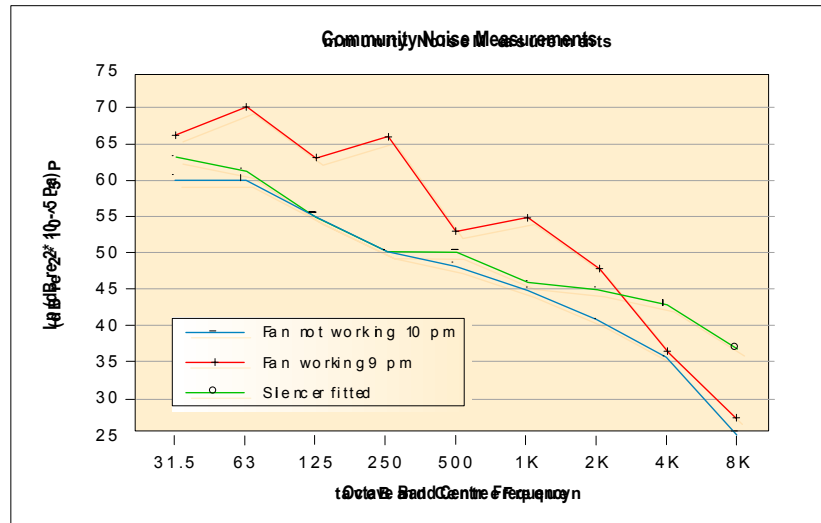


Noise Assessment and Control

Noise Data

Services are available to the extent required by any particular contract or client. As noise control work has been carried out over many years, a large amount of data has been accumulated. This includes noise spectra based on measured noise levels for a wide range of equipment including pumps, motors, compressors, boilers, fans, turbines, flares etc. This information is vital in order to avoid the specification of uneconomic or impossible limits for various items of equipment.



Foster Wheeler's noise control capability includes the skills needed for environmental assessment purposes. The Company has accumulated many years of process industry experience in community and workface noise assessment, prediction and abatement. This has made Foster Wheeler a recognised leader in this field.

Noise Calculations

Calculation methods are generally based on the industry standards recommended in EEMUA* publications 140, 141 and 142. Foster Wheeler has developed its own in-house computer program for calculation of work area and community noise levels. The program can include various ground effects and special attenuation effects can be used on a blanket or individual source basis.

It includes a "reverberant room" procedure which can calculate noise levels at any location in an enclosed area, as well as predicting the level of noise passing out through the walls and roof. This feature is particularly useful for factory buildings.

Range of Services Available

Foster Wheeler offer the following:

- Coordination of project noise control activities
- Surveys of existing community and plant noise levels

- Assessment of potential incremental noise levels and recommendation of suitable noise limits, taking account of such standards as:

- BS 4142 - Rating of Industrial Noise Affecting Mixed Residential and Industrial Areas
- BS 5228 - Noise Control on Construction and Open Sites
- PPG 25 - Planning and Noise
- WHO Guidance on noise levels

- Specification of suitable noise limits for individual pieces of equipment so as to achieve the overall plant noise limits

- Specification of noise attenuation measures such as silencers and acoustic enclosures with special attention when appropriate to attenuation in the low frequency bands

- Review and comment of equipment supplier proposals and noise data to ensure overall plant noise levels will achieve targets

- Preparation of final noise report

- Follow-up noise surveys

