



UNIVERSAL SILENCER

A DIVISION OF NELSON INDUSTRIES, INC.
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GAS TURBINE SILENCER APPLICATION SHEET

Engr.:

Date:

Customer: _____

Customer Inquiry: _____ Project Reference: _____

GAS TURBINE:

Turbine Manufacturer and Model No.: _____

Turbine Power Rating: _____ (HP or MW)

APPLICATION:

Number of Inlet Silencer(s) Required: _____

Number of Exhaust Silencer(s) Required: _____

Please fill out separate sheets if both Inlet and Exhaust Silencers are required. If a complete inlet or exhaust system design is necessary, please attach a description of the system requirements.

CONDITIONS:

Flow Rate: _____ (lbs/sec, lbs/hr, acfm) Allowable Pressure Drop, Silencer: _____ (inches of H₂O)

Flow Temperature: _____ (°F) Allowable Pressure Drop, System: _____ (inches of H₂O)

NOISE SPECIFICATIONS:

Octave Band Center Freq. (Hz)

| | 31.5 | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Unsilenced | | | | | | | | | |
| Turbine PWL | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| or | | | | | | | | | |
| SPL | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Silenced (required) | | | | | | | | | |
| SPL | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| or | | | | | | | | | |
| Overall SPL or Attenuation _____ dB(A) | | | | | | | | | |

Unsilenced SPL is at _____ feet away from the turbine inlet/exhaust and _____ feet above grade

Silenced SPL is at _____ feet horizontally from the silencer and _____ feet above grade

PWL is Sound Power Level in dB (re 1 picowatt) and SPL is Sound Pressure Level in dB (re 20 micropascals).

MATERIALS (if material isn't specified, Universal Silencer's standards will be chosen):

Shell: Thickness _____ Type _____

Internals: Thickness _____ Type _____

Exterior Surface Preparation: _____

Exterior Finish: _____

MOUNTING:

Silencer flange size: Inlet _____ (inches) Outlet _____ (inches)

Silencer orientation: Vertical Horizontal

Distance from grade to silencer inlet/centerline: _____ (feet)

EXHAUST STACK (if applicable):

Dimensions: _____ Approximate Weight: _____ (lbs)

Wind Load: _____ Seismic Load: _____

Distance from grade to top of stack: _____ (feet)