



**NOISE CONTROL
SERVICES LTD.**

CI/SfB

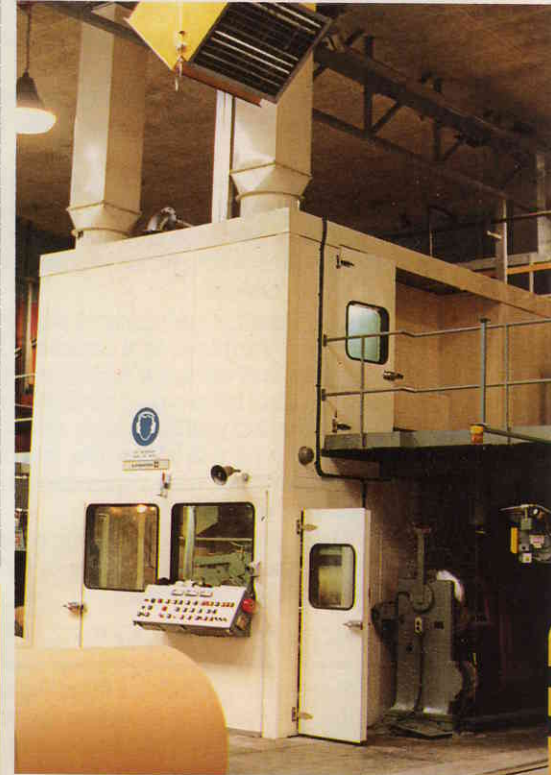
(68.8)

AUGUST 1983

100⚡50

NC System

**Modular Engineered Acoustic
Structure**



Noise Control Services Ltd NC System Modular acoustic enclosures are designed for cost effective noise control in industrial, commercial and building service applications. NCS' considerable experience in the construction and installation of enclosures for noise control has resulted in the practical and functional 100/50 NC System.

Enclosures can be built up in standard sizes to suit any requirement. They can be installed and disassembled as required to suit production changes and plant layout. The acoustic panels are of a composite construction and are used in conjunction with ancillary equipment to provide complete noise control installations affording good sound insulating and absorptive qualities together with durable construction, demountability and flexibility.

APPLICATIONS WITH SPECIAL REQUIREMENTS

In many instances an enclosure is required with a greater noise reduction than the standard system will provide. NCS will design and supply enclosures with panels manufactured to provide a suitable acoustic performance.

The acoustic components of the 100/50 NC systems are available as individual parts. Many customers utilise the silenced ventilation systems and acoustic doors to complete solid concrete block acoustic enclosures.

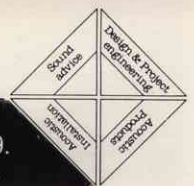
Our acoustic engineers are always on hand to help solve difficult applications.

No matter what the nature of the noise problem we can install an NC system specifically designed for your problems.

APPLICATIONS

Machinery Housings, Fan Plenums, Compressor Enclosures, Sound Barrier Walls, Quality Control or Research Test Rooms, Power Plant Offices, Sound Proof Offices or 'Quiet Havens', Noise Shields, Production Tunnels, Portable Pre-Assembled All Purpose Rooms, and Crane Cabs

**6 CANON PLACE, PAKURANGA,
AUCKLAND. TELEPHONE 576-4319.
P.O. BOX 82-126 HIGHLAND PARK.**



The 100/50 NC Systems are available in two models. The panels are normally supplied in nominal thicknesses of 50mm or 100mm dependent on the acoustic performance requirement. All standard panels comprise an outer-skin of pre-galvanised sheet steel, internal acoustic media, inert incombustible verminproof glassfibre retained behind the inner-skin of pre-galvanised perforated sheet steel.

The panels are fitted with channel frames and internal stiffening members to provide mechanical strength.

A variety of joining systems can be used between the individual panels. NCS have developed an 'H' section which provides a double passage acoustic seal that provides acoustic performance equal to the panelwork system.

The standard finish is galvanised sheet steel but all systems can be supplied in a number of alternative finishes dependent on each application. Internal surfaces may also be treated before construction of the panels. Internal painting after construction is not recommended as it will affect the internal absorption coefficient and consequently the overall performance of the system.

