

noiseletter

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Problem-solvers in vibration isolation,
noise and shock control.

Kinetics Noise Control Curtains Reduce Noise at Jewelry Manufacturing Plant

A common problem encountered in forming plants is maintaining productivity while limiting noise exposure of press operators.

Such was the dilemma faced by a leading Native American Indian jewelry manufacturer. Nine drop hammers, each with 500 lbs. (227 kg) capacity, created average noise levels in excess of 98 dBA at the operators' positions.

The design goals presented to Kinetics Noise Control were to supply a system which would reduce noise levels to OSHA standards or less at the operators' positions, but which would not interfere with material flow, and which would lower noise levels remotely from the drop hammers to 80 dBA.

The Kinetics solution was to strategically locate type KNC-100BQQ composite curtain panels around each press to form a row of three-sided enclosures (Fig. 1). Structure-borne noise transmission was reduced by mounting each press on Kinetics model KLM machine mounts (Fig. 4). Average noise levels, recorded at each operator's position, dropped to 90 dBA - an 8-dBA reduction.

An additional model KNC-100BQQ curtain was added to separate the drop hammer area from the rest of the plant, resulting in a plant ambient noise of less than 80 dBA (Fig. 2).

The combination of quality materials, experience, and innovative engineering led to a noise control solution conducive to the manufacturer's production requirements.



Figure 1

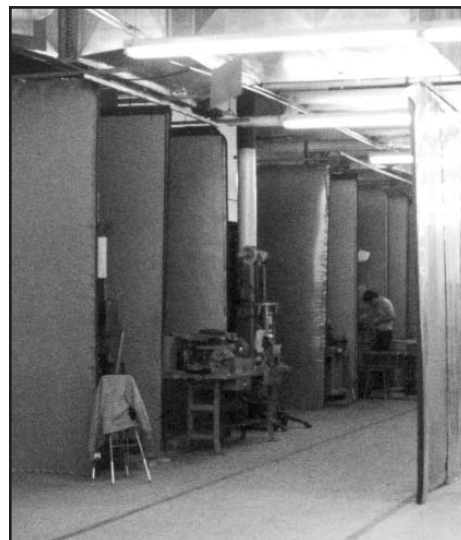


Figure 2

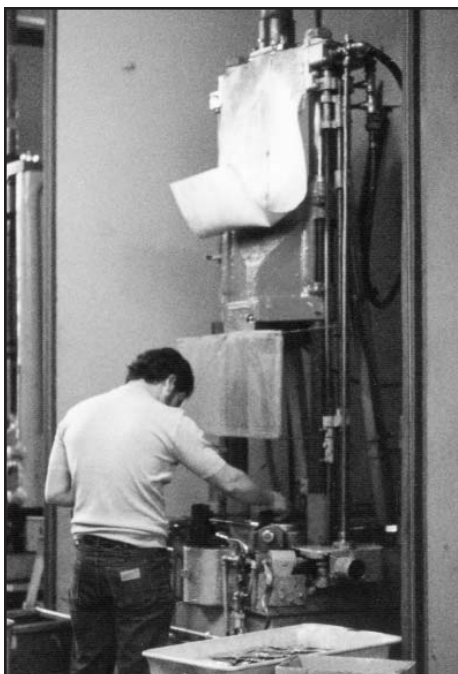


Figure 3

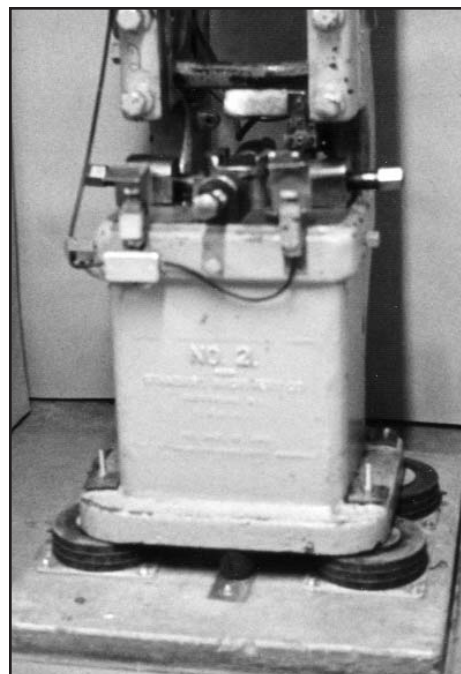


Figure 4