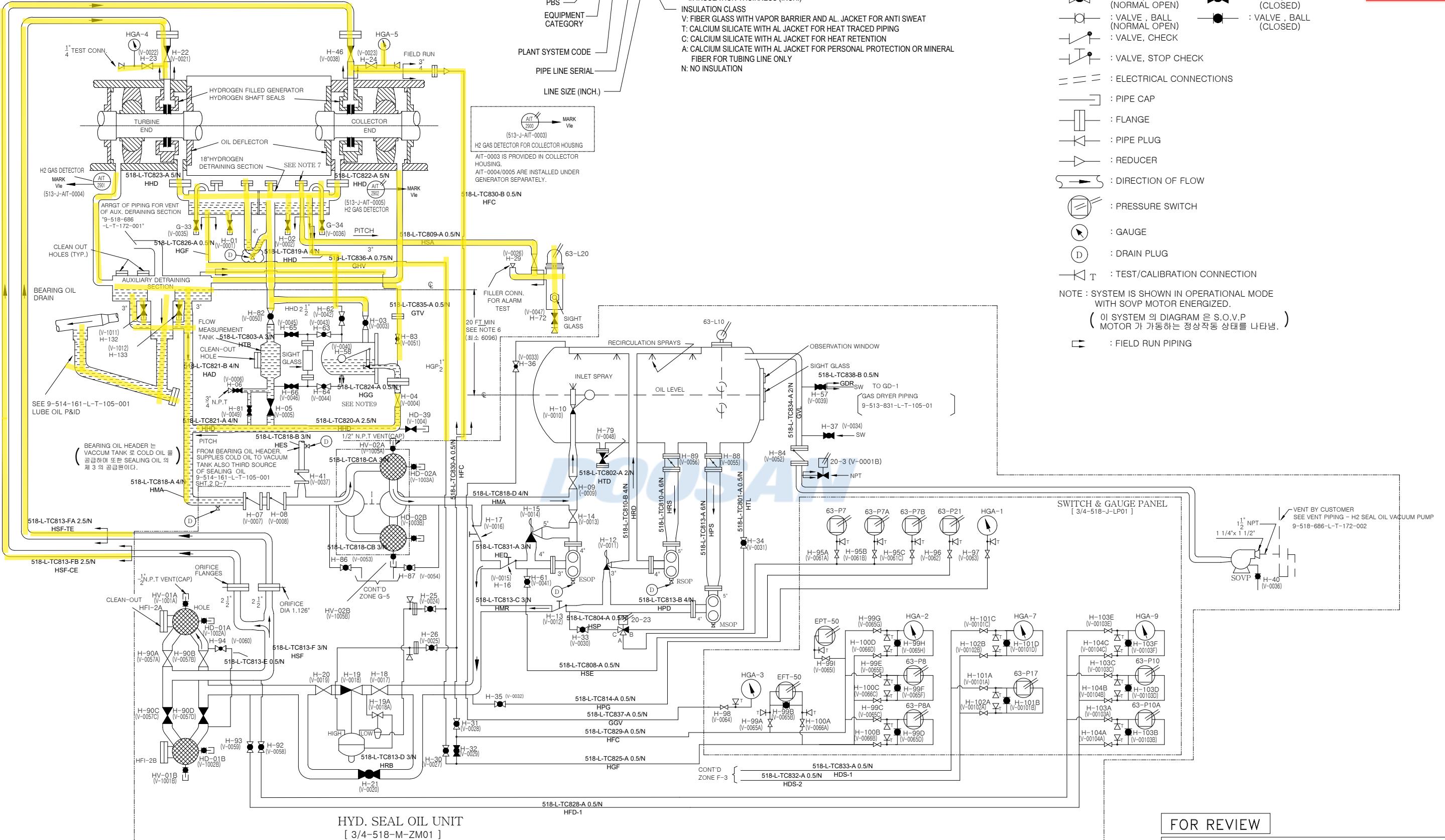


FILE NO : 3/4-518-L-TC ***-XX/N] THE (***-XX /N) INDICATED IN THIS DRAWING

AN THE LINE NUMBER

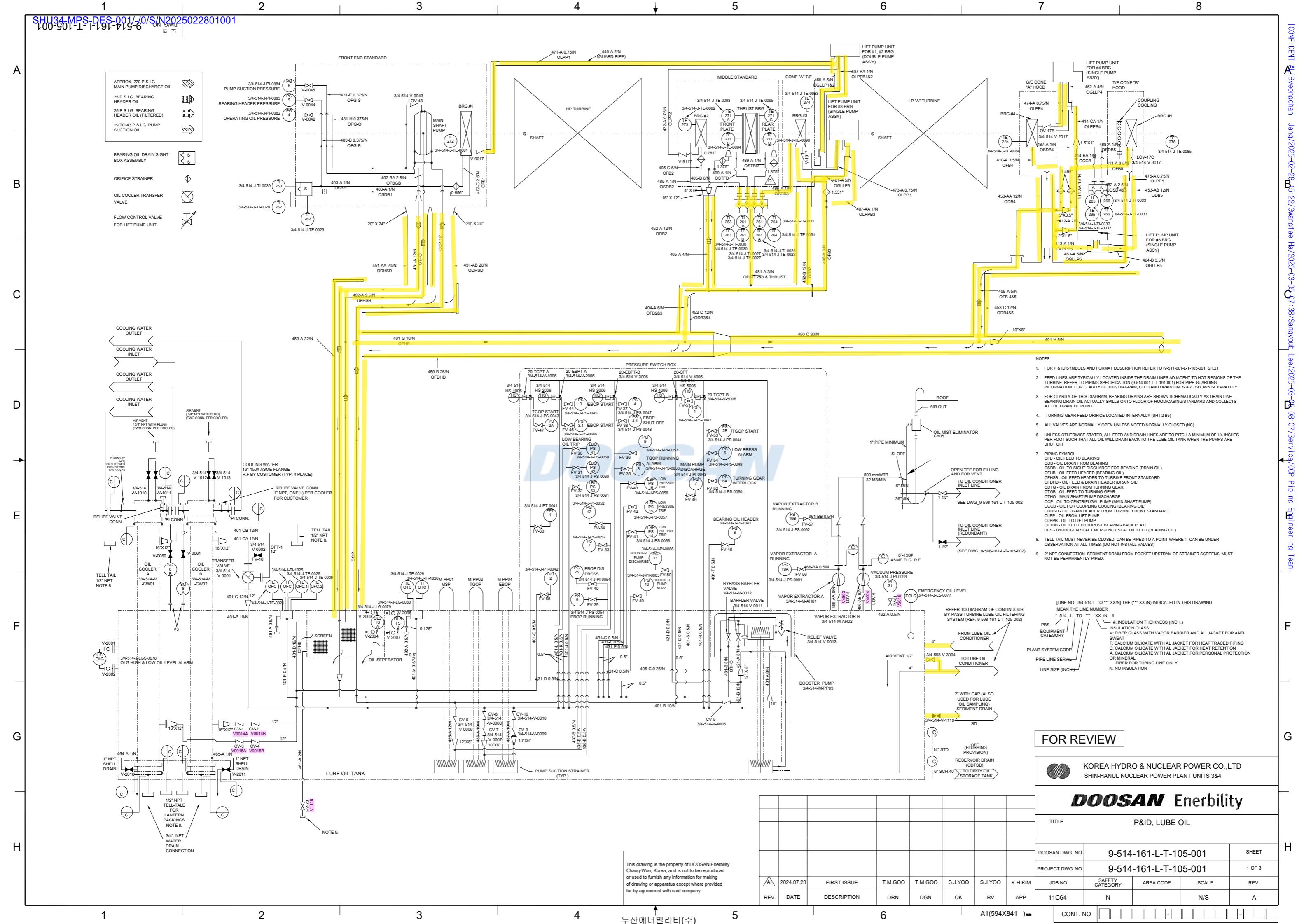
18 - L - TC *** - XX /N #

EAL
: INSULATION THICKNESS (INCH.)
INSULATION CLASS
V: FIBER GLASS WITH VAPOR BARRIER AND AL. JACKET FOR ANTI SWEAT
T: CALCIUM SILICATE WITH AL JACKET FOR HEAT TRACED PIPING
C: CALCIUM SILICATE WITH AL JACKET FOR HEAT RETENTION
A: CALCIUM SILICATE WITH AL JACKET FOR PERSONAL PROTECTION OR MINER
FIBER FOR TUBING LINE ONLY
N: NO INSULATION