Acoustic Media retention by a fine plastic film allows for internal steam cleaning in industrial applications where required.

ACOUSTIC PERFORMANCE

By selecting either the 100 or 50 NC system most applications will result in compliance with statutory requirements for internal noise criteria, or environmental criteria as required.

After on site sound pressure level readings taken by NCS Ltd using Bruel & Kjaer precision grade sound measuring equipment and having been completed and the expected performance agreed with the customer we guarantee to meet the specified criteria.

The acoustic performance of panels and components can be defined in several ways. At NCS Ltd we can provide 'sound reduction' figures from previous installations, or independent laboratory test figures providing transmission loss and absorption coefficient data.

INSTALLATION

By experience we have found there is no such unit as a totally standard component enclosure system. Every application must be treated as an individual project to achieve optimum acoustic performance and practicability of design.

Due to the high degree of accuracy required to achieve optimum acoustic performance NCS have trained a specialist installation team. This team has the experience required to enable us to fully guarantee our product.

Should our customer not require our erection team NCS can provide detailed installation drawings and site supervision by an acoustic project engineer if required.

ANCILLARY EQUIPMENT

Windows —

In many installations a high degree of visibility is essential for safety as well as visual access. Double glazed acoustic windows are used. They employ air tight seals, absorptive lined reavels and safety glass. A dessicant material fitted within the window reavel will prevent any fogging.

Doors —

Both single leaf access doors through to large double leaf machinery doors of similar construction and performance to the acoustic panel system may be incorporated and usually form an important feature in the acceptibility of the enclosure design. They are fitted with compression type seals (double for the 100 system) heavy duty hinges and pressure type door hardware.

Apertures —

Cutouts or apertures for services, pipes and electrical components are fitted with removable heavy duty cover plates complete with neoprene seals. Air inlet and outlets are fitted with splitter type duct attenuators as appropriate. Individual designs to meet customer requirements can be provided.

Structural Support —

For numerous applications both 100 and 50 systems are self supporting. For projects where large dimension or numerous panels are to be removable purpose designed supporting steel structures are provided.

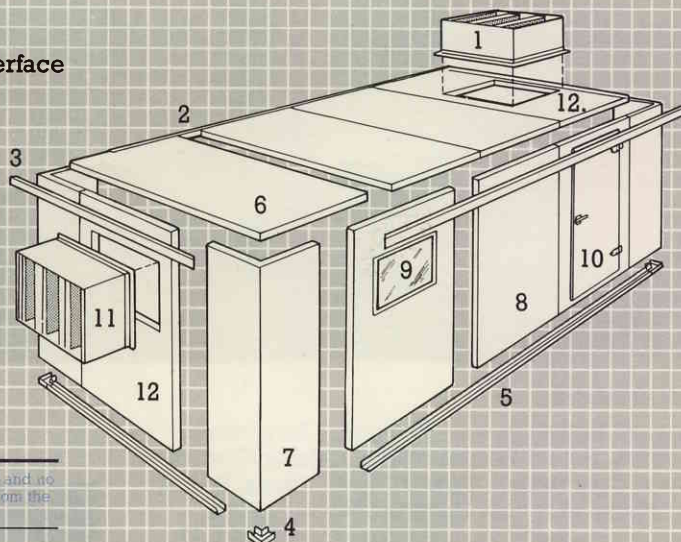
Ventilation —

Ventilation requirements are determined for individual applications. Silenced forced ventilation systems are provided employing duct silencers, 'QUIETFLOW' acoustic louvres and either axial flow or centrifugal fans.

Warranty —

All NC systems and components are fully guaranteed against material defects or workmanship for a minium period of twelve months.

1. Discharge Air Silencer
2. & 3. Roof Apron for Wall-Roof Interface
4. Corner Channel Floor
5. Floor-Channel
6. Roof Panels
7. Wall Corner Panel
8. Wall Panel
9. Window Panel
10. Door Panel
11. Inlet Air Silencer
12. Silencer Panel



The information contained herein is believed to be correct and no liability is accepted for any loss which may be sustained from the use of the information.