TGENIUS
INNOVATION • DEVELOPMENT • DELIVERY

T-GENIUS

ACOUSTIC SYSTEMS

Industrial noise reduction systems

for industry, energy, infrastructure and construction.

NOISE REDUCTION
at source and in the surrounding area

MODULAR SYSTEMS
fixed and mobile

SALES / RENTAL
design • installation • service

NOISE REDUCTION
PROTECTION
MOBILITY



CLIENT CHALLENGE

NOISE. CONDITIONS.

OPERATIONAL CONTINUITY.

The acoustic protection system must perform in a demanding industrial environment without disrupting plant operations.

01 HIGH NOISE LEVELS

Machines and processes generate noise in the immediate surroundings of employees.

02 WEATHER CONDITIONS

Wind and low or high temperatures affect working conditions and installations.

03 OPERATION WITHOUT DOWNTIME

The solution should be installed and relocated without stopping plant operations.

04 VARIABLE CONFIGURATION

Temporary and permanent zones require a modular system tailored to the project.



ENERGY • INDUSTRY • INFRASTRUCTURE

» ACOUSTIC PROTECTION SHOULD SUPPORT OPERATIONAL CONTINUITY, NOT CREATE ANOTHER CONSTRAINT.

T-GENIUS SOLUTIONS

ONE PLATFORM.
MANY APPLICATIONS.

We design and deliver modular acoustic systems tailored to operating conditions, installation time and the cooperation model.

01

BARRIERS AT THE NOISE SOURCE

Systems reducing noise emissions directly at machines and processes.

02

MOBILE AND TEMPORARY SYSTEMS

Solutions for construction sites, maintenance, service zones and temporary enclosures.

03

ACOUSTIC WALLS AND ENCLOSURES

Fixed, sliding and modular systems for industry, energy and infrastructure.

04

SALES / RENTAL / SERVICE

Design, installation, relocation and technical support tailored to the project.

FROM TEMPORARY PROTECTION TO A COMPLETE ACOUSTIC SYSTEM.



HEIGHT



FOLDING WALLS



SLIDING WALLS



OUTDOOR

DIFFERENT SYSTEMS • ONE T-GENIUS PLATFORM

MODULAR SYSTEM

ACOUSTIC SYSTEM 4 IN 1.

One structure combines acoustic, weather, protective and energy-efficiency functions.

1 NOISE REDUCTION

Reduction of noise emissions in the immediate vicinity of the source.

2 SIDE PROTECTION

The system can provide side protection and fall protection.

3 WEATHER PROTECTION

Protection of work areas and equipment against wind and weather conditions.

4 ENERGY EFFICIENCY

Reduced heat loss and improved control of conditions around equipment.

FOUR FUNCTIONS. ONE SYSTEM.





PRESS • FASTEN • SECURE

INSTALLATION ON STANDARD SCAFFOLDING STRUCTURES

ACOUSTIC PARAMETERS

PERFORMANCE YOU CAN MEASURE.

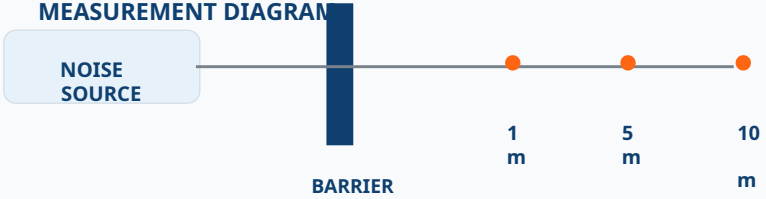
Example noise-reduction values based on test data for different barrier heights and measurement distances.

21.2 dB
AVERAGE REDUCTION

46.7 dB
MAXIMUM REDUCTION

101 dB(A)
SOURCE LEVEL
IN TEST CONFIGURATION

MEASUREMENT DIAGRAM



EXAMPLE MEASUREMENT RESULTS

BARRIER HEIGHT	1 m	5 m	10 m
5 m / 18 m	47	38	31
3 m / 18 m	35	30	28

NOTES ON RESULTS

- A higher barrier increases the potential for noise attenuation.
- The result depends on system geometry and source location.
- The data are indicative for the tested configuration.

Results must be interpreted in relation to the specific installation.