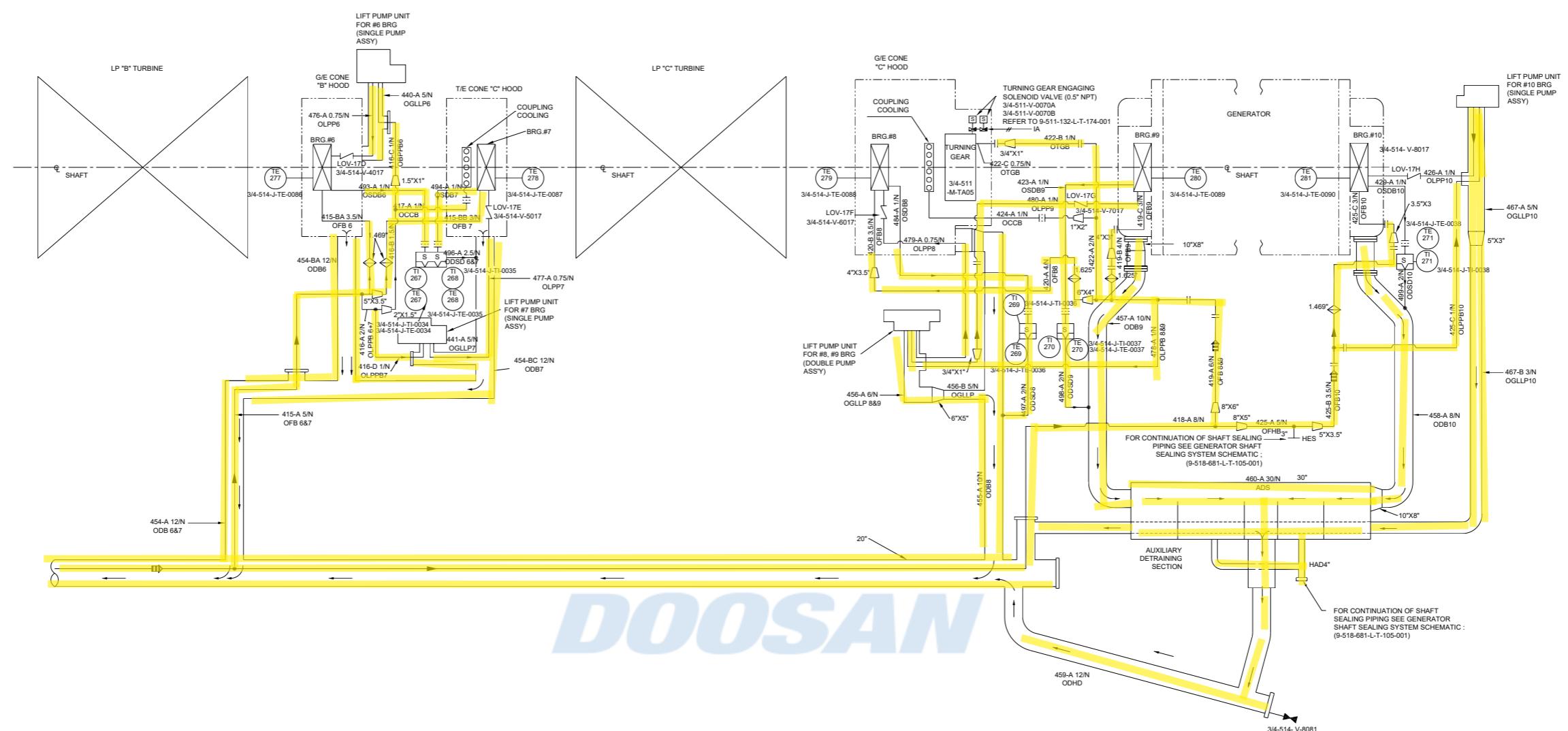


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							DOOSAN Enerbility				
							GENERATOR SHAFT SEAL SYSTEM SCHEMATIC				
							DOOSAN DWG NO		9-518-681-L-T-105-001		SHEET
							PROJECT DWG NO		9-518-681-L-T-105-001		1 OF 2
A	2024.06.27	FIRST ISSUE	S.J.YOO	S.J.YOO	S.J.YOO	S.J.YOO	K.H.KIM	JOB NO.	SAFETY CATEGORY	AREA CODE	SCALE
REV.	DATE	DESCRIPTION	DRN	DGN	CK	RV	APP	11C64	N	N/S	A
		C			A2(420X594-5)		CONT. NO.				



NQ



FOR REVIEW

 KOREA HYDRO & NUCLEAR POWER CO., LTD
SHIN-HANUL NUCLEAR POWER PLANT UNITS 3&4
DOOSAN Enerbility

TITLE P&ID, LUBE OIL

DOOSAN DWG NO 9-514-161-L-T-105-001 SHEET

PROJECT DWG NO 9-514-161-L-T-105-001 2 OF 3

JOB NO. SAFETY CATEGORY AREA CODE SCALE REV.

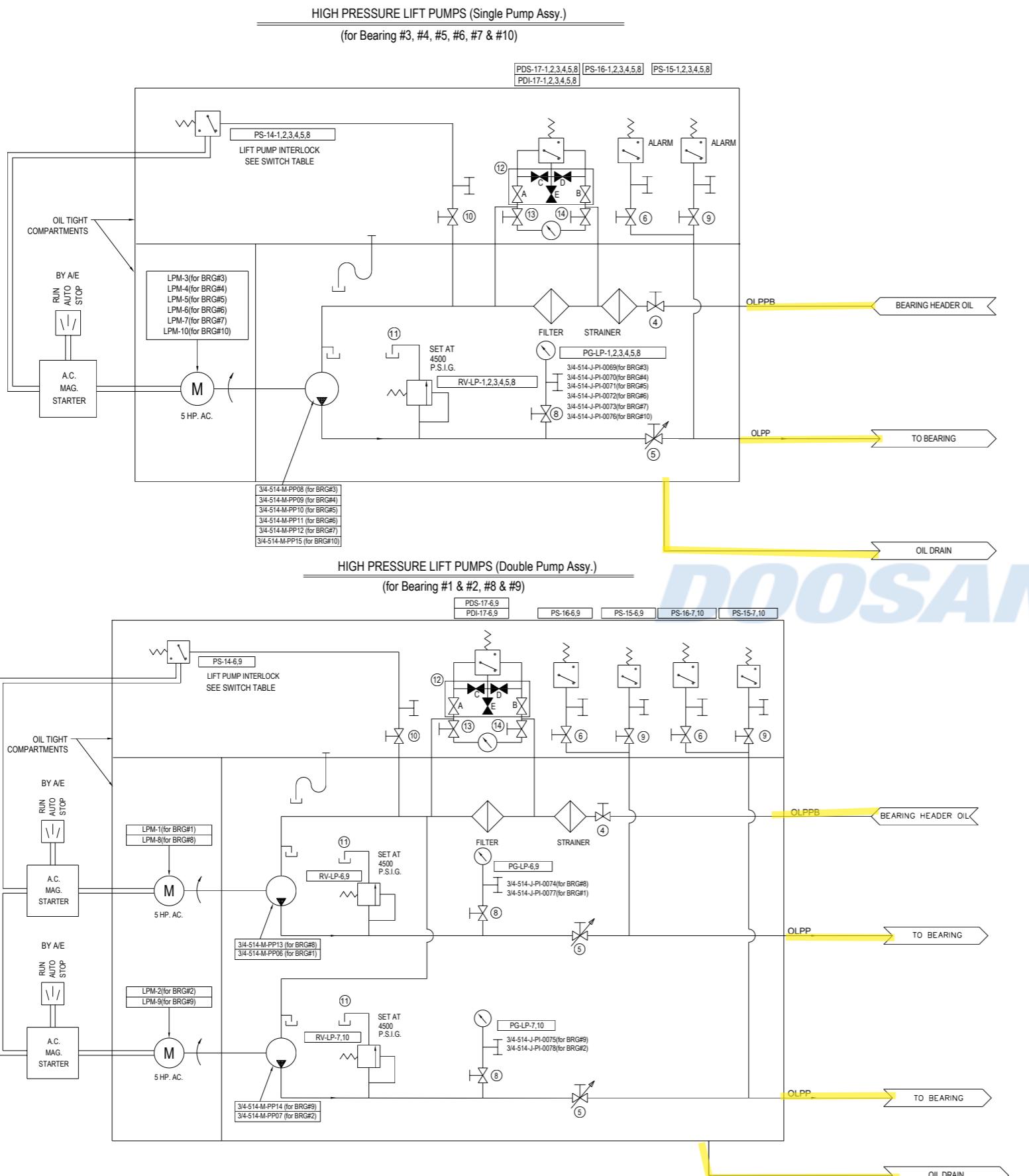
11C64 N N/S A

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REV.	DATE	DESCRIPTION	DRN	DGN	CK	RV	APP
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CONT. NO							
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[CONFIDENTIAL] Byeongchan Jang / 2025-02-28 15:22 / swangtae Ha / 2025-03-05 07:38 / Sangyoub Lee / 2025-03-05 08:07 / Service/CCP Piping Engineering Team



MISCELLANEOUS REFERENCE INFORMATION		
ITEM	ENGLISH	MKS METRIC
LUBE OIL SYSTEM	18 PSIG 25 PSIG 40 PSIG 220 PSIG	1.265 kg/cm ² 1.757 kg/cm ² 2.812 kg/cm ² 15.467 kg/cm ²
PRESSURE RELIEF VALVES	4500 PSIG	316.388 kg/cm ²
MOTORS	5 HP	3.7 kW

