FACILITY CODES AND DESCRIPTIONS FOR LINE DESIGNATION

CODIGO DE AREAS Y DESCRIPCION PARA DESIGNACION DE LINEAS

SERVICE CLASS INDEX / MATERIAL CLASS DESIGNATION

(CR) COOLING WATER RETURN	C1E2A, C1E2H
(CT) CONCENTRATE (COPPER)	L3E0HO, L3T0HH, C1E2R
(CW) COOLING WATER SUPPLY	C1E2A, C1E2H
(EA) EXHAUSTED AIR	C1E2A, C1E2H
(FRW) FRESH WATER	C1E2A, C1E2H, M1E0H2U, M3E0H, M2E0H
(FW) FIRE WATER	C1F2A, M2F0H2U, M3F0HU
(IA) INSTRUMENT AIR	G1E2A
(PA) PLANT AIR	C1E2A, C1E2H
(PW) PROCESS WATER	C1E2A, C1E2H, MDE0H2U, M3E0H, M2E0H, C3E2E, M1E0H2U
(RW) RECLAIM WATER	C1E2A, C1E2H, MDE0H2U
(SL) SLURRY (LINED)	L1E0VJ, L1E0VE, C1E2R
(SU) SLURRY (UNLINED)	C1E2R, M1E0H2U, MDE0H2U

SERVICE AND MATERIAL CLASS INDEX IS FOR REFERENCE ONLY. REFER TO "GENERAL SPECIFICATION FOR PIPING, VALVES AND FITTINGS" DOC. N°4-V2-2000-PP-SPE-000001, FOR THE LATEST UP TO DATE INFORMATION.

(BA) BLOWER AIR	C1E2A, C1E2H
(CL) COLLECTOR	C1E2B
(C1) PRIMARY COLLECTOR	C1E2B
(C2) SECONDARY COLLECTOR	C1E2B
(DO) DIESEL OIL	C1E2B
(DW) DRINKING WATER/POTABLE WATER	G1E2A, M1E0H2U, MDE0H2U
(FL) FLOCCULANT	C1E2B
(FO) FUEL OIL	C1E2B
(FR) FROTHER (MIXTURE)	C1E2B
(GO) GEAR LUBRICATION OIL	S1E0E, SJE0Q
(GW) GLAND SEAL WATER	C3E2E, C1E2A, C1E2H
(HOL) HYDRAULIC OIL LOW PRESSURE	S1E0E
(HS) SODIUM HYDROXIDE (NaOH)	S1E0E
(LOL) LUBE OIL LP (LOW PRESSURE)	S1E0E
(LOM) LUBE OIL MEDIUM PRESSURE (CLASS 3000)	SJE0Q
(ML) MILK OF LIME (LIME SLURRY)	C1E2R
(ND) SODIUM HYDROSULFIDE (N_aHS)	S1E0E
(NG) NITROGEN	C1E2A, C1E2H
(PD) PROCESS DRAIN	C1E2R, M1E0H2U, MDE0H2U
(RN) NON-CORROSIVE REAGENTS	C1E2B
(RT) TEST REAGENTS	C1E2B
(RO) SPARE REAGENT	C1E2B
(SA) SULPHURIC ACID	C1E3B
(VA) VACUUM	C1E2B
(WE) WASTE EFFLUENT, CHEMICAL WASTE	C1E2B
(WSU) SEWAGE WATER	LUP

THIS LIST OF SERVICE AND MATERIAL CLASS INDEX IS FOR REFERENCE ONLY, AND IT WILL BE ADDED IN A LATER REVISION OF THE "GENERAL SPECIFICATION FOR PIPING, VALVES AND FITTINGS" DOC. N° 4-V2-2000-PP-SPE-000001. NEW REVISION OF THE SPEC WILL SUPERSEDE THIS LIST.

