

# ENCLOSURES

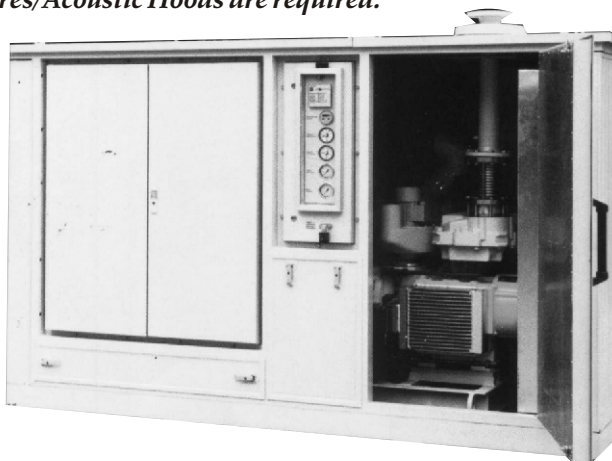


## EVEREST ACOUSTIC HOOD / ENCLOSURES

**NOISE INSULATION ENCLOSURES ~ ACOUSTIC HOODS** Everest acoustic enclosures are one of the most effective means for containment of excessive noise and for the insulation of the workers from the noise. Even where the silencers are used, they can only treat the air borne noise. The treatment of mechanical noise from the blower, motor etc. is beyond the scope of silencers. Thus, in order to achieve low noise levels, that are often statutory requirements, Noise enclosures/Acoustic Hoods are required.

Our technology is so flexible, we can custom manufacture "Special Enclosures" to suit our various blowers and individual requirements.

Everest has developed these acoustic hoods for the blower assemblies and supplied the same to many noise pollution conscious industries such as N.T.P.C., Daliem, Driplex, Ion Exchange (India) Ltd. etc. Everest's economical design provides noise reduction of 12-25 dB(A) bringing down the total noise emitted to safe acceptable limits.



### NOISE POLLUTION AND IT'S EFFECTS

The unwanted, undesired sound is called Noise. It causes general feeling of annoyance, interference with wanted sound, fatigue, damage to auditory mechanism and reduction in efficiency of working performance. Regular exposure of workers to higher levels of noise results in hearing loss. The maximum permissible exposure to sound under OSHA (Occupational Safety & Health Regulations of U.S.A, Department of Labour) are as under:-

#### Sound Pressure Levels and Allowable Exposure Time under OSHA (Occupational Safety & Health Regulations)

Sound Pressure Levels (dB)	Maximum Daily Exposure Duration Hours
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	0.5
115	0.25

When the daily noise exposure is composed of 2 or more periods of noise exposure of different levels, their combined effect should be considered rather than the individual effect of each. *If the sum of the following fractions i.e.*

**If  $C_1/T_1 + C_2/T_2 + \dots + C_n/T_n > 1$  then the mixed exposure should be considered to exceed the limits.**

**Where  $C_n$**  Total time of exposure at a specified noise level and  
 **$T_n$**  Total time of exposure permitted

When employees are subject to noise levels exceeding the safe limits feasible administrative & engineering controls should be utilized. If such controls fail to reduce the sound levels within the safe permissible limits, personal protective equipment's, such as ear plugs, caps etc. be provided and used to reduce sound levels to acceptable limits.

### NOISE CONTROL

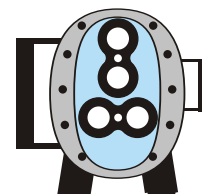
Noise can be effectively controlled within the acceptable levels by:

- 1) Noise Control at Design Stage
- 2) Noise Control at Source
- 3) Control of Noise Transmission Path
- 4) Protective Measures at the Receiver

WE JUST DON'T OFFER BLOWERS, WE OFFER SOLUTIONS!

#### PRODUCT RANGE

Air Blowers~Water Cooled Blowers~Gas Blowers~Vacuum Booster Pumps~Acoustic Hoods & Enclosures~Dry Vane Pumps



**EVEREST** Transmission

*Everest sound reduction enclosures have been designed for effective noise reduction of Blowers placed inside.*

### SPECIFICATIONS

**Design** The sound reduction enclosures are specially designed to reduce noise pollution to suit the local environment. These are engineered to take care of air intake and outlet, resulting in a pleasing and attractive design.

**Construction** The robust bodywork of sound reduction enclosures is due to its construction from preformed heavy gauge sheet steel section and its reinforcement with fabricated superstructure. Rubber gaskets are provided to all doors and external joints to resist weathering. The bolted structure provides easy removal of panels for maintenance of servicing of Blowers.

**Air Circulation** Sufficient cooling air inlet acoustic louvers are provided in the enclosure for efficient air circulation avoiding derating of the machine.

**Installation** The sound reduction enclosures are preassembled on a support frame and can be easily and quickly assembled at site.

### SPECIAL FEATURES

**Noise Control** Noise level reduction to the tune of 25 to 30% is achieved.

**Mobility** The enclosures can be easily shifted or transported.

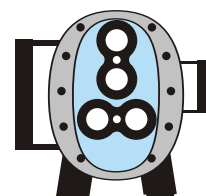
**Ease of Maintenance** Adequate space is available inside the canopy for easy maintenance.

**Elimination of Civil Work** Enclosures are suitable for open installation and hence require no separate building or shed.

### SOUND REDUCTION ENCLOSURES FOR EXISTING BLOWERS/GENSETS/MACHINERY

For all types and ratings of Blowers, gensets and other machinery such as compressors, drill jigs, bare sound reduction enclosures are offered as factory made assembled product. Turnkey projects are also executed using loose panels of enclosures.

*Everest, the manufacturers of Everest Roots Type Twin Lobe Rotary Air Blowers, can control noise effectively, at source, by incorporating design modifications, careful blower & accessory selection and by use of acoustic hoods or noise insulation panels to within the safe acceptable levels. For all your needs for effective noise control of blowers, contact:*



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**EVEREST** Transmission