AND/OR SUPPLIERS. IT IS TRANSMITTED TO YOU IN CONFIDENCE AND TRUST, AND YOU AGREE TO TREAT THIS DOCUMENT IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE AGREEMENT UNDER WHICH IT WAS PROVIDED TO YOU. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.

DWG. REF.

NEXT ASSY.

THIRD ANGLE PROJECTION

STATUS : ☒ PRE ☐ CFC ☐ CAE ☐ DES ☐ OPEN ITEMS

\*\*\* This record was final approved on 5/19/2018 3:06:35 AM. (This statement was added by the PRIME system upon its validation)

P&ID REF DRAWING NUMBER  
1W04600

Fluid WATER

System ARHR

SIGNATURES SHOWN ARE FOR CURRENT REVISION

DRAFTER MAES L May. 17. 18

DRAFTING CHECKER JACOBS T MAY 17. 18

DESIGN ENGINEER DUVEILLER B MAY 17 18

ENGINEER VERIFIER POGGI F MAY. 22. 18

Q.A. ENGINEER (IF APPLICABLE)

OTHER APPROVAL (IF APPLICABLE)

VERIFIER NA

RESP MGR NA

Line nr RB SUMP DISCHARGE

Design press (bar) 42

Design temp (°C) 204

Operating press (bar) 15

Operating temp (°C) 60

SAFETY CLASS 2

DESIGN CODE ASME SECTION III NC EDITION 1971 + W72

CALC NOTE ARHR-NEK-CN-00015

DATABASE IDENTIFICATION NUMBER: 2N00389-SH04-R01.dwg

Westinghouse

WESTINGHOUSE ELECTRIC  
BELGIUM  
B-1400 NIVELLES, BELGIUM

TITLE

KRSKO  
ARHR  
ALTERNATE RESIDUAL HEAT REMOVAL SYSTEM  
ISOMETRICS

RB SUMP DISCHARGE

SIZE A2 SCALE: NTS DWG. NO. 2N00389 REV. 2

ESTIMATED TOTAL MASS: NA SHT. 4 OF 5





\*\*This page was added to the quality record by the PRIME system upon its validation and shall not be considered in the page numbering of this document.\*\*

## Approval Information

Author Approval Jacobs Thierry Jun-19-2018 03:06:35

Files approved on Jun-19-2018

\*\*\* This record was final approved on 6/19/2018 3:06:35 AM. (This statement was added by the PRIME system upon its validation)