



BAR Stool Sitting



Airports are evolving, becoming dynamic and complex mega-urban multicultural environments where people spend time waiting, eating, working, shopping and relaxing. The undeniable requirements for such a "new village" are ergonomic comfort during waiting time, technological support for the working travellers, perisonalized seating solutions for differing cultural and accessibility needs, flexibility and adaptability for high density traffic areas.

| scenario |

Intensive SITTING

NORMAL Sitting





Active STANDING





aeris

Aeris is the new public seating system designed by Grimshaw and manufactured by Tecno, conceived for the new high traffic airports & stations worldwide.









Design

The sober yet elegant design of Aeris is the expression of a high technological level and an high industrialization talent.

Transparency of the system facilitate safety and security. The high compositional flexibility and modularity enables the system to be arranged in different configurations and layouts.

The system is also very versatile and reversible. The supporting frame of the seat enables to exchange the elements of the seat and the armrests even after initial installation, without any need of further changes or adjustments or the danger of damaging the elements.



tubient seat Depth

Ergonomy

The study on the seat comfort has led to the definition of a silhouette able to naturally support the body.

To satisfy the needs of regular use, the seating is designed to ensure maximum comfort even for long waiting periods. Ergonomically shaped seats and backrests with lumbar support help the body assume a correct posture and avoid the formation of pressure points. Seat depth and height has been carefully chosen to facilitate use even by those with reduced mobility.







Modularity

Aeris allows to create different configurations joining the single elements or using linear and angular connection components.

The modular system allow to configure the product on the base of the user needs.



Adaptability

Aeris allows to be easily adapted to different configurations joining the single elements or using linear and angular connection components.

The modular system allow to adapt the layout on end-user needs, ranging from linear to inside or outside curved configurations.



Flexibility

The seating system can be arranged favouring a higher number of seats or a more spaced and comfortable configuration.

The chaise longue, as well as the leaning bar and the seat version for people with disabilities complete the product range.

Two different typologies of armrests are available, dividing or containing, can be combined forming different seating configurations





Maintenance

The Aeris design addresses all the maintenance challenges of busy public environments : especially designed for public space areas with frequent "movers", where elegance joined to easy maintenance is particularly essential.

Durable materials and high performance finishes resist abuse.

The bench structure and surrounding floor are open and accessible for cleaning. In the unlikely event of damage, the modular construction allows individual components to be replaced quickly.

The bench concept has been engineered as a "Zero Maintenance". It doesn't require any special maintenance. Seat shells are made in self-coloured injected polyurethane, easy to maintain and clean.



| technical data |



Tecno





power management

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Front View



Bottom View





Side View with Power & Data Module







| details |

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The connection joint is fixed at the beam, the plastic cover can be removed for the joint to be assembled.





Connection with additional module. Bench module (linear or angular) to manage aggregations.





Simple, Quick and Easy fixing system to the main beam, both for armrest, side table and shells .





The legs characteristics allow various anchoring solutions, with anchor screws, simple rivet pin or freestanding rubber feet .





| options |







← 530 → + 530 → + 530 → + 530 → + 530 → + 530 → +





- 600 ------ 600 ------ 530 ------ 600 ------ 600 -------











| intensive vs comfort |

Shell Width mm. 520



| armrests |

The legs characteristics allow for various anchoring solutions as anchor screws, simple rivet pins or Freestanding Rubber feet .



Curved

Full flexibility for mixing and matching materials, the system not only offer integrated accessories but also offer extensive layout configurations – ranging from linear to **inside** or **outside** curved configurations.





| backless |

Backless seats provide an identical profile aesthetic, increased sightline visibility and easy seating access from either side of the bench. Design & Details fully coordinated with the collection .





|chaise longue|





| sit-standing |

Perch seats provide convenient short-term rest in a semi-standing posture that's ideal for busy, fast-paced environments where space is at a premium.





| finishes & materials |

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Structure, Legs & Armrests

AluminumCorianHPL

Side Tables, 12 mm

Shells





| test & certificates |





APPLICANT

TECNO SPA Name:

Address: Via Milano 28 Casella Postale N.121 Mariano Comense, Co 22066 Italy



Product : Panca Aeris. UNI EN 16139:2013 (Stability Only)

DATE

Sample in: 06/05/2017 Tests start: 07/05/2017 Tests end: 18/05/2017 Report issue: 18/05/2017

OVERALL DIMENSIONS:

Measured:	Depth:	640 mm;	Height:	900 mm	
	Width:	2360 mm	Weight:	61 kg	
Nominal:	Depth:	ND;	Height:	ND;	
	Width:	ND;	Weight:	ND;	
Sample number	951887	Order number: 11767267			

Sample number 321991

REFERENCE STANDARD

EN 16139:2013 + EN 16139:2013/AC:2013 Furniture. Strength, durability and safety. Requirements for non-domestic seating.

NOTE: On customer's request only the test listed in this report have been performed.

Sample defects before the test: NO VISIBLE DEFECTS

Technician **Rodolfo Sala** Laboratory Manager Matteo Longoni

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Note: any copy, even partial, of this report, and any change or alteration to it are strictly forbidden. The test results listed in this report are relevant only for the tested sample. Sampling performed by the customer.

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TEST REPORT: 4787932642.1

APPLICANT

Name:

TECNO SPA Address: Via Milano 28 Casella Postale N.121 Mariano Comense, Co 22066 Italy



Product : Aeris.