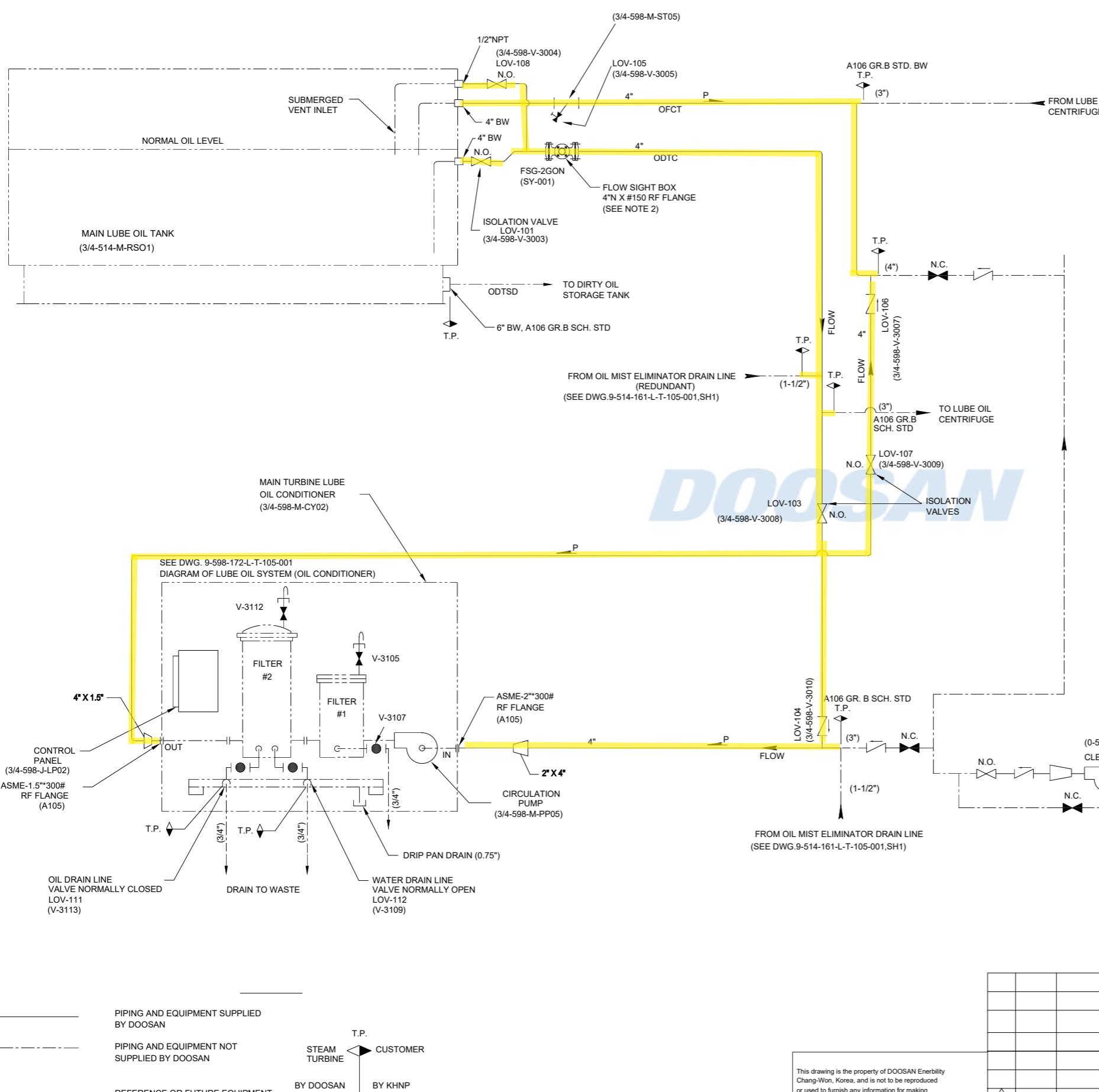
PRESSURE SWITCH NOTES		
PRESSURE SWITCH CONTACTS OPERATE AT PRESSURE (P.S.I.G.) INCREASE AND DECREASE AS FOLLOWS:		
SWITCH	INCREASE	DECREASE
PS-14-1~9	5 (C)	3 (O)
PS-16-1~9	HIGH 900 (O)	HIGH 840 (C)
PS-15-1~9	LOW 325 (O)	LOW 265 (C)
PS-16-10	HIGH 550 (O)	HIGH 500 (C)
PS-15-10	LOW 325 (O)	LOW 265 (C)

CONTACTS OPEN (O) - CLOSED (C)
PS-15, PS-16 FOR LOW PRESS. ALARM
(HIGH: HIGH PRESS SET, LOW: LOW PRESS SET.)

PRESSURE SWITCHES						
SWITCH ID	LIFT PUMP NO.	BRG NO.	ENGLISH		MKS METRIC	
			INCREASE	DECREASE	INCREASE	DECREASE
PS-14-1	3/4-514-J-PS-0062	#3	#3 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-2	3/4-514-J-PS-0063	#4	#4 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-3	3/4-514-J-PS-0064	#5	#5 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-4	3/4-514-J-PS-0065	#6	#6 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-5	3/4-514-J-PS-0066	#7	#7 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-6	3/4-514-J-PS-0067	#8,9	#8,9 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-8	3/4-514-J-PS-0068	#10	#10 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-14-9	3/4-514-J-PS-0079	#1,2	#1,2 BRG	5 P.S.I.G.	3 P.S.I.G.	0.352 Kg/cm ²
PS-16-1(HIGH)	3/4-514-J-PS-0069	#3	#3 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-2(HIGH)	3/4-514-J-PS-0070	#4	#4 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-3(HIGH)	3/4-514-J-PS-0071	#5	#5 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-4(HIGH)	3/4-514-J-PS-0072	#6	#6 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-5(HIGH)	3/4-514-J-PS-0073	#7	#7 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-6(HIGH)	3/4-514-J-PS-0074	#8	#8 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-7(HIGH)	3/4-514-J-PS-0075	#9	#9 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-8(HIGH)	3/4-514-J-PS-0076	#10	#10 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-9(HIGH)	3/4-514-J-PS-0077	#1	#1 BRG	900 P.S.I.G.	840 P.S.I.G.	63.277 Kg/cm ²
PS-16-10(HIGH)	3/4-514-J-PS-0078	#2	#2 BRG	550 P.S.I.G.	500 P.S.I.G.	38.669 Kg/cm ²
PS-15-1(LOW)	3/4-514-J-PS-0080	#3	#3 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-2(LOW)	3/4-514-J-PS-0081	#4	#4 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-3(LOW)	3/4-514-J-PS-0082	#5	#5 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-4(LOW)	3/4-514-J-PS-0083	#6	#6 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-5(LOW)	3/4-514-J-PS-0084	#7	#7 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-6(LOW)	3/4-514-J-PS-0085	#8	#8 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-7(LOW)	3/4-514-J-PS-0086	#9	#9 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-8(LOW)	3/4-514-J-PS-0087	#10	#10 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-9(LOW)	3/4-514-J-PS-0088	#1	#1 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PS-15-10(LOW)	3/4-514-J-PS-0089	#2	#2 BRG	325 P.S.I.G.	265 P.S.I.G.	22.850 Kg/cm ²
PDS-17-1	3/4-514-J-PDS-0162	#3	#3 BRG			
PDS-17-2	3/4-514-J-PDS-0163	#4	#4 BRG			
PDS-17-3	3/4-514-J-PDS-0164	#5	#5 BRG			
PDS-17-4	3/4-514-J-PDS-0165	#6	#6 BRG			
PDS-17-5	3/4-514-J-PDS-0166	#7	#7 BRG			
PDS-17-6	3/4-514-J-PDS-0167	#8,9	#8,9 BRG			
PDS-17-8	3/4-514-J-PDS-0168	#10	#10 BRG			
PDS-17-9	3/4-514-J-PDS-0169	#1,2	#1,2 BRG			

LP NO.	(4)	(5)	(6)	(8)	(9)	(10)	(11)	(12)	Remarks
#3	3/4-514-V-1014	3/4-514-V-1015	3/4-514-V-1016	3/4-514-V-1018	3/4-514-V-1019	3/4-514-V-1020	3/4-514-V-1301	3/4-514-V-1039	Bearing #3
#4	3/4-514-V-2014	3/4-514-V-2015	3/4-514-V-2016	3/4-514-V-2118	3/4-514-V-2019	3/4-514-V-2020	3/4-514-V-1302	3/4-514-V-2030	Bearing #4
#5	3/4-514-V-3014	3/4-514-V-3015	3/4-514-V-3016	3/4-514-V-3018	3/4-514-V-3019	3/4-514-V-3020	3/4-514-V-1303	3/4-514-V-3030	Bearing #5
#6	3/4-514-V-4014	3/4-514-V-4015	3/4-514-V-4016	3/4-514-V-4018	3/4-514-V-4019	3/4-514-V-4020	3/4-514-V-1304	3/4-514-V-4030	Bearing #6
#7	3/4-514-V-5014	3/4-514-V-5015	3/4-514-V-5016	3/4-514-V-5018	3/4-514-V-5019	3/4-514-V-5020	3/4-514-V-1305	3/4-514-V-5030	Bearing #7
#8	3/4-514-V-6014	3/4-514-V-6015	3/4-514-V-6016	3/4-514-V-6018	3/4-514-V-6019	3/4-514-V-6020	3/4-514-V-1306	3/4-514-V-6030	Bearing #8
#9	3/4-514-V-7014	3/4-514-V-7015	3/4-514-V-7016	3/4-514-V-7018	3/4-514-V-7019	3/4-514-V-1307			Bearing #9
#10	3/4-514-V-8014	3/4-514-V-8015	3/4-514-V-8016	3/4-514-V-8018	3/4-514-V-8019	3/4-514-V-8020	3/4-514-V-1308	3/4-514-V-8030	Bearing #10
#1	3/4-514-V-9014	3/4-514-V-9015	3/4-514-V-9016	3/4-514-V-9018	3/4-514-V-9019	3/4-514-V-9020	3/4-514-V-1309	3/4-514-V-9030	Bearing #1
#2	3/4-514-V-9114	3/4-514-V-9115	3/4-514-V-9116	3/4-514-V-9118	3/4-514-V-9119	3/4-514-V-1310			Bearing #2

