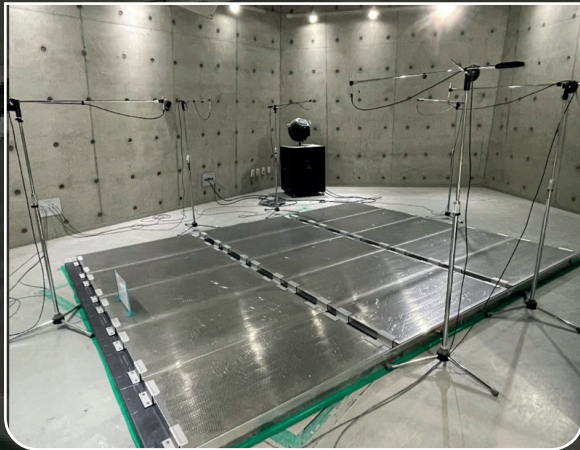
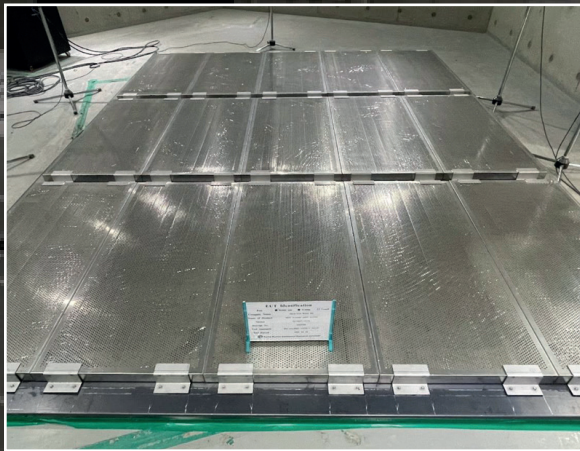
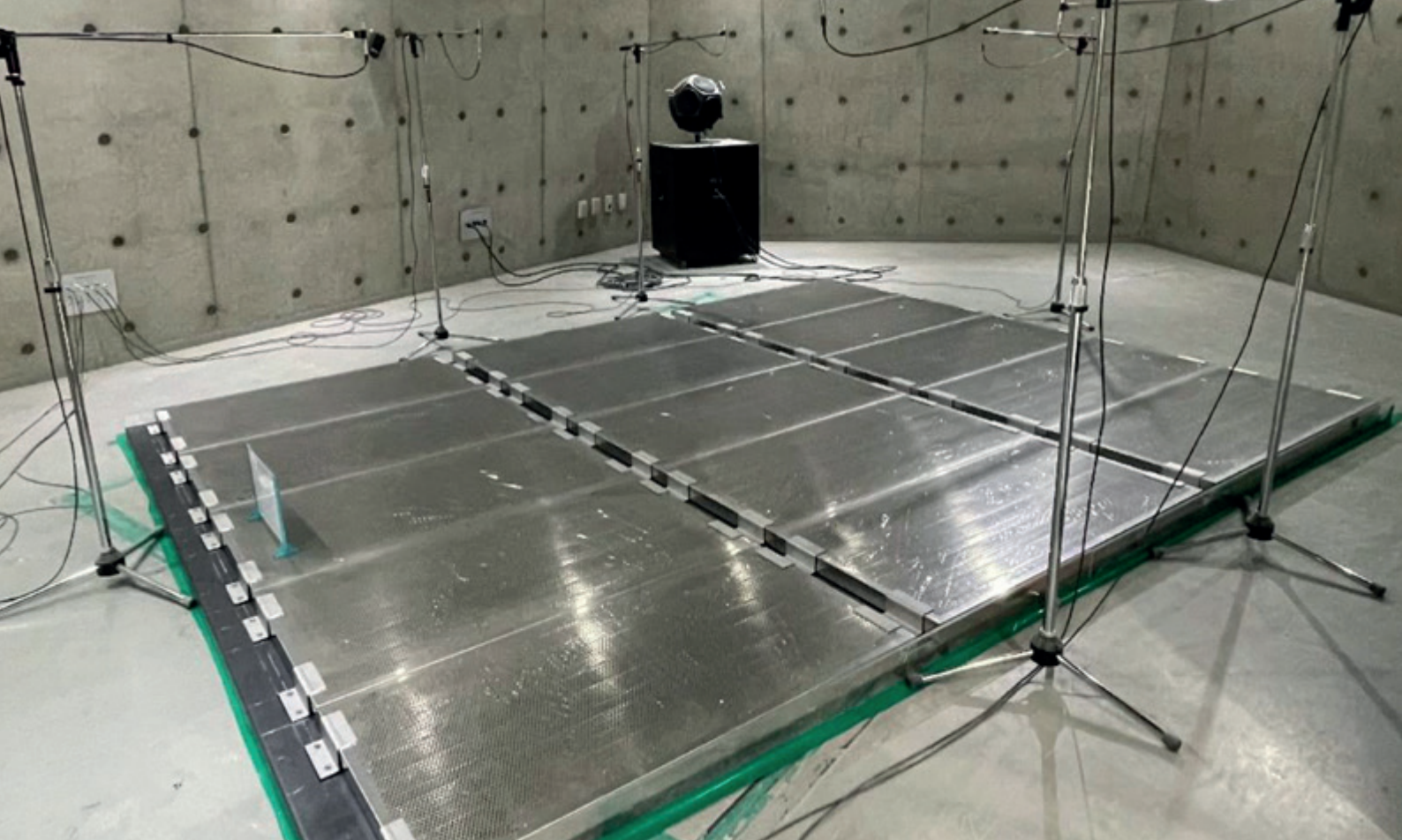


Acoustic Wall / Sound Absorption Cassettes

EUT Identification	
Test	☒ Before test ☒ Testing ☐ Tested
Company Name	Mech-Tool Korea Inc
Name of Product	MTE Acoustic panel system
Model	EC70027-AT-01
Receipt No.	2410709
Test Standards	ISO 354:2003, ASTM C 423-22
Test Period	2024. 04. 04

 Korea Marine Equipment Research Institute





MTE Acoustic Wall Sound Absorbing Cassettes

With more than five decades of specialist experience, MTE has become recognised worldwide for protecting people and assets from fire, blast and radiant heat hazards across the oil & gas, nuclear, petrochemical and renewable energy sectors. Building on its origins supporting North Sea oil and gas developments, MTE has continually advanced its technical capability, applying this heritage of engineering excellence to modern high hazard environments.

