

LIST OF EQUIPMENT			TYPICAL DRAWING			REFERENCE DOCUMENTS			GENERAL NOTES :		
EQUIPMENT NO.	EQUIPMENT NAME	DIAGRAM NAME									
205-E-01 205-E-02 205-E-03 205-E-04 205-E-05 205-E-06 205-E-07 205-E-08 A 205-E-08 B 205-E-09 A 205-E-09 B 205-E-10 205-E-11 205-E-12 205-E-13 205-E-14 205-E-15 205-E-16	WASTE HEAT BOILER PROCESS GAS HEATER INTERBED COOLER 1st PROCESS GAS COOLER 2nd PROCESS GAS COOLER 1st WSA CONDENSER 2nd WSA CONDENSER 1st ACID COOLER 1st ACID COOLER 2nd ACID COOLER 2nd ACID COOLER STEAM SUPERHEATER DRY AIR HEATER BLOWDOWN COOLER CONDENSATE COOLER 1st BFW PREHEATER 2nd BFW PREHEATER HOT AIR HEATER	P04 P12 P08 P08 P08 P09 P14 P21 P21 P22 P22 P05 U05 P25 P26 U04 U04 P06	1) HOOKUP DRAWINGS FOR IA: Applicable for motor operated control damper						1) SPECIFICATION FOR CALCULATION BLOCKS. DOCUMENT NO.: P66001		
205-FB-01 205-FB-02	COMBUSTOR SUPPORT HEATER	P03 P13							2) SET POINT, ALARMS AND TRIP VALUES, OPERATING MANUAL APPENDIX - 11. DOCUMENT NO.: P47001-11		
205-G-01	WET ELECTROSTATIC PRECIPITATOR	P15							NOTE 1) PURGE AIR TO BE HEATED TO 220°C.		
205-K-01 A 205-K-01 B 205-K-02 A 205-K-02 B 205-K-03 A 205-K-03 B 205-K-04 A 205-K-04 B 205-K-05 A 205-K-05 B 205-K-06 A 205-K-06 B	1st COOLING AIR BLOWER 1st COOLING AIR BLOWER 2ND COOLING AIR BLOWER 2ND COOLING AIR BLOWER 1ST COMBUSTION AIR BLOWER 1ST COMBUSTION AIR BLOWER 2nd COMBUSTION AIR BLOWER 2nd COMBUSTION AIR BLOWER PROCESS GAS BLOWER PROCESS GAS BLOWER RECYCLE GAS BLOWER RECYCLE GAS BLOWER	P17 P17 P18 P18 P19 P19 P13 P13 P11 P11 P20 P20									
205-KM-01 A 205-KM-01 B 205-KM-02 A 205-KM-02 B 205-KM-03 A 205-KM-03 B 205-KM-04 A 205-KM-04 B 205-KM-05 A 205-KM-05 B 205-KM-06 A 205-KM-06 B	MOTOR FOR 205-K-01 A MOTOR FOR 205-K-01 B MOTOR FOR 205-K-02 A MOTOR FOR 205-K-02 B MOTOR FOR 205-K-03 A MOTOR FOR 205-K-03 B MOTOR FOR 205-K-04 A MOTOR FOR 205-K-04 B MOTOR FOR 205-K-05 A MOTOR FOR 205-K-05 B MOTOR FOR 205-K-06 A MOTOR FOR 205-K-06 B	P17 P17 P18 P18 P19 P19 P13 P13 P11 P11 P20 P20									
205-M-01 205-M-02	1st PROCESS GAS MIXER 2nd PROCESS GAS MIXER	P10 P10	2) DOUBLE DAMPERS ARRANGEMENT:								
205-ME-01 A 205-ME-01 B 205-ME-01 C 205-ME-02 A 205-ME-02 B 205-ME-03 205-ME-04 205-ME-05 205-ME-06	1st MIST CONTROL UNIT 1st MIST CONTROL UNIT 1st MIST CONTROL UNIT 2nd MIST CONTROL UNIT 2nd MIST CONTROL UNIT STACK DRY AIR UNIT NEUTRALIZATION PIT PHOSPHATE DOSING UNIT	U01 U01 U01 U02 U02 P16 U05 U06 U07									
205-P-01 A 205-P-01 B 205-P-02 A 205-P-02 B 205-P-03 A 205-P-03 B 205-P-04 A 205-P-04 B 205-P-05 A 205-P-05 B 205-P-06 A/S	1st ACID PUMP 1st ACID PUMP 2nd ACID PUMP 2nd ACID PUMP BFW PUMP BFW PUMP QUENCH WATER PUMP QUENCH WATER PUMP OFF SPEC ACID PUMP OFF SPEC ACID PUMP EFFLUENT PUMP	P21 P21 P22 P22 U03 U03 P15 P15 U08 U08 U06									
205-PM-01 A 205-PM-01 B 205-PM-02 A 205-PM-02 B 205-PM-03 A 205-PM-03 B 205-PM-04 A 205-PM-04 B 205-PM-05 A 205-PM-05 B 205-PM-06 A/S	MOTOR FOR 205-P-01 A MOTOR FOR 205-P-01 B MOTOR FOR 205-P-02 A MOTOR FOR 205-P-02 B MOTOR FOR 205-P-03 A MOTOR FOR 205-P-03 B MOTOR FOR 205-P-04 A MOTOR FOR 205-P-04 B MOTOR FOR 205-P-05 A MOTOR FOR 205-P-05 B MOTOR FOR 205-P-06 A/S	P21 P21 P22 P22 U03 U03 P15 P15 U08 U08 U06									
205-R-01 205-R-02 205-R-03 205-R-04	1st SCR REACTOR 2nd SCR REACTOR 1st SO2 CONVERTER 2nd SO2 CONVERTER	P07 P07 P08 P12									
205-V-01 205-V-02 205-V-03 205-V-04 205-V-05 205-V-06 205-V-07 205-V-08 205-V-09 205-V-10 205-V-11 205-V-12	FUEL GAS K.O. DRUM ARU GAS K.O. DRUM SWS GAS K.O. DRUM 1st ACID VESSEL 2nd ACID VESSEL 1st STEAM DRUM 2nd STEAM DRUM LP FLASH DRUM BLOWDOWN DRUM 1st CONDENSATE POT 2nd CONDENSATE POT OFF SPEC ACID VESSEL	P01 P02 P02 P21 P22 P23 P24 P26 P25 P26 U04 U08									

