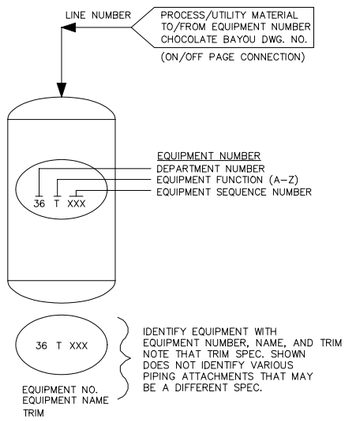
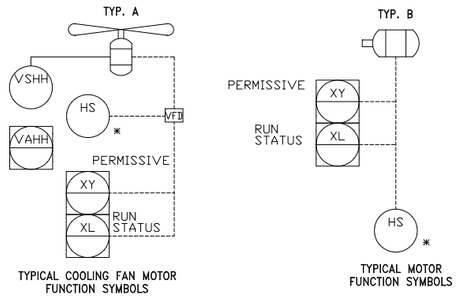
EQUIPMENT DESIGNATION



ASSOCIATED MOTOR DEVICES



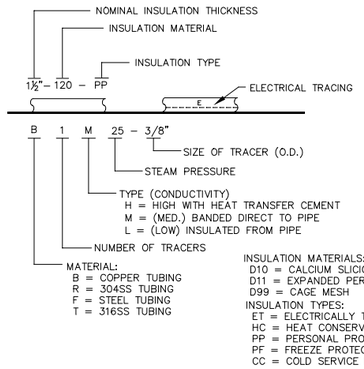
*** HAND SWITCH TYPES:**

HOA = 3 POSITION HAND–OFF–AUTO SWITCH
S/S = 2 POSITION STOP–START SWITCH
OFF/ON = 2 POSITION OFF–ON SWITCH
FOS = 3 POSITION FAST–OFF–SLOW SWITCH

NOTE:

HAND SWITCHES MAY ALSO BE PUSH BUTTONS

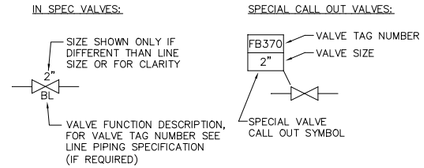
TRACING AND INSULATION



INSULATION MATERIALS:
D10 = CALCIUM SLICICATE (HOT SERVICE)
D11 = EXPANDED PERLITE(HOT SERVICE)
D99 = CAGE MESH

INSULATION TYPES:
ET = ELECTRICALLY TRACED
HC = HEAT CONSERVATION
PP = PERSONAL PROTECTION
PF = FREEZE PROTECTION
CC = COLD SERVICE INSULATION

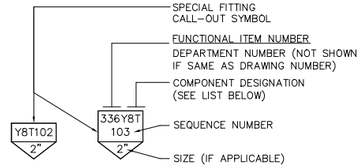
VALVE IDENTIFICATION



VALVE FUNCTION DESCRIPTIONS:

BL – BLOCK
CK – CHECK
CSO – CAR SEAL OPEN
CSC – CAR SEAL CLOSED
DR – DRAIN
FL – FLUSH
FP – FULL PORT
GO – GEAR OPERATED
NC – NORMALLY CLOSED
NO – NORMALLY OPEN
OT – ORIFICE TAP
PT – PRESSURE TAP
SC – SAMPLE CONNECTION
TH – THROTTLE
VT – VENT

SPECIAL FITTINGS



COMPONENT DESIGNATIONS:

Y8A – AIR VENTS
Y8B – LINE BLIND
Y8C – SEPARATORS
Y8D – ATMOSPHERIC VENT FITTINGS
Y8E – EXPANSION JOINTS
Y8F – FLEXIBLE DEVICES (UNLOADING ARMS)
Y8G – SIGHT FLOW INDICATORS
Y8H – HOSE & FITTINGS
Y8J – HOSE RACKS
Y8K – SAFETY SHOWERS
Y8M – MIXERS & EJECTORS (NON–PROCESS FUNCTIONS)
Y8N – SPRAY NOZZELS
Y8R – REGULATORS (NON–INSTRUMENT LOOP COMPONENT)
Y8S – STRAINERS & LINE FILTERS
Y8T – STEAM TRAPS
Y8V – SPECIAL VALVES
Y8X – SPECIAL FITTING (COMPONENT NOT LISTED)

EMISSIONS / TITLE – 5 RELATED SYMBOLS

SYMBOL IDENTIFIES THE LOCATION OF THE EMISSION POINT NUMBER WHICH IS THE SAME AS THE VENT OPENING LOCATION OR THE EMISSION SOURCE POINT.

NOTE:

1. THIS DRAWING APPLIES TO SCOPE OF WORK FOR THE "CYANCO PROJECT HERSHEY" HOWEVER THIS DRAWING DOES NOT SUPERCEDE ANY UNIT SPECIFIC STANDARD SYMBOLOGY DRAWINGS.
2. SEE PROJECT SPECIFICATIONS & DRAWINGS FOR DETAILED DESCRIPTION OF PIPE, FITTINGS, VALVES, TRACING AND INSULATION.
3. ALL BLEED, VENT, AND DRAIN VALVES SHALL INCLUDE CAPS OR BLIND FLANGES IN ACCORDANCE WITH PIPING MATERIAL SPECIFICATIONS. THESE ARE USUALLY NOT SHOWN ON P&ID'S.
4. A " MIN. " OR " MINIMUM DISTANCE " NOTE IMPLIES FITTING MAKE UP.

REFERENCE DRAWINGS

NO.	TITLE
–	–

MSC
MARS SPACE CONSTRUCTION, L.L.C.
ENGINEERING, DESIGN & CONSTRUCTION
TEXAS REGISTERED ENGINEERING FIRM F–XXXX

REVISIONS

NO.	FIRM	DATE	DESCRIPTION	BY	CHK.	APP.
A	MSC	04/15/21	ISSUED FOR REVIEW	GJR	–	–
B						
C						
D						
E						
F						

XXXX

ENGINEERING RECORD

	BY	DATE
DRN:	GJR	04/15/21
DES:	–	–
CHK:	–	–
APP:	–	–
AFE No.	–	–
SE&C JOB NO.		–
PROJ. ENGR:		–
SCALE:	NONE	

CLIENT LOGO

MARS BASE PROCESS SERVICES
UTIILTY SERVICES

P&ID LEGEND
MONTGOMERY COUNTY, TEXAS

PLOT SCALE N/A | DWG. NO. D–XXXX–P04–103 | REV A
CAD NO. PID–103

C:\DESIGN\ P&ID\ MSC\ D–XXXX–P05–103_A