



COMBUSTION MOTOR SIZE - 1 H.P.
 SYSTEM MOTOR SIZE - 25 H.P.
 ELECTRICAL - 230 VAC/60 Hz/3 PH
 B.T.U. RATING = 735,000 BTU/HR
 GAS SUPPLY LINE 1" NPT
 GAS PRESSURE REQUIRED = 728 SCFH @ 2-5 PSI SUPPLY
 INLET FLOW RATE - 50-250 SCFM

NOTES:
 1) THE PROCESS INLET VALVE MUST REMAIN CLOSED AND THE DILUTION AIR VALVE MUST REMAIN OPEN UNTIL THE SYSTEM OUTLET TEMPERATURE REACHES A PRESET LEVEL.
 2) THE DILUTION AIR VALVE IS ADJUSTED TO DILUTE PROCESS INLET TO MAINTAIN OUTLET TEMPERATURE SET POINT.
 3) CATALYST VOLUME IS 0.458 cu ft.

COMPENSATORY NOTE:
 The information contained in this drawing is intended for use only by those individuals authorized by the design engineer. The reproduction or distribution of this drawing without the consent of the design engineer is strictly prohibited.

- LEGEND**
- ETM ELAPSED TIME METER
 - FE FLOW ELEMENT
 - FI FLOW INDICATOR
 - FT FLOW TRANSMITTER
 - LSHH LEVEL SWITCH HIGH HIGH
 - M MOTOR
 - MCP MASTER CONTROL PANEL
 - MOP MOTOR OPERATED VALVE
 - PHI PRESSURE DIFFERENTIAL, HIGH
 - PI PRESSURE INDICATOR
 - PSH PRESSURE SWITCH HIGH
 - PSL PRESSURE SWITCH LOW
 - SP SAMPLE POINT
 - SV SOLENOID VALVE
 - TOV TEMPERATURE CONTROL VALVE
 - TE TEMPERATURE ELEMENT
 - TI TEMPERATURE INDICATOR
 - TIC TEMPERATURE CONTROLLER
 - TSI TEMPERATURE SWITCH HIGH
 - VI VALVE INDICATOR
 - VFD VARIABLE FREQUENCY DRIVE
 - ZSC POSITION SWITCH CLOSED
 - ZSO POSITION SWITCH OPEN
 - BAV BALL VALVE
 - BTB BUTTERFLY VALVE
 - GV GATE VALVE
 - RV RELIEF VALVE
 - WS WEIR STRAINER
 - R REGULATOR
 - PM PANEL MOUNTED
 - ALM ALARM LIGHT
 - RLM RAIN LIGHT
 - ES EMERGENCY STOP
 - AL AIR LINE
 - CL CONTROL LINE
 - GL GAS LINE
 - WL WALKOFF LINE
 - WL WATER LINE
- ALARMS**
1. SYSTEM INLET VALVE NOT CLOSED
 2. DILUTION VALVE NOT OPEN
 3. MOISTURE SEPARATOR HIGH HIGH LEVEL
 4. LIQUID RING PUMP HIGH HIGH LEVEL
 5. LIQUID RING PUMP OIL HIGH LEVEL
 6. LIQUID RING PUMP OIL LOW LEVEL
 7. CATALYST INLET HIGH TEMPERATURE
 8. CATALYST DISCHARGE HIGH TEMPERATURE
 9. SYSTEM READY TEMPERATURE NOT REACHED
 10. CATALYST HIGH DIFFERENTIAL PRESSURE
 11. SYSTEM AIR LOW PRESSURE
 12. GAS LOW PRESSURE
 13. GAS HIGH PRESSURE
 14. FLAME FAILURE
 15. COMBUSTION AIR LOW PRESSURE
 16. EMERGENCY STOP

REV.	DESCRIPTION	DATE	APPR.	CHK BY	DATE	SCALE	SIZE	DWG NO.	JOB NO.	SHEET	REV.
				JMO	3/10/05	N/A	5	RN10046TP	RN10046	1	1

BISCO Environmental
 Soil & Groundwater Remediation Equipment
 Randolph, Massachusetts 02368

TITLE
 SOIL VAPOR EXTRACTION & THERMAL OXIDIZER
 PROCESS & INSTRUMENTATION DIAGRAM