PIPING AND INSTRUMENTATION DIAGRAM SULPHURIC ACID PLANT									
SCALE	JOB NO.	DEPT.	SECTN.	UNIT	DWG. No.	REV.			
~	A886	02	42	205	1112	5			
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड INDIAN OIL CORPORATION LIMITED BS-VI PROJECT HALDIA REFINERY 375 MTPD SULPHURIC ACID PLANT									
 इंजीनियर्स इंडिया लिमिटेड ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)									
 HALDOR TOPSØE									
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GENERAL NOTES :

A) ALL INSTRUMENT TAG NOS TO BE PREFIXED BY UNIT NO '205'.

B) FOR LEGENDS, SYMBOLS AND OTHER GENERAL NOTES, REFER P&ID NO. A882-02-42-00-1191/1192.



1) PURGE AIR TO BE HEATED TO 220°C.

5	25.06.18	HAZOP AND SIL RECOMM. INCORP.		DM	RK	MSM
4	21.03.18	ISSUED FOR ENGG. & HAZOP	PKR	DM	RK	MSM
REV.	DATE	REVISIONS	DRN	BY	CHKD	APPD.



PIPING AND INSTRUMENTATION DIAGRAM
SULPHURIC ACID PLANT

SCALE	JOB NO.	DEPT.	SECTN.	UNIT	DWG. No.	REV.
	A886	02	42	205	1112	5

इंडियन ऑयल कॉर्पोरेशन लिमिटेड
INDIAN OIL CORPORATION LIMITED
BS-VI PROJECT
HALDIA REFINERY
375 MTPD SULPHURIC ACID PLANT



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3	Revised as indicated	Jan 10, 2018	ALKH/QAAB	DEPA	ABKJ	
2	Revised as indicated	Dec 15, 2017	ALKH/QAAB	DEPA	ABKJ	
1	General revision	Oct 27, 2017	ALKH/QAAB	DEPA	ABKJ	
0	First issue	Aug 31, 2017	ALKH/QAAB	PLEO	ABKJ	
REV.	DESCRIPTION	DATE	DRAWN	CHECK	APPR.	
Sulphuric Acid Plant Haldia Refinery						
		SHEET SIZE	UNIT	205		
List of equipments Piping and instrument diagram		NAME		S01B		
DOCUMENT ID S-06841		P42001-B-205-1112		3		
JOB NUMBER		DOCUMENT NUMBER		REV		