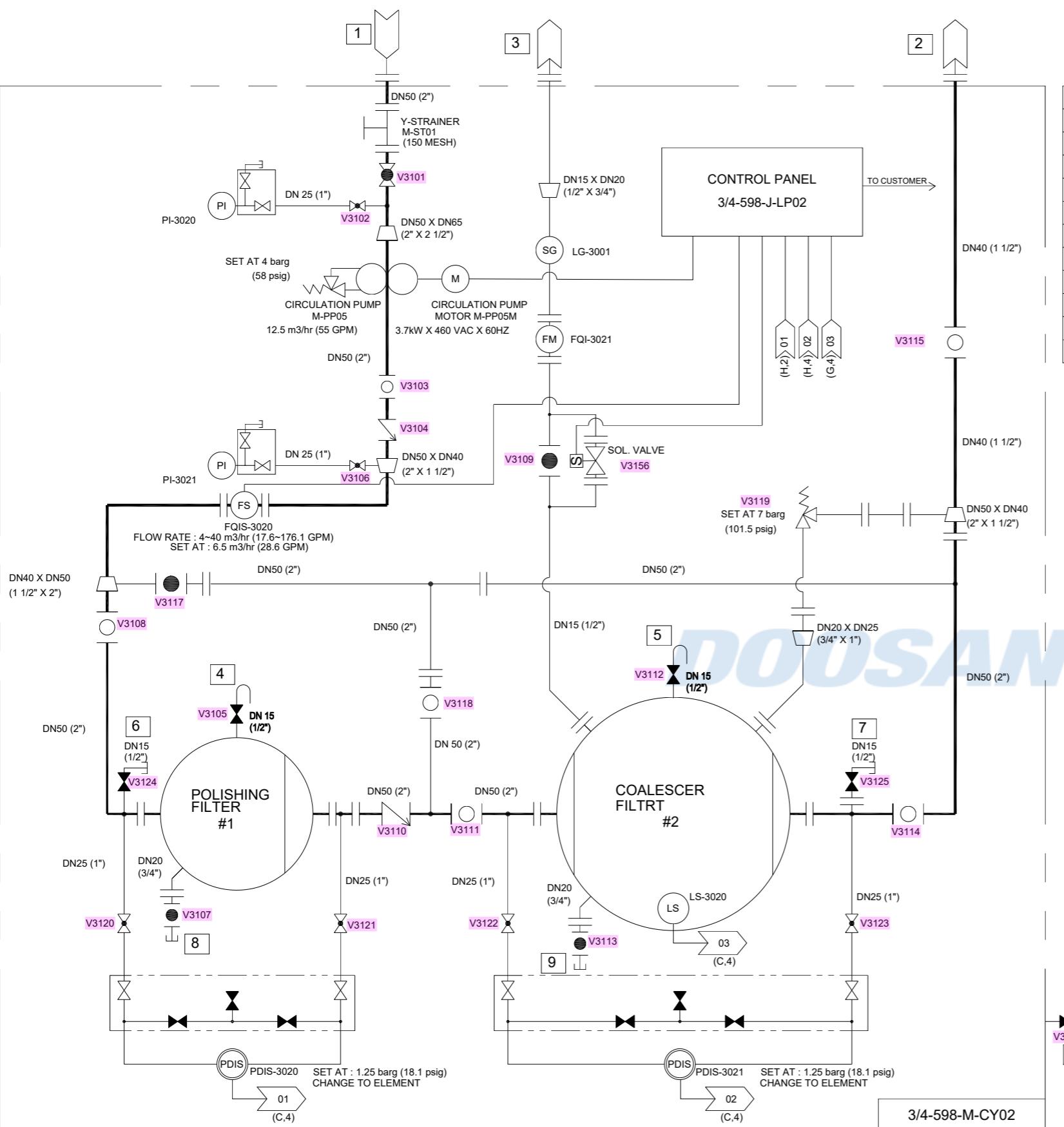
LP NO.	(13)	(14)	Remarks
#3	3/4-514-V-1013	3/4-514-V-1022	Bearing #3
#4	3/4-514-V-2013	3/4-514-V-2022	Bearing #4
#5	3/4-514-V-3013	3/4-514-V-	



REV.	DATE	DESCRIPTION	DRN	DGN	CK	RV	APP	11C64	N	N/S	A

A1(594X841)

CONT. NO



NOZZLE DATA (Refer to NO.)

NO.	DESCRIPTION	SIZE	Q'TY	MATERIAL	REMARKS
1	CONDITIONER SUCTION	ASME #150 x DN50 (2") -SW(RF)	1	A105	-
2	CONDITIONER DISCHARGE	ASME #150 x DN40 (1 1/2") -SW(RF)	1	A105	-
3	CONDITIONER WATER DRAIN	ASME #150 x DN20 (3/4") -SW(RF)	1	A105	-
4	POLISHING FILTER AIR VENT	ASME #150 x DN15 (1/2") PIPING	1	A106-B	-
5	COALESCER FILTER AIR VENT	ASME #150 x DN15 (1/2") PIPING	1	A106-B	-
6	DIRTY SAMPLING VALVE	ASME #150 x DN15 (1/2")-NPT	1	A105	-
7	CLEAN SAMPLING VALVE	ASME #150 x DN15 (1/2")-NPT	1	A105	-
8	POLISHING FILTER OIL DRAIN VALVE	ASME #150 x DN20 (3/4")-SW	1	A105	-
9	COALESCER FILTER OIL DRAIN VALVE	ASME #150 x DN20 (3/4")-SW	1	A105	-
10	SIKD DRAIN VALVE	ASME #150 x DN20 (3/4")-SW	1	A105	-

NOTE:

1. PROCESS FLOW SYMBOLS PER ANSI Y32.11 ARE USED ON THIS SCHEMATIC.
2. ABBREVIATION
S - NORMALLY CLOSED SOLENOID VALVE
M - MOTOR
PI - PRESSURE INDICATOR
PDIS - DIFFERENTIAL PRESSURE INDICATOR SWITCH
LS - LEVEL SWITCH
FM - FLOW METER
SG - SIGHT GLASS
FS - FLOW SWITCH
3. TAG NO
- VALVE : 3/4-598-#
- INSTRUMENT : 3/4-598-J-#
- ELECTRIC PANEL : 3/4-598-J-LP02
4. REFERENCE DRAWING
- 9-598-172-L-T-174-001 : LUBE OIL CONDITIONER OUTLINE
- 9-514-172-L-T-144-001 : LUBE OIL CONDITIONER WIRING DIAGRAM
5. VALVE SYMBOL (CONNECTION TYPE)
|○| : BALL VALVE (SW)
☒ : GLOBE VALVE (SW)
☒ : GATE VALVE (SW)
☒ : CHECK VALVE (SW)
☒ : RELIEF VALVE

FOR REVIEW

KOREA HYDRO & NUCLEAR POWER CO., LTD
SHIN-HANUL NUCLEAR POWER PLANT UNITS 3&4

DOOSAN Enerbility

TITLE DIAGRAM OF LUBE OIL SYSTEM
(OIL CONDITIONER)