PIPE DIAMETER (D) / VENT DIAMETER (d)

PIPE DIAMETER (D)	VENT DIAMETER (d)
2"	3/4"
3"	1"
4"	2"
6"	2"
8"	3"
10"	4"
12"	4"
14"	6"
16"	6"
18"	8"
20"	8"
24"	10"
28"	10"
30"	10"
36"	16"
38"	16"
40"	16"
42"	16"
48"	16"
54"	18"
60"	18"
OR HIGHER	

AREA / FACILITY NUMBER / DESCRIPTION

AREA	FACILITY NUMBER	DESCRIPTION
2000		MINERAL PROCESS FACILITIES
2100		PRIMARY CRUSHING AND MATERIAL HANDLING & STORAGE
	2140	COARSE ORE STORAGE/STOCKPILE
2200		CONCENTRATOR FACILITIES
	2210	GRINDING
	2220	ROUGHER FLOTATION AND REGRIND
	2225	CLEANER FLOTATION
	2230	PEBBLE CRUSHING
	2240	Cu-Mo CONCENTRATE THICKENER
	2250	CONCENTRATE PUMPING & PIPELINE (Including Return Water Line)
	2260	MOLYBDENUM PLANT
	2265	Cu CONCENTRATE THICKENING
	2270	REAGENTS FACILITIES
	2280	COARSE ORE RECLAIM (Including Belt Feeders and Sag Mill Conveyor)
	2290	FILTER (DEWATERING) PLANT
	2295	FILTER CAKE STORAGE & LOADOUT
2600		TAILINGS
	2610	TAILINGS THICKENERS
2800		UTILITIES & ONSITE INFRASTRUCTURE
	2831	WATER SUPPLY & DISTRIBUTION
	2832	SEWAGE SYSTEM
	2834	COMPRESSED AIR

TIE - INS - DISCIPLINE

TC : CIVIL/ESTRUCTURAL TIE-IN
TJ : INSTRUMENTATION AND CONTROL TIE-IN
TM : MECHANICAL TIE-IN
TP : PIPING TIE-IN
TWP : GROUP TIE-IN

BHP

PARA REVISION
FOR REVIEW

amec foster wheeler

- [ ] Revisado / Reviewed
- [ ] Revisado con Comentarios / Reviewed with comments
- [ ] Rechazado y volver a emitir / Rejected, reissue
- [x] Solo Información / Information Only

Fecha / Date: 17-05-2019
Firma / Signature: Marcial Mendoza

- [ ] SPANISH LANGUAGE GOVERNS
- [x] ENGLISH LANGUAGE GOVERNS

Rev. No.	DATE	REVISIONS	DIS.	REV.	D.L.	BHP	REFERENCE DOCUMENTS	BHP N°	NOTE
2	03-may-19	ISSUED APPROVED FOR CONSTRUCTION	FC	GB	JB				
1	20-dec-18	ISSUED APPROVED FOR CONSTRUCTION	SKC	RM	SA/JB				
0	17-jan-18	ISSUED APPROVED FOR DESIGN	FC	HA	JB				
0A	21-sep-17	ISSUED FOR COMPANY APPROVAL	FC	HA	JB				
A	25-jul-17	ISSUED FOR INTERNAL REVIEW	FC	HA	JB				

Fluor-Salfa

BHP MINERA SPENCE S.A.

ENGINEERING	SCALE	DATE		DATE
DESIGNED BY:			DRAWN BY: SYAM	11-12-18
REVISED BY: R. MONDAL	11-12-18		DISCIPLINE LEADER: ADAPA/BARRERA	11-12-18
ENGINEERING MGR: JOSHI/LEGGETT	11-12-18		PROJECT MGR: A. KING	11-12-18
BHP ENGINEERING MGR:			PROJECT MGR:	

VENDOR DRAWING N°: 4-V2-2000-PR-PID-000004

SGO PROJECT

MINERAL PROCESS FACILITIES

PIPING CLASS SYMBOLOGY P&ID

CONTRACT N°: 8500135645 | BHP DRWG N°: 4-V2-2000-PR-PID-000004 | REV. 2

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