The MTE Acoustic Wall is engineered to deliver high performance sound absorption in manned areas, ensuring improved comfort, communication, and operational efficiency in demanding industrial environments. MTE acoustic wall sound absorbing cassettes provide reliable and consistent acoustic control across a full range of facilities.

Acoustic Performance

MTE acoustic products are independently tested and classified in accordance with BS EN ISO 354:2003 for sound absorption performance.

Noise Reduction Coefficient (NRC): 0.85

Class B – Extremely Absorbing

Sound Absorption Coefficient (α_s): 0.81

Class B/C – Extremely to Highly Absorbent

This performance ensures effective reduction of reverberation and unwanted reflected sound, contributing to a safer and more comfortable working environment.

Cassette Construction

MTE sound-absorbing cassettes are engineered for durability, acoustic efficiency, and ease of installation:

Supplied in standard sizes or manufactured to suit the structural grid, minimising site cutting and material wastage.

Fabricated from perforated steel sheet formed into a rigid tray.

Cassettes incorporate an unperforated perimeter band, providing structural framing and clean visual definition.

Rear face options include:

Solid steel plate

Perforated steel plate

Open-back design with steel straps, securing insulation while maintaining rigidity

This adaptable construction approach allows the system to integrate seamlessly into new build and retrofit projects.

Surface Finish & Integration

To ensure visual consistency across the installation, MTE acoustic cassettes can be supplied with matching surface finishes to surrounding non-perforated wall systems. This creates a uniform aesthetic while delivering enhanced acoustic performance.

Insulation & Environmental Protection

Each cassette incorporates encapsulated acoustic insulation:

Insulation is enclosed within a protective film membrane, preventing the release of fibres or dust into the environment.

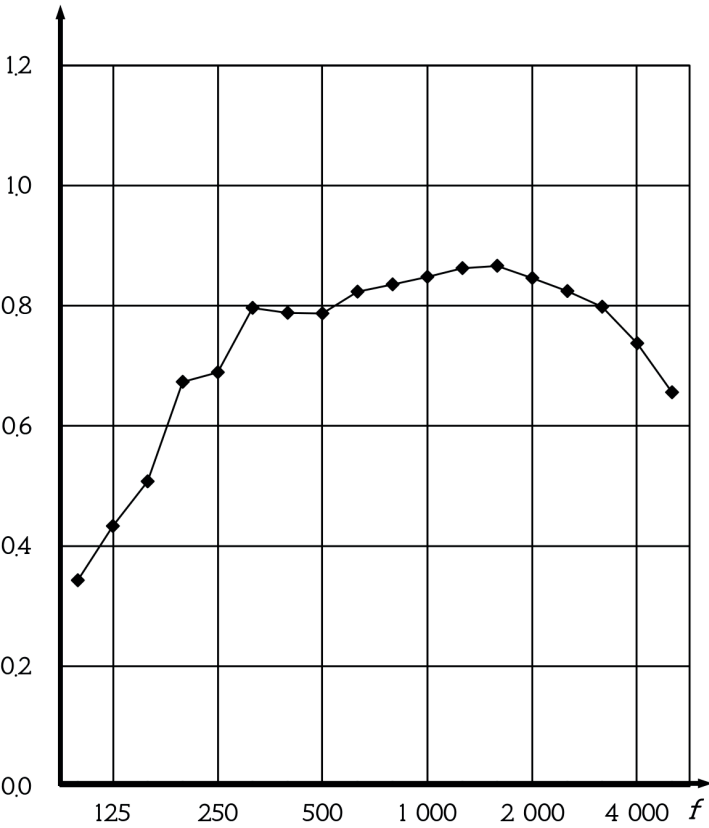
The membrane also protects against moisture ingress, maintaining the integrity of the acoustic material.

The assembly maintains flame-retardant properties for safe use in regulated industrial environments.

Together, these features ensure a durable, low-maintenance acoustic system suited to offshore modules, plant rooms, control environments, workshops, and manned process areas.

1.6 TEST RESULT

frequency f Hz	α_s one-third octave –
100	0.34
125	0.43
160	0.51
200	0.67
250	0.69
315	0.80
400	0.79
500	0.79
630	0.82
800	0.84
1 000	0.85
1 250	0.86
1 600	0.87
2 000	0.85
2 500	0.82
3 150	0.80
4 000	0.74
5 000	0.66



Key

α_s sound absorption coefficient
 f frequency, in Hz

The noise reduction coefficient in accordance with ASTM C 423 :
NRC = 0.80



A global leader for over 50 years

The MTE Advantage

- ✓ **Proven Performance** – Designed to meet your environmental requirements
- ✓ **Custom-Built Solutions** – Tailored to your project needs
- ✓ **Trusted Globally** – Installed in major energy and industrial facilities worldwide
- ✓ **Efficient Installation** – No specialist tools required



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