

PIPE LINES CONNECTIONS

PROCESS CONNECTION WITH ISBL

XXXX from XXXXXX
PID XXX

XXXX to XXXXXX
PID XXX

PROCESS CONNECTION WITH OSBL

XXXXX from XXXXXX
PID XXX

XXXXX to XXXXXX
PID XXX

UTILITIES CONNECTION

FC → FC ←

FC = FLUID CODE

PIPING SYMBOLS

MAIN PROCESS STREAM

SECONDARY PROCESS / UTILITY STREAM

FLOW DIRECTION

GRAVITY

SLOPE

NO LOW POINT

PACKAGING LIMIT

FUTUR

PIPING BREAK / SCOPE BREAK

OSBL ISBL

LIMIT OF SCOPE

(BUYER) (VENDOR)

LIMIT OF SCOPE

H PP

INSULATION BREAK

○

LINE NUMBER BREAK

LINE NUMBERING

DIA - FLUID - SSS NNN - M M M - XX

INSULATION CODE (1-2 DIGITS)

MATERIAL TYPE

CLASS PN

MATERIAL GROUP

LINE NUMBER-CHRONO (3 DIGITS)

SECTION NUMBER (3 DIGITS)

FLUID CODE (5 DIGITS)

LINE DIAMETER (MAX 3 DIGITS)

MATERIAL CLASS CODE

FIRST DIGIT	SECOND DIGIT	THIRD DIGIT
S STAINLESS STEEL	0 PN6	1 P265GH
C CARBON STEEL	1 PN16	2 P355GH
G GALVANIZED STEEL	2 PN25	3 P460
P PLASTIC/COMPOSITE	4 PN40	6 304
	6 PN63	7 316
		V PVC
		E POLYETHYLENE
		B POLYBUTENE
		P POLYPROPYLENE
		G GRE

FLUID CODE

FLUID ABBREVIATION	SERVICE
AMBI	NH4HCO3 AMMONIUM BICARBONATE
AMCON	NH4NO3 AMMONIUM NITRATE CONDENSATE
AMMO	NH4OH AMMONIAC (4N/12N)
AMNI	NH4NO3 AMMONIUM NITRATE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CO2	GASEOUS CO2
CWR	COOLING WATER RETURN
CWS	COOLING WATER SUPPLY
DMW	DEMINERALISED WATER
EVAP1	LIQUID INSIDE EVAPORATION PACKAGE
EVAP2	VAPOR INSIDE EVAPORATION PACKAGE
EVAP3	LIQUID INSIDE
EVAP4	VAPOR INSIDE
IA	INSTRUMENTATION AIR
IW	INDUSTRIAL WATER
KERO	KEROSENE 100% (DILUENT)
NIAC	HNO3 (5N/15N) NITRIC ACID
PWW	PROCESS WASTE WATER
RECON	RARE EARTH CONDENSATE
RENO	RARE EARTH - NITRATE SOLUTION (AQUEOUS)
RESL	RARE EARTH
SA	SERVICE AIR
TBP	TBP / KEROSENE + RARE EARTH (ORGANIC SOLVENT)
MAGN	DEMAGNETIZED MAGNET POWDER
MASW	DEMAGNETIZED MAGNET SWARF
MAOX	MAGNET OXYDE POWDER
REISL	RARE EARTH BORE IRON SLURRY SOLUTION
REINO	RARE EARTH BORE IRON NITRATE SOLUTION
REBNO	RARE EARTH BORE NITRATE SOLUTION
2PH	2 PROPYL HEPTANOL (ORGANIC SOLVENT)
BONA	SODIUM BORATE SOLUTION
BOSL	SODIUM BORATE SLURRY
BOCON	BORATE CONDENSATE
EXSL	EXOGEN SLURRY
RESOC	COLD RARE EARTH SOLID (CARBONATE, OXYDE)
RESOH	HOT RARE EARTH SOLID (OXYDE)
AMNIC	NH4NO3 AMMONIUM NITRATE CONDENSATE
HYPER	HYDROGEN PEROXIDE (H2O2 - 70%)
PC88A	PC88A /KEROSENE + RARE EARTH (ORGANIC SOLVENT)
NAOH	NaOH 20%
SOLV	SOLVESSO (DILUENT)
ALI	ALIQAT (ORGANIC SOLVENT)
CO2L	LIQUID CO2
VENT1	LOW TEMPERATURE VENT
VENT2	HIGH TEMPERATURE VENT
CA	COMBUSTION AIR, DILUTION AIR
LPN	LOW PRESSURE NITROGEN
LPS	LOW PRESSURE STEAM
LPC	LOW PRESSURE STEAM CONDENSATE
PW	POTABLE WATER

ABBREVIATIONS

ATM	ATMOSPHERE
ASL	AT SAFE LOCATION
ISBL	INSIDE BATTERY LIMIT
NNF	NORMALLY NO FLOW
OSBL	OUTSIDE BATTERY LIMIT

VALVES

NORMALLY OPEN

NORMALLY CLOSED

MANUAL VALVE

3 WAY VALVE

GLOBE VALVE

HOLD

CONTROL VALVE

PRESSURE REDUCER

PRESSURE DEVERSER

SAFETY VALVE

CHECK VALVE

PIPING COMPONENTS

REDUCER

EXCENTRIC REDUCER

CAP

PLUG

FLANGE

BLIND FLANGE

PARTICULAR ACCESSORIES

SPECTACLE BLIND (OPEN / CLOSE)

SPACE RING

PAN TAIL

EJECTOR / INJECTOR / EDUCTOR

SAFE LOCATION

ATM. VENT

DESUPERHEATER

TUNDISH

FILTER / STRAINER

TEMPORARY STRAINER

Y STRAINER

SAMPLING VALVE / CONNECTION

SILENCER

FLEXIBLE HOSE

STEAM TRAP

SIGHT GLASS

EXPANSION JOINT

SPRAY NOZZLE

ADJUSTABLE WEIR PIPE

BIRD SCREEN

JET MIXER

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CAREMAG PROJECT - FEED

CAREMAG

PIPING AND INSTRUMENTATION DIAGRAM

LEGEND SHEET - PIPING SYMBOL

CONTRACTOR DOC N°		S48505-SEN-000-PCD-PID-1003	
SCALE	FORMAT	DOCUMENT NUMBER	
NONE	A3	A-03-PID-0003	
REV.	DATE	DESCRIPTION	WRITTEN
00	XX-XX-202X	FIRST ISSUE	AGO
			VRO
			NPR
			CHECKED
			APPROVED