THE RESULT DEPENDS ON SYSTEM GEOMETRY, SOURCE LOCATION AND INSTALLATION CONDITIONS.

APPLICATIONS

ONE SYSTEM.
FOUR OPERATING ENVIRONMENTS.

T-Genius systems can operate as fixed, mobile or temporary solutions, depending on the facility and noise source.



1

INDUSTRY

Production lines, halls, heavy-industry plants and service zones.



2

ENERGY

Generator sets, CHP, auxiliary equipment and installations operating near buildings.



3

CONSTRUCTION

Construction sites, refurbishment, upgrades and temporary acoustic enclosures.



4

INFRASTRUCTURE

Internal roads, process routes and areas close to residential zones.

FROM INDUSTRIAL INSTALLATIONS TO TEMPORARY PROTECTION ON CONSTRUCTION SITES.

COOPERATION MODEL

SALES, RENTAL,

INSTALLATION AND SERVICE.

We deliver the system in a model tailored to the project - from single supply to full installation, relocation and technical support.

1

SALES

Supply of panels, a complete system or a configuration tailored to the facility.

2

RENTAL

Temporary solutions for construction, refurbishment, service shutdowns and emergency works.

3

DESIGN AND CONFIGURATION

Selection of height, length, module type and installation method for operating conditions.

4

INSTALLATION, RELOCATION AND SERVICE

System commissioning, subsequent relocation and operational support.


MODULAR SYSTEM


OUTDOOR


MOBILITY


SPECIAL PROJECTS

The cooperation model depends on project duration, budget and facility type.

A FLEXIBLE DELIVERY MODEL FOR PERMANENT, TEMPORARY AND EMERGENCY PROJECTS.

MOBILE SYSTEM

MOBILE ACOUSTIC PROTECTION 3 IN 1.

System mounted directly on construction and industrial fencing. Fast to install, dismantle and relocate.

01

NOISE REDUCTION

Reduces the impact of works and equipment on the immediate surroundings.

02

DUST PROTECTION

Helps limit the spread of dust beyond the work zone.

03

VISUAL SCREENING

Organises the work area and limits direct visibility into the work zone.





RAPID ZONE PROTECTION

- construction and refurbishment
- service zones
- temporary projects

MOBILITY • RAPID RELOCATION • REPEATED USE

A SOLUTION FOR CONSTRUCTION, REFURBISHMENT, SERVICE ZONES AND TEMPORARY AREAS.

FOLDING WALLS

OPEN THE SPACE WHEN YOU NEED IT.

Folding acoustic walls create flexible work zones that can be quickly opened or closed without permanent construction.



INDOOR

T20 | FOLDING WALL

For halls, production lines and zones where the space needs to be periodically opened.

- approx. 10% of length when folded
- noise reduction + sound absorption
- configuration tailored to the facility



OUTDOOR

T50 | FOLDING WALL

For outdoor applications and demanding industrial conditions where a flexible barrier is required.

- approx. 10% of length when folded
- operation in changing conditions
- project-specific solutions

INDOOR AND OUTDOOR - THE SAME FLEXIBILITY, DIFFERENT OPERATING ENVIRONMENTS.

SLIDING WALLS

ACCESS WHEN YOU NEED IT. ACOUSTIC PROTECTION WHEN REQUIRED.

Sliding acoustic walls allow the zone to be opened and closed without blocking personnel access or internal material transport.

01

PERSONNEL ACCESS

Rapid opening of the zone where regular personnel access is required.

02

MATERIAL TRANSPORT

Opening the route for trolleys, internal transport and process servicing.

03

INDOOR / OUTDOOR

Configurations for halls and outdoor facilities, selected for the conditions of the specific project.



T20 | INDOOR



OUTDOOR

Outdoor versions for industrial applications and changing operating conditions.

ACOUSTIC PROTECTION THAT DOES NOT BLOCK LOGISTICS OR ACCESS TO THE ZONE.

FIXED WALLS / FAST

PERMANENT PROTECTION.
FLEXIBLE CONFIGURATION.

Fixed acoustic walls improve sound conditions without the need for permanent building construction.

01

REDUCTION AND ABSORPTION

Noise reduction and minimisation of reflections from hard surfaces.