DWG. NO. 9-598-172-L-T-105-001

SHEET

PROJECT DWG NO. 9-598-172-L-T-105-001

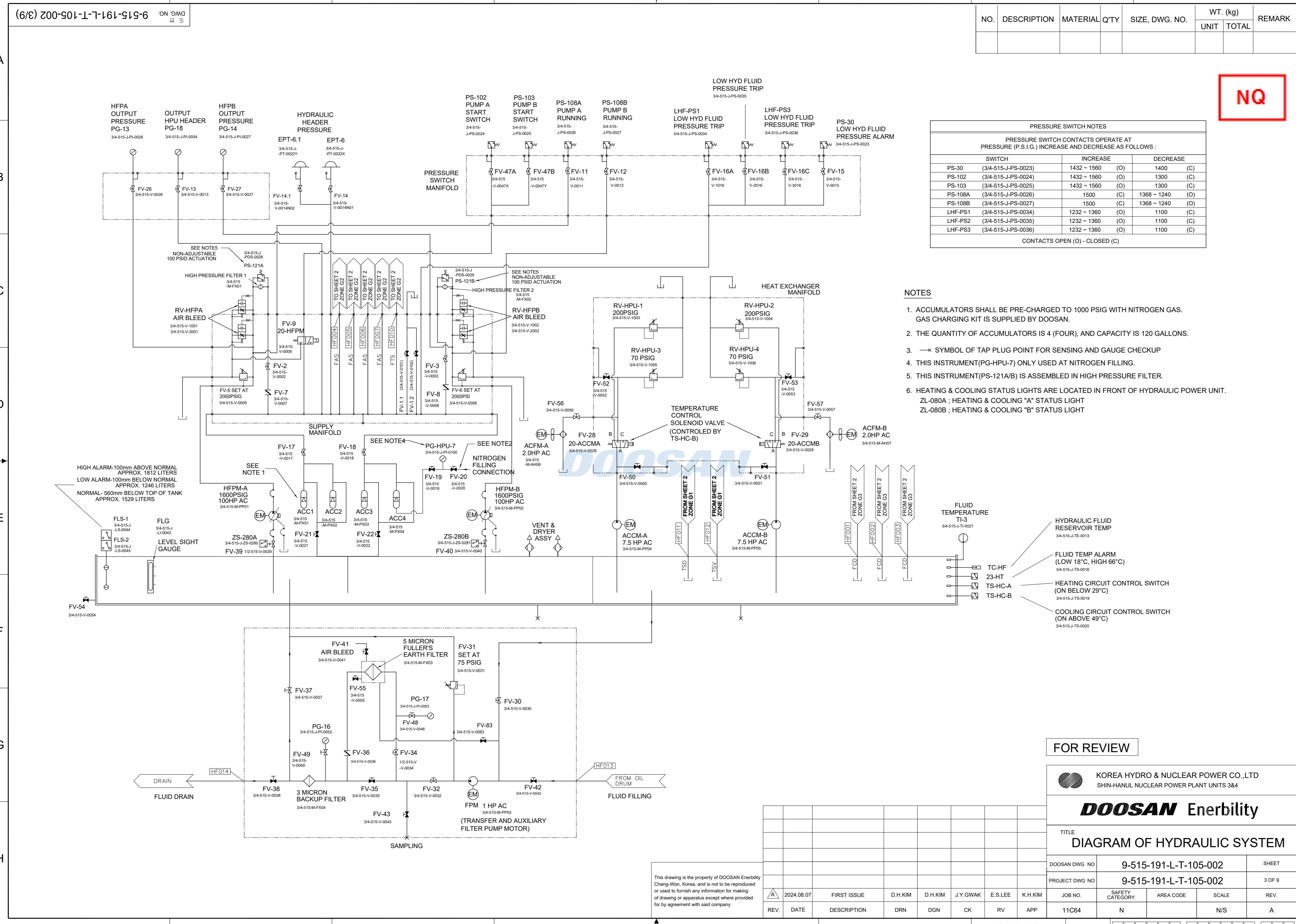
1 OF 1

REV. 2024.07.23 FIRST ISSUE T.M.GOO T.M.GOO S.J.YOO S.J.YOO K.H.KIM JOB NO.

REV. DATE DESCRIPTION DRN DGN CK RV APP 11C64 SAFETY CATEGORY AREA CODE SCALE REV.

N/S A

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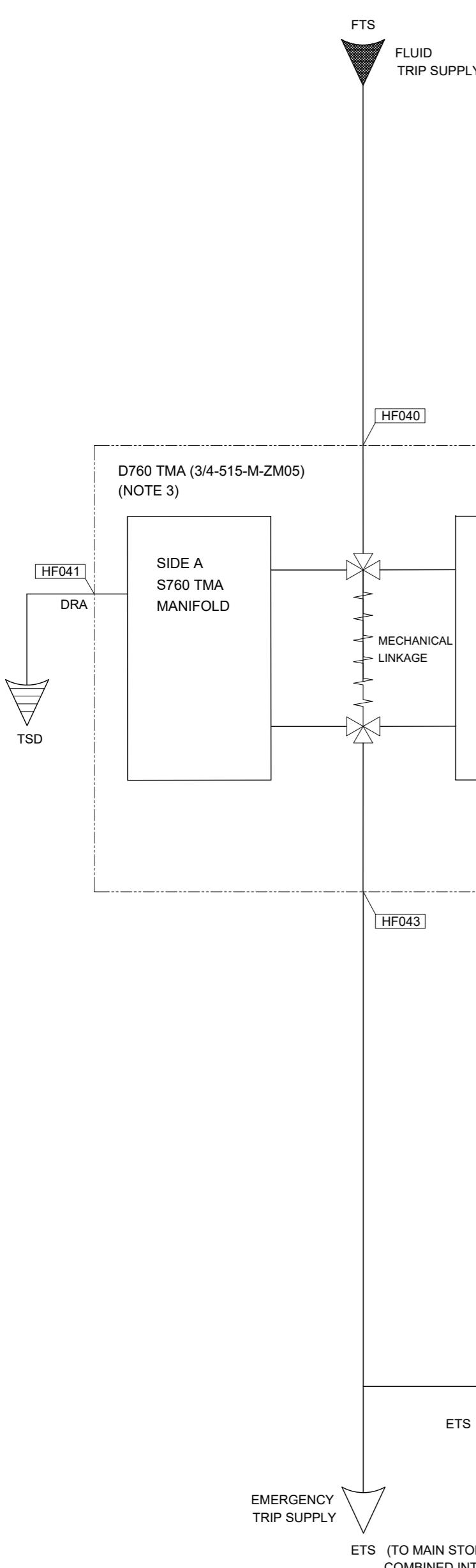


NQ

DWG. NO. 9-515-191-L-T-105-002 (4/9)

NO.	DESCRIPTION	MATERIAL	Q'TY	SIZE, DWG. NO.	WT. (kg)		REMARK
					UNIT	TOTAL	

(EMERGENCY TRIP SYSTEM)

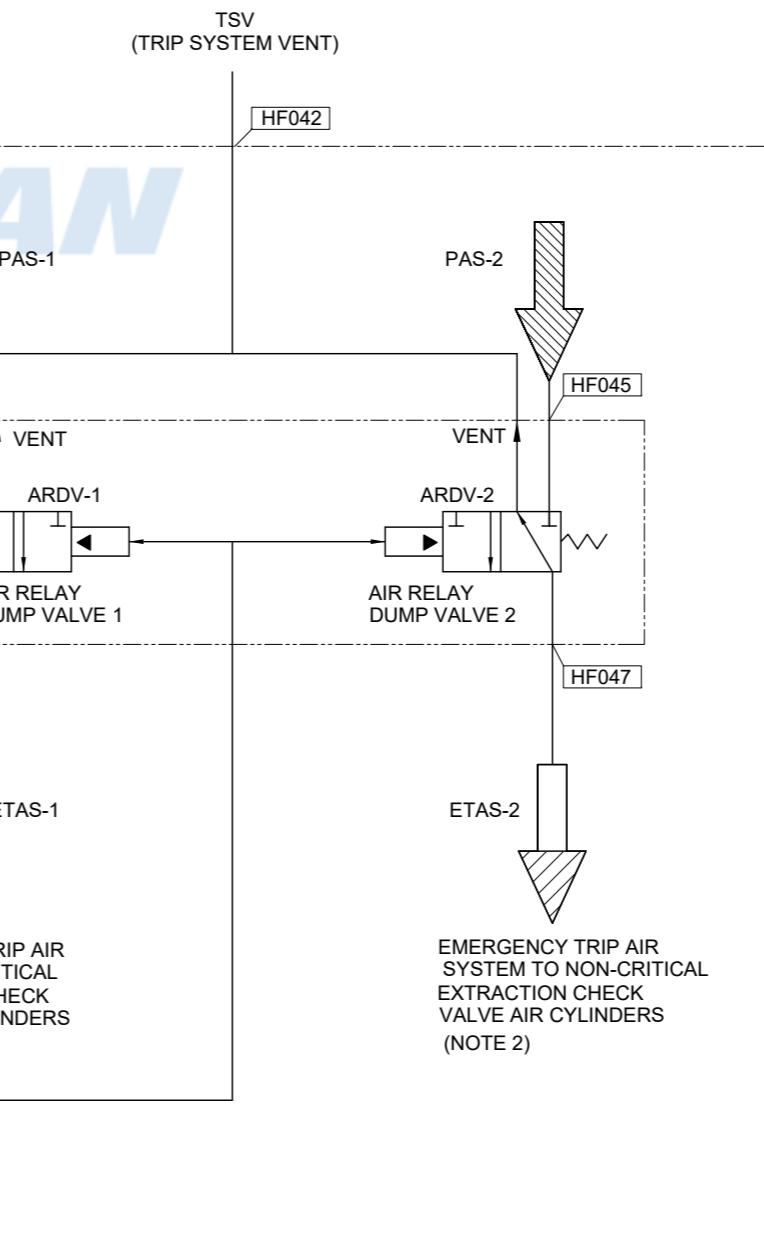


NOTE

1. TAP PLUG FOR TEST (—X)
2. CRITICAL CHECK VALVES IN THE HIGH ENERGY CONTAINED IN THE EXTRACTION SYSTEM (HP TURBINE EXTRACTION) PROVIDE OVERSPEED PROTECTION AND PARTIAL WATER INDUCTION PROTECTION.
TO KEEP THE PROBABILITY HIGH THAT THE VALVES WILL WORK PROPERLY, FUNCTION TESTING IS REQUIRED ACCORDING TO GEK72349C WHICH IS INCLUDED IN 9-510-001-L-T-431-001 (T/G INSTRUCTION BOOK).
NON-CRITICAL VALVES, THOSE NOT RETAINING SIGNIFICANT ENERGY, (LP TURBINE EXTRACTION) PROVIDE SOME PROTECTION AGAINST WATER OR COLD STEAM FLOWING INTO THE TURBINE AND QUITE SMALL OVERSPEED CONTRIBUTION.
3. SEE DWG NO. (243D2007 / 9-515-191-L-T-105-001)
FOR "D760 TMA HYDRAULIC DIAGRAM"

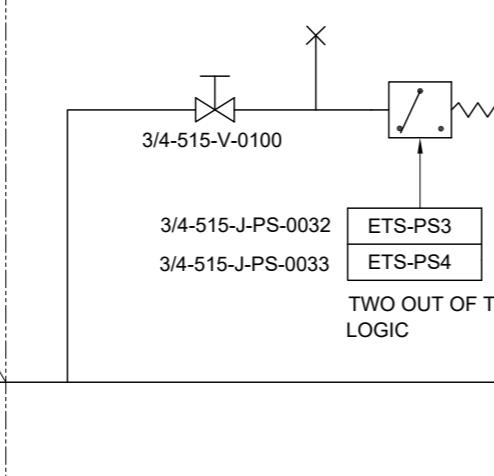
FRONT STANDARD (3/4-511-M-ZM01)

DOOSAN



ETS (TO MAIN STOP VALVES, CONTROL VALVES, COMBINED INTERMEDIATE VALVES)

EMERGENCY TRIP SUPPLY



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REV. DATE DESCRIPTION DRN DGN CK RV APP 11C64 N N/S A

NQ

PRESSURE SWITCH NOTES

PRESSURE SWITCH CONTACTS OPERATE AT PRESSURE (P.S.I.G.) INCREASE AND DECREASE AS FOLLOWS:

SWITCH	INCREASE *	DECREASE
ETS-PS3 (3/4-515-J-PS-0032)	650 (0)	400 (C)
ETS-PS4 (3/4-515-J-PS-0033)	650 (0)	400 (C)

* DIFFERENTIAL IS NOT ADJUSTABLE.
INCREASING PRESSURE SETTINGS ARE APPROXIMATE.

