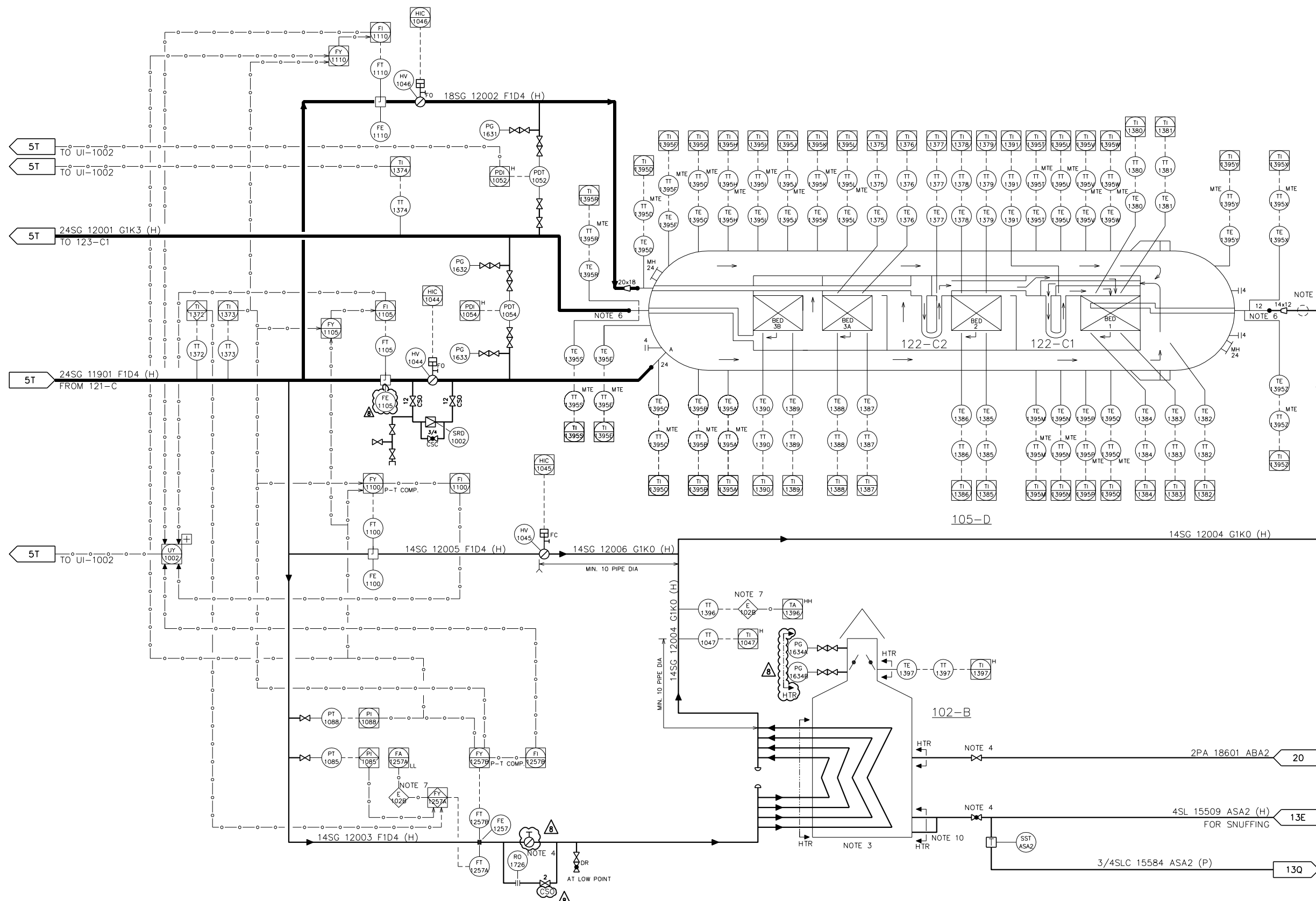


102-B		
START-UP HEATER		
DES./OPER.TEMP	°C	466/245;402
DES./OPER.PRESS	kg/cm2G	152.7/102.3;100.43
MATERIAL COIL		A312 TP304H
HEAT DUTY	Gcal/h	12.8

1. FOR GENERAL NOTES AND SYMBOLS SEE DRAWING 4A, 4B.
2. DELETED.
3. FOR FUEL GAS PIPING AND CONTROLS SEE DRAWING 19C.
4. MINIMUM 15M FROM FURNACE.
5. RUPTURE DISK TO PROTECT 121-C AGAINST DIFFERENTIAL PRESSURE.
6. NOT INSULATE NOZZLE.
7. REFER TO WRITE-UP BY CONTROL SYSTEMS ENGINEERING FOR INTERLOCK DESCRIPTION.
8. DELETED.
9. DELETED.
10. TOTAL OF 10 SNUFFING STEAM NOZZLE.
11. 14" FLANGE TO FLANGE (AS WAREHOUSE SPARE) TO BE PROVIDED ONLY FOR FUTURE INSTALLATION AND MAINTENANCE PURPOSE.



REV	DESCRIPTION	ISSUED BY	CHECKED BY	DATE	REV	DESCRIPTION	ISSUED BY	CHECKED BY	DATE
0	RE-ISSUED FOR CONSTRUCTION (AFC-3)	TS	ABA	DW	HGW	ANS	HW	US	11/1/11
1	RE-ISSUED FOR CONSTRUCTION (AFC-2)	TS	ABA	DW	HGW	ANS	HW	US	2/8/12
2	RE-ISSUED FOR CONSTRUCTION (AFC-1)	TS	ABA	DW	HGW	ANS	HW	US	10/6/12
3	ISSUED FOR CONSTRUCTION (AFC)	EB	ABA	DW	BK	AM	SAL	US	2/6/11
4	RE-ISSUED FOR APPROVAL (AFD-1)	EB	ABA	DW	BK	UJ	SAL	US	2/6/11
5	ISSUED FOR APPROVAL (AFD)	EB	ABA	DW	BK	UJ	SAL	US	2/28/11
6	ISSUED FOR DETAIL DESIGN (APP-2)	ABA	JKS	YRK	BOP	HGN	SAL	US	11/6/13
REV	DESCRIPTION	ISSUED BY	CHECKED BY	DATE	REV	DESCRIPTION	ISSUED BY	CHECKED BY	DATE

REVISIONS

PROJECT NAME :	KALTIM-5 PROJECT 2500 MTPD AMMONIA AND 3500 MTPD UREA BONTANG, EAST KALIMANTAN, INDONESIA
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CLIENT NAME : **PUPUK KALTIM**
PT. PUPUK KALIMANTAN TIMUR

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CONTRACTOR :		ISSUE MARK
 PT. INI KARYA PERSADA TEKNIK		 Toyo ENGINEERING CORPORATION

CONTRACTOR WORK NUMBER : 10107 / BA096300 / 11-018-01

PIPING & INSTRUMENT FLOW DIAGRAM
AMMONIA SYNTHESIS CONVERTER

SCALE	\sim	DWG. NO.	K5-01-E1-PD-5U-T
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DOC. NO.	K5-01-E1-PD-022-T	SHEET 022/073	REV. 8
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