02

REUSE

Changing needs do not mean losing the system - the wall can be reconfigured and used again.

03

FACILITY-SPECIFIC CONFIGURATION

Layout tailored to the workstation geometry, process and available space.

04

INDOOR / OUTDOOR

Versions for halls and outdoor applications and more demanding operating conditions.



T20 FAST | INDOOR



FAST OUTDOOR

Flexible outdoor wall for industrial and commercial facilities, which can be repositioned in a different layout.

PERMANENT ACOUSTIC PERFORMANCE WITHOUT LOSING THE ABILITY TO RECONFIGURE THE SYSTEM.

WORKSTATIONS

FROM THE PROBLEM TO A CONTROLLED ZONE.

Two typical cases where acoustic systems can reduce noise at source and improve working conditions.

MANUAL CLEANING

PROBLEM	SOLUTION	RESULT
Noise generated by the process	Acoustic curtains or modular panels	Noise reduction
Strong reflections from hard surfaces	Partially enclosed work zone	Improved comfort and communication
	Absorption reducing reverberation	

CLEANING / BLASTING CHAMBER

PROBLEM	SOLUTION	RESULT
Very high noise level	Barrier around the chamber	Noise reduction at the source
Difficult working conditions for operators	Controlled acoustic barrier	Improved safety and lower impact on the surroundings
	Noise-source isolation	

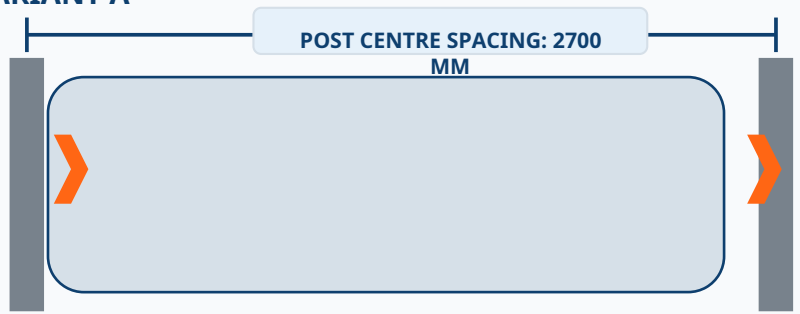
THE BEST RESULTS COME FROM REDUCING NOISE AS CLOSE TO ITS SOURCE AS POSSIBLE.

TECHNICAL CONFIGURATION

SYSTEM TAILORED TO THE STRUCTURE.

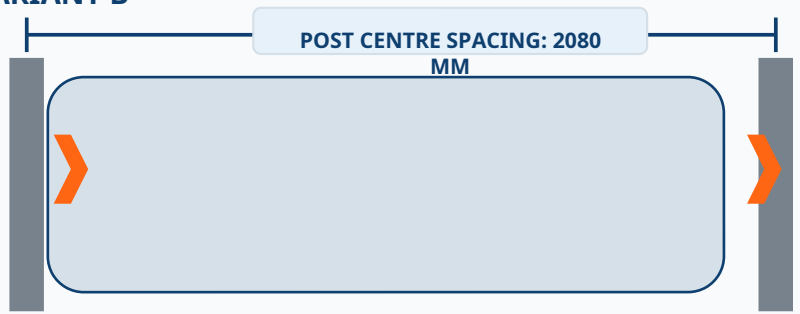
Panels are configured for the actual post spacing, with controlled installation overlaps and the option of light compression at the corners.

VARIANT A



Heavy foil	2840 mm	Thickness	50 mm
Acoustic barrier	2560 mm	Panel weight	25.5 kg

VARIANT B



Heavy foil	2220 mm	Thickness	50 mm
Acoustic barrier	1940 mm	Panel weight	19.6 kg

VERTICAL OVERLAP	140 mm per side	TOP / BOTTOM OVERLAP	70 mm + 70 mm	FILLING	soft, lightly compressible

T-GENIUS ACOUSTIC SYSTEMS

LET'S TALK ABOUT YOUR NOISE ZONE.

We select the solution for the noise source, facility geometry, operating conditions and the time in which the system must be commissioned.

DESIGN | SALES | RENTAL | INSTALLATION | SERVICE

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