CONTACTS OPEN (O) - CLOSE (C)

FOR REVIEW

KOREA HYDRO & NUCLEAR POWER CO., LTD
SHIN-HANUL NUCLEAR POWER PLANT UNITS 3&4

DOOSAN Enerbility

TITLE
DIAGRAM OF HYDRAULIC SYSTEM

DOOSAN DWG NO	9-515-191-L-T-105-002	SHEET
PROJECT DWG NO	9-515-191-L-T-105-002	4 OF 9
JOB NO.	Safety Category	Area Code
REV.	Area Code	Scale

CONT. NO

A2(420x594 mm)

1 2 3 4 5 6 7 8

두산에너빌리티(주)

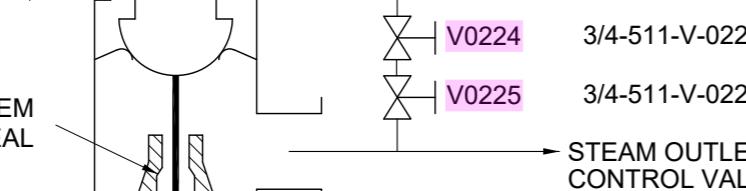
DWG. NO. 9-515-191-L-T-105-002 (5/9)

MAIN STOP VALVE

(SV-1) 3/4-511-V-0901
(SV-3) 3/4-511-V-0903
(SV-4) 3/4-511-V-0904

STEAM INLET

STEM SEAL

PT-201 ON SV-1 3/4-511-J-PT-0135
V0224 3/4-511-V-0224
V0225 3/4-511-V-0225
STEAM OUTLET TO CONTROL VALVES

MAIN STOP VALVE

(SV-2) 3/4-511-V-0902

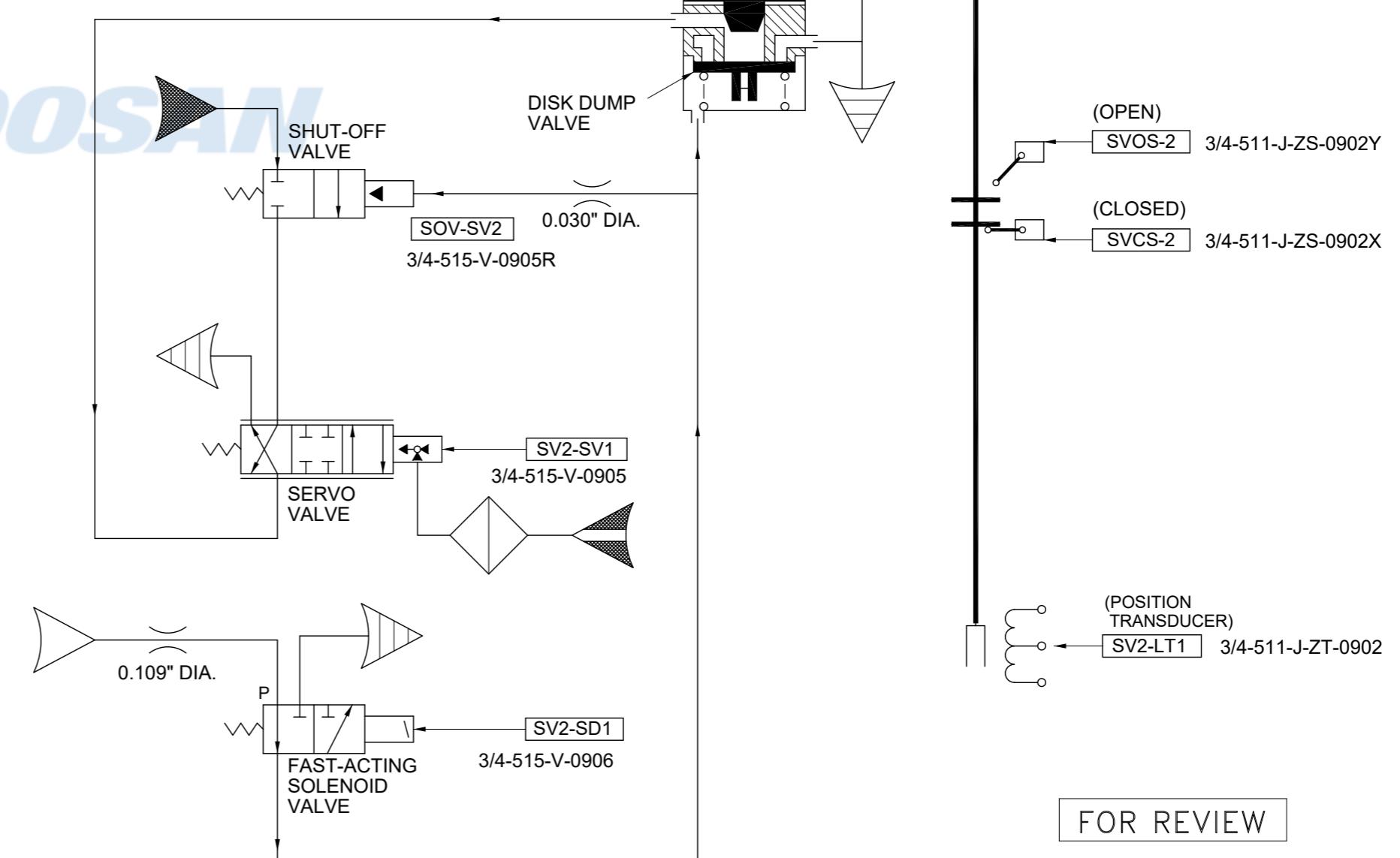
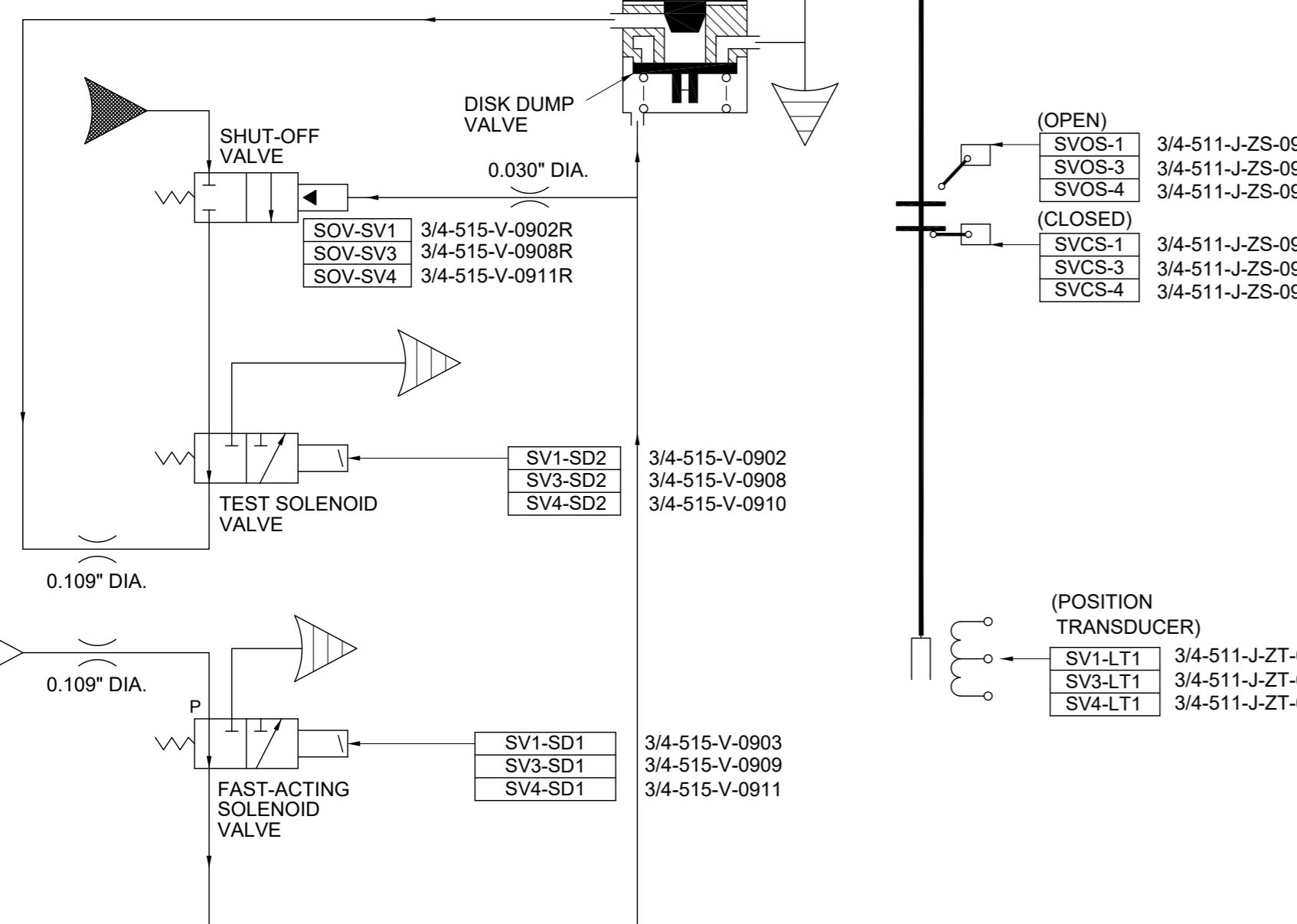
STOP VALVE BY-PASS VALVE

