



Owner:
HINDALCO INDUSTRIES LIMITED
Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400 093, India



EPCM Contractor:
W. L. GORE & ASSOCIATES (Pacific) Pte, Ltd. India Branch
703, A-Wing, 215 Atrium, Andheri Kurla Road, Mumbai 400059, India



Nominated Subcontractor - Engineering, Quality Control, Supervision:
SMARTLuth Solution and Service Pvt. Ltd.
Unit No: 503, 5th Floor, ECO Centre, EM-4 Sector-V, Salt Lake City, Kolkata - 700091, India

Hindalco Renusagar U5 1 x 80 MW PF Captive Power Plant

Flue Gas Desulfurization Project (FGD) with GORE™ SO₂ Control System

FGD - Electrical Load List

0	23-02-2021	First Issue	S.Das	S.Chakraborty		M.Deb
Rev.	Date	Description of revision	Prepared	Checked	Approved	
Hindalco Renusagar U5 1 x 80 MW PF Captive Power Plant			Drg. / Doc. No. : S21001- EN01 - 05HSD - 331002			
Flue Gas Desulfurization Project (FGD) with GORE™ SO ₂ Control System			Gore Doc. No.: RPDUS.EM.000		page 1	of 2
FGD - Electrical Load List			GORE Job : RPDUS		Rev. :	00
			File: FGD - Electrical Load List -R0_dated 23.2.2022			

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FGD - Electrical Load List

10	Hindalco Doc No: S21001- EN01 - 05HSD - 331002			Rev-0														Date: 23.2.2022
	WL Gore Doc No: RPDU5.EM.000																	
Sl.no	Item name of drive units	Tag no's	P&ID Ref. No.	Working	Stand by	Duty			Feeder Type	Starter Type	VOLTAGE		Power consumption	Motor Power rating		SOV Power rating	Feeder Rating	Remarks
						CONTINUOUS	INTERMITTENT	STAND BY			3-Phase ,50 HZ, AC	Single Phase ,50 HZ, AC	BKW	KW	HP	KW		
1	MIST-ELIMINATOR/OHT FGTR MAKE-UP/ ASH FILTER- FRESH WATER PUMP-A	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	DOL	415 V		13.26	18.5	25			
2	MIST-ELIMINATOR/OHT FGTR MAKE-UP/ ASH FILTER- FRESH WATER PUMP-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		13.26	18.5	25		
3	PROCESS WATER PUMP -A	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	DOL	415 V		37.80	50	67			
4	PROCESS WATER PUMP -B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		37.80	50	67		
5	FGTR MODULE WASH PUMP-A	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	DOL	415 V		19.04	25	34			
6	FGTR MODULE WASH PUMP-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		19.04	25	34		
7	PUMP TO CLIENT SERVICES-A	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT		DRIVE	DOL	415 V		2.49	3.7	5			
8	PUMP TO CLIENT SERVICES-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		2.49	3.7	5		
9	FGTR EFFLUENT TRANSFER PUMP-A	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT		DRIVE	DOL	415 V		1.99	3.7	5			
10	FGTR EFFLUENT TRANSFER PUMP-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		1.99	3.7	5		
11	SAC INLET PUMP-A	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	DOL	415 V		1.99	3.7	5			
12	SAC INLET PUMP-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		1.99	3.7	5		
13	SAC RECOVERED WATER -A	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	DOL	415 V		2.65	3.7	5			
14	SAC RECOVERED WATER -B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		2.65	3.7	5		
15	SAC START-UP RECIRCULATION PUMP -A	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT		DRIVE	DOL	415 V		0.08	0.25	1			
16	SAC START-UP RECIRCULATION PUMP -B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		0.08	0.25	1		
17	CONCENTRATED ACID LOADING PUMP -A	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT		DRIVE	DOL	415 V		2.21	3.7	5			
18	CONCENTRATED ACID LOADING PUMP -B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	DRIVE	DOL	415 V		2.21	3.7	5		
19	BOOSTER FAN	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			DRIVE	VFD	690 V		818	865	1154			
20	SAC SYSTEM	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			SUPPLY		415 V					69	TENTATIVE, FEEDER RATING	
21	MAIN LIGHT DISTRIBUTION PANEL	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			SUPPLY		415 V					5		
22	FIRE ALARM SYSTEM	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS			SUPPLY		415 V					1		
23	DOSING PUMP-A	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT		SUPPLY	DOL		230 V		0.37	0.5			
24	DOSING PUMP-B	LATER	S21001-XFXX-05HSD-227XX		1				STAND BY	SUPPLY	DOL		230 V		0.37	0.5		
25	AGITATOR OF DOSING TANK	LATER	S21001-XFXX-05HSD-227XX	1			INTERMITTENT					230 V		0.22	0.3			
26	MOTORISED VALVES AS PER P&ID	LATER	S21001-XFXX-05HSD-227XX	38			INTERMITTENT		DRIVE	R DOL		230 V	20.9	0.55	0.8		TOTAL POWER	
27	PILOT SOLENOID FOR PNEUMATIC ACTUATOR OF DAMPERS ON ID FAN TO CHIMENY	LATER	S21001-XFXX-05HSD-227XX	2			INTERMITTENT		SUPPLY	ON-OFF		230 V				0.12	TOTAL BASED ON POWER REQUIREMENT OF PILOT SOLENOID AS 0.06 KW	
28	PILOT SOLENOID FOR PNEUMATIC ACTUATOR OF DAMPERS ON TAP OFF LINE FROM ID FANS TO BOOSTER FAN	LATER	S21001-XFXX-05HSD-227XX	2			INTERMITTENT		SUPPLY	ON-OFF		230 V				0.12		
29	PILOT SOLENOID FOR PNEUMATIC ACTUATOR OF DAMPERS AT BOOSTER FAN SUCTION	LATER	S21001-XFXX-05HSD-227XX	2			INTERMITTENT		SUPPLY	ON-OFF		230 V				0.12		
30	PNEUMATIC ACTUATED VALVES	LATER	S21001-XFXX-05HSD-227XX	142			INTERMITTENT		ON-OFF		230 V					8.52	TOTAL POWER	
31	PLC PANEL	LATER	S21001-XFXX-05HSD-227XX	1		CONTINUOUS						230 V				5	TENTATIVE, FEEDER	