TABLE 43-C

OCTAVE BAND ANALYSIS OF THREE TYPICAL INDUSTRIAL NOISES

Overall Level	Sound Pressure Level in db, re 0.0002 dyne/sq cm							
	Octave band (c)							
	37 5 to 75	75 to 150	150 to 300	300° to 600°	600° to 1,200°	1,200° to 2,400°	2,400 to 4,800	4,800 to 9,600
103	84	85	87	93	93	95	97	87
101	91	97	98	85	85	81	80	82
95	84	84	85	84	84	86	88	84

°Octave bands specified in the tentative hearing conservation level

isfactory for hearing conservation purposes, *but it is not always practical or possible.* A reduction in the amount of noise produced *by a machine* or a machining process may be accomplished by

1 Careful acoustical design of new machines
2 Modification of design of machines now in use
3 Proper upkeep and repair of equipment
4 Muffling of exhausts
5 Changes in methods of processing

In contrast to the loud noises just cited, a survey° of private and government engineers who design office buildings, stores, and hospitals found average (overall) sound levels considered good air conditioning design practice to be

General office	47 db
General	44
Reception room	43
Conference room	39
Private office	38 5
Hospital patient room	38

Reduction in amount of noise transmitted through air or building structures. Control of noise transmission may lower the overall noise level in a general work area, but it has little if any effect on the noise levels in the immediate vicinity of the source. A reduction in the amount of noise transmitted to the work area can be accomplished by

1. Increasing the distance between the work area and the source of noise

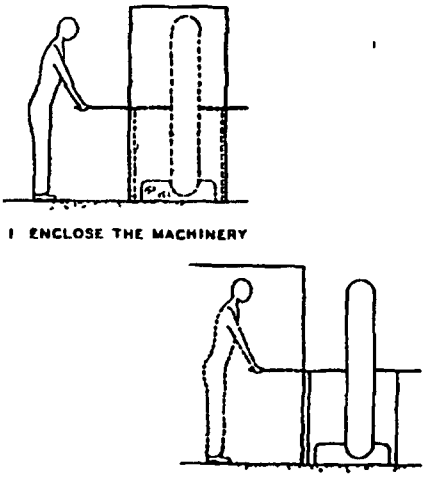

Fig. 43-7. Two methods of isolating disturbing noises

2 Constructing barriers between the work area and the source of noise.
3 Sound treating work areas to reduce reverberation
4 Placing equipment on vibration mounts

°Technical Report No. 35, Building Research Advisory Board, Washington, D C (1959).