STEAM INLET

STEM SEAL

STEAM OUTLET TO CONTROL VALVES

NQ



FOR REVIEW

KOREA HYDRO & NUCLEAR POWER CO., LTD
SHIN-HANUL NUCLEAR POWER PLANT UNITS 3&4

DOOSAN Enerbility

TITLE
DIAGRAM OF HYDRAULIC SYSTEM

DOOSAN DWG NO 9-515-191-L-T-105-002 SHEET

PROJECT DWG NO 9-515-191-L-T-105-002 5 OF 9

REV. A

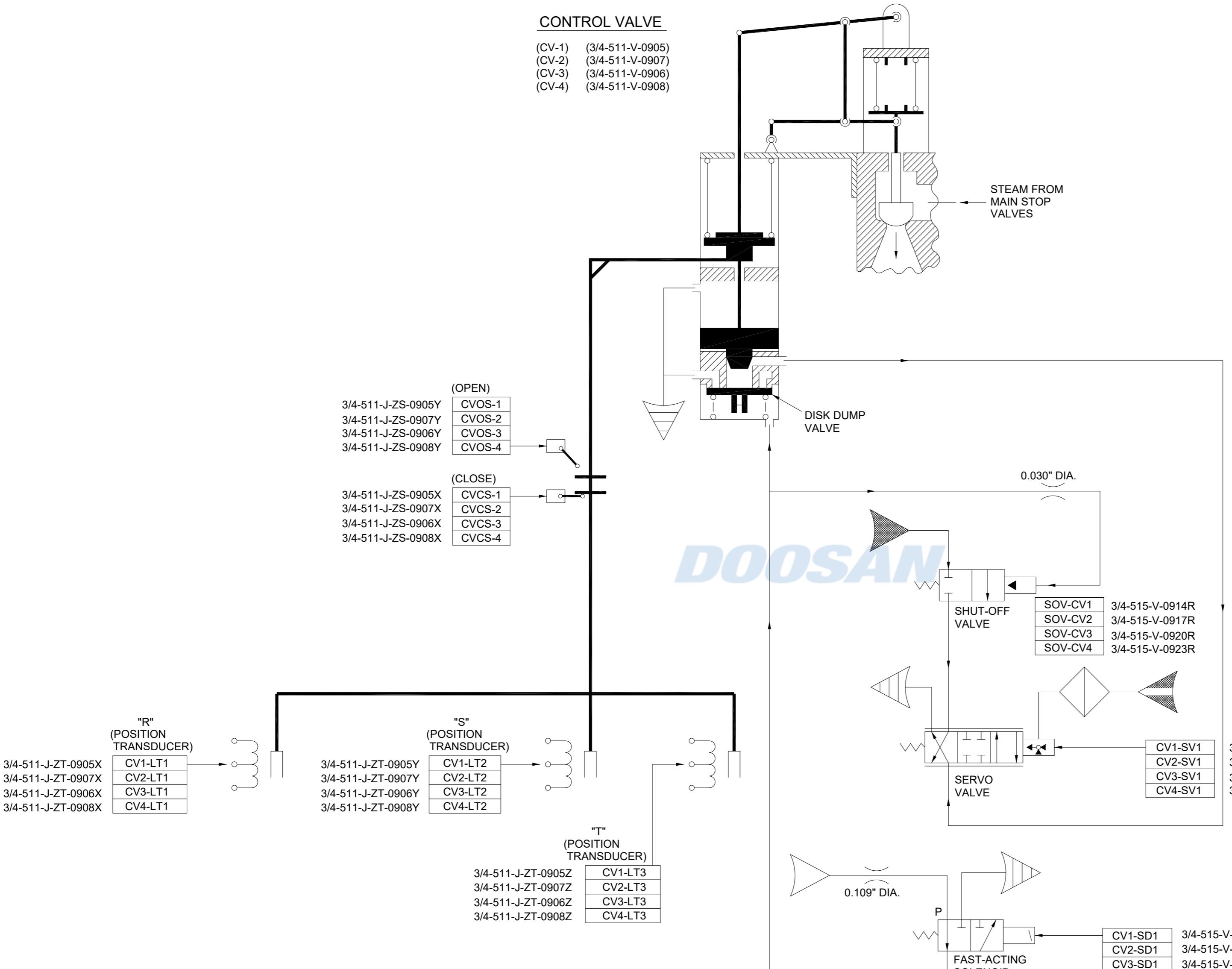
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A	2024.08.07	FIRST ISSUE	D.H.KIM	D.H.KIM	J.Y.GWAK	E.S.LEE	K.H.KIM	JOB NO.	SAFETY CATEGORY	AREA CODE	SCALE	REV.
REV.	DATE	DESCRIPTION	DRN	DGN	CK	RV	APP	11C64	N		N/S	A

9-515-19
V.G. NO.

NO.	DESCRIPTION	MATERIAL	Q'TY	SIZE, DWG. NO.	WT. (kg)		REMARK
					UNIT	TOTAL	

Q



KOREA HYDRO & NUCLEAR POWER CO. LTD

DOOSAN Enerbility

TITLE

DIAGRAM OF HYDRAULIC SYSTEM

SAN DWG NO 9-515-191-L-T-105-002 SHEET

JECT DWG NO 9-515-191-L-T-105-002 6 OF 9

JOB NO.	Safety Category	AREA CODE	SCALE	REV.

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두산 에너빌리티

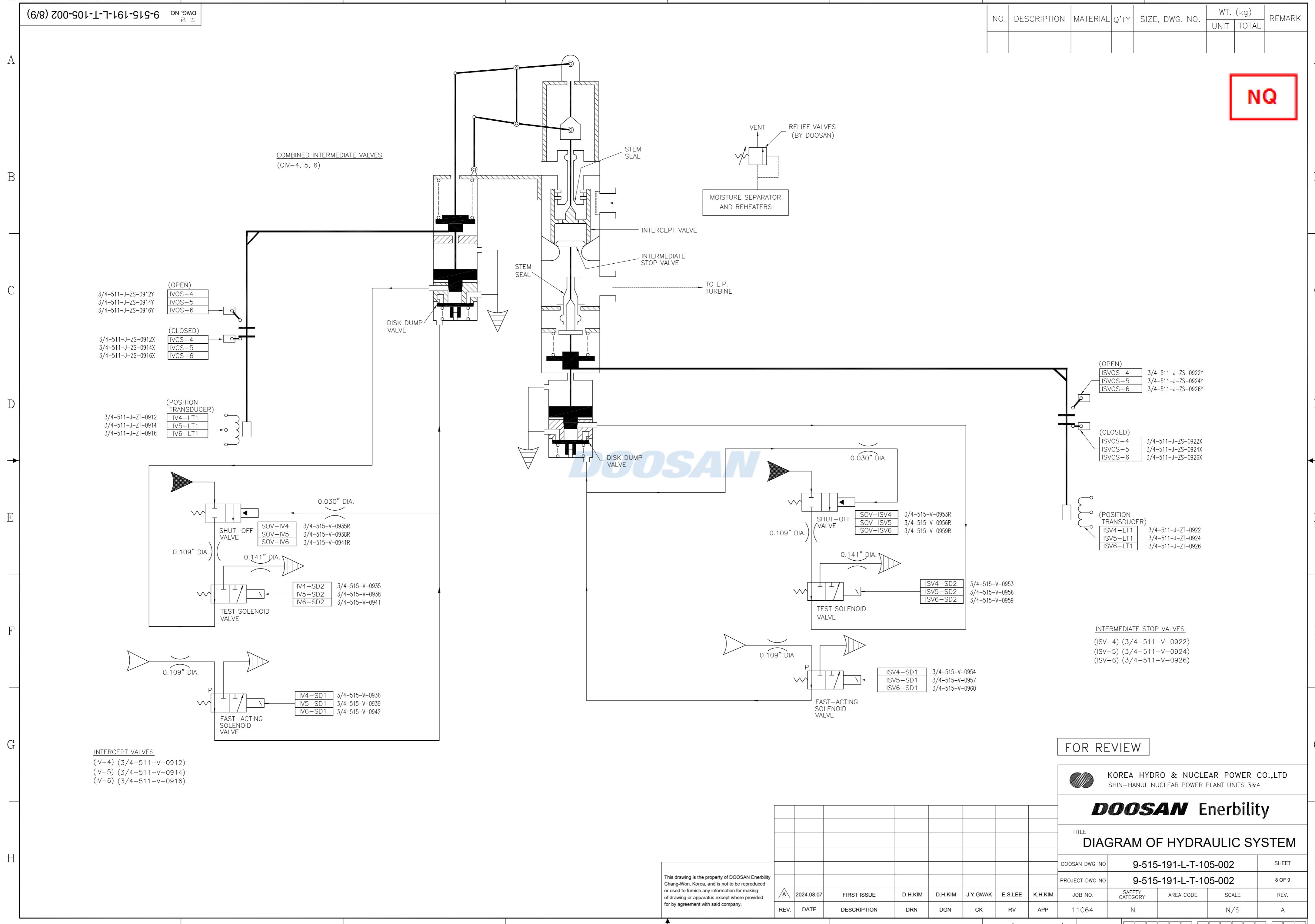
9-515-191-L-T-105-002 (8/9) W.G. NO.

9-515-19 NO.

| NO. | DESCRIPTIVE

NO. | WT. (kg)

ONFIDER



DWG. NO.	9-515-191-L-T-105-002 (9/9)
E&E NO.	

NO.	DESCRIPTION	MATERIAL	Q'TY	SIZE, DWG. NO.	WT. (kg)		REMARK
					UNIT	TOTAL	

NQ

INTERFACE POINT NAME	SHEET NO. DWG ZONE	FLUID TYPE	NORMAL PRESSURE PSIG (KG/CM2)	NORMAL TEMPERATURE °F (°C)	NORMAL FLOW GPM (LPM)	MAXIMUM PRESSURE PSIG (KG/CM2)	MAXIMUM TEMPERATURE °F (°C)	MAXIMUM FLOW GPM (LPM)	CONNECTION DESCRIPTION
HF001	SHT. 2 G-3	HYDRAULIC	0 (0)	115 (46.1)	5 (18.9)	200 (14.1)	150 (65.5)	588.5 (2227.7)	FLUID DRAIN
HF002	SHT. 2 G-3	HYDRAULIC	0 (0)	115 (46.1)	2.2 (8.3)	200 (14.1)	150 (65.5)	220 (832.8)	FLUID DRAIN
HF003	SHT. 2 G-3	HYDRAULIC	0 (0)	115 (46.1)	5 (18.9)	200 (14.1)	150 (65.5)	588.5 (2227.7)	FLUID DRAIN
HF004	SHT. 2 G-2	HYDRAULIC	1600 (112.5)	115 (46.1)	3.6 (13.6)	3000 (210.9)	150 (65.5)	380 (1438.5)	FLUID SUPPLY
HF005	SHT. 2 G-2	HYDRAULIC	1600 (112.5)	115 (46.1)	0.55 (2.1)	3000 (210.9)	150 (65.5)	19 (71.9)	FLUID SUPPLY
HF006	SHT. 2 G-2	HYDRAULIC	1600 (112.5)	115 (46.1)	3.6 (13.6)	3000 (210.9)	150 (65.5)	380 (1438.5)	FLUID SUPPLY
HF007	SHT. 2 G-2	HYDRAULIC	1600 (112.5)	115 (46.1)	3.6 (13.6)	3000 (210.9)	150 (65.5)	380 (1438.5)	FLUID SUPPLY
HF010	SHT. 2 G-2	HYDRAULIC	1600 (112.5)	115 (46.1)	0.5 (1.9)	3000 (210.9)	150 (65.5)	1 (3.8)	FLUID TRIP SUPPLY
HF011	SHT. 2 G-1	HYDRAULIC	0 (0)	115 (46.1)	0.5 (1.9)	200 (14.1)	150 (65.5)	1 (3.8)	TRIP SYSTEM DRAIN
HF012	SHT. 2 G-1	HYDRAULIC	0 (0)	115 (46.1)	0 (0)	200 (14.1)	150 (65.5)	0.1 (0.4)	TRIP SYSTEM VENT
HF013	SHT. 3 G-4	HYDRAULIC	0 (0)	115 (46.1)	0 (0)	3000 (210.9)	150 (65.5)	1 (3.8)	FLUID RESERVOIR FILL
HF014	SHT. 3 G-2	HYDRAULIC	0 (0)	115 (46.1)	0 (0)	3000 (210.9)	150 (65.5)	1 (3.8)	FLUID RESERVOIR DRAIN
HF040	SHT. 2 F-2	HYDRAULIC	1600 (112.5)	115 (46.1)	0.5 (1.9)	3000 (210.9)	150 (65.5)	1 (3.8)	FLUID TRIP SUPPLY
HF041	SHT. 2 F-2	HYDRAULIC	0 (0)	115 (46.1)	0.5 (1.9)	200 (14.1)	150 (65.5)	1 (3.8)	TRIP SYSTEM DRAIN
HF042	SHT. 2 B-1	HYDRAULIC	0 (0)	115 (46.1)	0 (0)	200 (14.1)	150 (65.5)	0.1 (0.4)	TRIP SYSTEM VENT
HF043	SHT. 2 E-2	HYDRAULIC	1600 (112.5)	115 (46.1)	0.62 (2.3)	3000 (210.9)	150 (65.5)	9.12 (34.5)	EMERGENCY TRIP SUPPLY
HF044	SHT. 2 B-1	AIR	60 (4.2)	70.2 (21.1)	0.01 (0)	125 (8.8)	150 (65.5)	1 SCFM	AIR RELAY DUMP SUPPLY
HF045	SHT. 2 B-1	AIR	60 (4.2)	70.2 (21.1)	0.01 (0)	125 (8.8)	150 (65.5)	1 SCFM	AIR RELAY DUMP SUPPLY
HF046	SHT. 2 B-1	AIR	60 (4.2)	70.2 (21.1)	0.01 (0)	125 (8.8)	150 (65.5)	1 SCFM	EMERGENCY TRIP AIR SUPPLY
HF047	SHT. 2 B-1	AIR	60 (4.2)	70.2 (21.1)	0.01 (0)	125 (8.8)	150 (65.5)	1 SCFM	EMERGENCY TRIP AIR SUPPLY
HF050	SHT. 2 C-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF051	SHT. 2 C-3	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF052	SHT. 2 C-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF053	SHT. 2 D-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF054	SHT. 2 D-3	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF055	SHT. 2 D-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF056	SHT. 2 E-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF057	SHT. 2 E-3	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF058	SHT. 2 E-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF059	SHT. 2 F-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF060	SHT. 2 F-3	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF061	SHT. 2 F-3	HYDRAULIC	1600 (112.5)	115 (46.1)	0.2 (0.8)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF080	SHT. 2 B-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	0.02 (0.1)	EMERGENCY TRIP SUPPLY
HF081	SHT. 2 B-4	HYDRAULIC	0 (0)	115 (46.1)	0.7 (2.6)	200 (14.1)	150 (65.5)	95.5 (361.5)	FLUID DRAIN
HF082	SHT. 2 B-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.9 (3.4)	3000 (210.9)	150 (65.5)	95 (359.6)	FLUID SUPPLY
HF090	SHT. 2 C-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	0.02 (0.1)	EMERGENCY TRIP SUPPLY
HF091	SHT. 2 C-4	HYDRAULIC	0 (0)	115 (46.1)	0.7 (2.6)	200 (14.1)	150 (65.5)	95.5 (361.5)	FLUID DRAIN
HF092	SHT. 2 C-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.9 (3.4)	3000 (210.9)	150 (65.5)	95 (359.6)	FLUID SUPPLY
HF100	SHT. 2 D-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	0.02 (0.1)	EMERGENCY TRIP SUPPLY
HF101	SHT. 2 D-4	HYDRAULIC	0 (0)	115 (46.1)	0.7 (2.6)	200 (14.1)	150 (65.5)	95.5 (361.5)	FLUID DRAIN
HF102	SHT. 2 D-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.9 (3.4)	3000 (210.9)	150 (65.5)	95 (359.6)	FLUID SUPPLY
HF110	SHT. 2 E-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	0.02 (0.1)	EMERGENCY TRIP SUPPLY
HF111	SHT. 2 E-4	HYDRAULIC	0 (0)	115 (46.1)	0.7 (2.6)	200 (14.1)	150 (65.5)	95.5 (361.5)	FLUID DRAIN
HF112	SHT. 2 E-4	HYDRAULIC	1600 (112.5)	115 (46.1)	0.9 (3.4)	3000 (210.9)	150 (65.5)	95 (359.6)	FLUID SUPPLY
HF130	SHT. 2 B-7	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF131	SHT. 2 B-7	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF132	SHT. 2 B-7	HYDRAULIC	1600 (112.5)	115 (46.1)	0.39 (1.5)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF140	SHT. 2 B-6	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF141	SHT. 2 B-6	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF142	SHT. 2 B-6	HYDRAULIC	1600 (112.5)	115 (46.1)	0.39 (1.5)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF150	SHT. 2 B-5	HYDRAULIC	1600 (112.5)	115 (46.1)	0.01 (0)	3000 (210.9)	150 (65.5)	3 (11.4)	EMERGENCY TRIP SUPPLY
HF151	SHT. 2 B-5	HYDRAULIC	0 (0)	115 (46.1)	0.4 (1.5)	200 (14.1)	150 (65.5)	55 (208.2)	FLUID DRAIN
HF152	SHT. 2 B-5	HYDRAULIC	1600 (112.5)	115 (46.1)	0.39 (1.5)	3000 (210.9)	150 (65.5)	9.5 (36)	FLUID SUPPLY
HF160</									