UNI EN 16139:2013

(Ref. EN 1728:2012, cl. _,)

DATE	
Sample in:	10/04/2017
Tests start:	10/04/2017
Tests end:	06/05/2017
Report issue:	06/05/2017

OVERALL DIMENSIONS

Measured:	Depth:	640 mm;	Height:	900 mm	
	Width:	2360 mm	Weight:	61 kg	
Nominal:	Depth:	ND;	Height:	ND;	
	Width:	ND;	Weight:	ND;	
Sample number	899539	Order number: 11716737			

REFERENCE STANDARD

EN 16139:2013 + EN 16139:2013/AC:2013 Furniture. Strength, durability and safety. Requirements for non-domestic seating.

NOTE: On customer's request only the test listed in this report have been performed.

Applied test level:2

Sample defects before the test: NO VISIBLE DEFECTS

Technician **Rodolfo Sala** Laboratory Manager Matteo Longoni

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3 Pages to Follow

7 Pages to Follow



Test Report: 4787979353.1

APPLICANT

Name: TECNO SPA Address: Via Milano 28 Casella Postale N.121 Mariano Comense, Co 22066 Italy



Product: Panca Aeris - Prove preliminari ANSI BIFMA X5.4:2012

DATE

19/5/2017	
19/5/2017	
30/5/2017	
30/5/2017	

OVERALL DIMENSIONS:

Measured:	Depth:	640 mm;	Height:	900 mm;	
	Width:	2360 mm;	Weight:	61.0 kg	
Nominal	Depth:	ND:	Height:	ND:	
	Width:	ND;	Weight:	ND;	

Sample number 951884 Order number: 11767257

REFERENCE STANDARD

ANSI/BIFMA X5.4:2012 Lounge and Public Seating - Tests. NOTE: On customer's request only the test listed in this report have been performed.

Sample defects before the test: NO VISIBLE DEFECTS Tests have been performed on a temperature of 21 ± 2 °C The tests have been performed on 1 sample as requested by the customer Sample classified as multiple seating Type C

> Technician Rodolfo Sala

Laboratory Manager Matteo Longoni

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Test Certificate

This certificate confirms that the

Foam - Ref: Elastofoam I 4102/128/FL with Colour Paste & Black Paint

Supplied by

Elastogran UK Limited

has been tested at FIRA International Limited and successfully satisfied the requirements from:

Schedule 1 part I of the Furniture and Furnishings (Fire) (Safety) Regulations 1988, amended 1989 and 1993 (based on BS 5852: 1982 Part 2)

Report reference: TFFLF25854

tere latta SIGNATURE Stephen Cotton

POSITION Section Leader of Flammability

CERTIFICATE DATE

10 December 2008

For and on behalf of FIRA INTERNATIONAL LIMITED

This certificate only relates to the sample(s) supplied and tested at the time. Re-testing at intervals is recommended and should be subject to agreement between the supplier and the purchaser.



FIRA International Ltd Maxwell Road, Stevenage, Hertfordshire SG1 2EW, England.



4 Pages to Follow

| environmental |

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CEB TT



ENVIRONMENTAL RESPONSIBILITY

Aeris system is produced with environmentally responsible materials and manufacturing processes. All components are recyclable. Powder coat metal finishing produces negligible amounts of harmful VOCs com- pared to solvent-based coatings. Wood seats options use re-cut multilaminar veneers that minimize impact on forests.

The System uses low environmental impact materials such as 95% recyclable aluminium and 100% Polyurethane featuring thermal recycling through splitting polyurethane chains (processes aimed to produce new raw materials for plastics production and re-use) or to generate energy as well as a composite.

Components can be easily separated for recycling too, so that at the end of its useful life, almost 98% of the product by weight can be easily recycled.

TESTING AND CERTIFICATION

To ensure consistent product quality, Tecno has had its Quality Management System certified to **UNI EN ISO 9001** and its Environmental Management System certified to **UNI EN ISO 14001**. Aeris System conform to European Standard STI 2008/164/EC relating to people with reduced mobility and even might easily incorporate an integrated "obstacle warning bar" for the visually impaired. The products have also been tested according to international standards, including for example Ansi-Bifma X5.4:2012 or UNI EN 16139:2013 governing seating strength, stability and durability requirements and BS 5852:1982 leading resistance and performances to fire.

All Quality Control procedures at Tecno SpA are undertaken during the whole design, manufacturing, pre-assembling and laying process accordingly to UNI EN Standards. Tecno is accredited to **UNI EN ISO 9001:2008** (Quality Management System) as well as to **UNI EN ISO 14001:2004** (Environmental Management System) and employ a full time quality control officer.









| leed[®] credits 🛞 |

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With reference to the guidelines issued by the USGBC (United States Green Building Council) concerning the features of a products to obtain LEED credits, listed below is the necessary technical information for evaluating Aeris System to become eligible to sustain LEED standard chapter.

Tecno Spa | Aeris System can contribute to the requested rating in LEED Programs for sustainable Buildings.

All evaluations reported refer to a bench with four seats, with internal and external armrests.

MR C 3.2 - Reuse of materials (Max. value 1 point)

Aeris product's characteristics make it possible to fix the product and restore it to full functional conditions by simply replacing certain components at the end of its lifecycle or according to maintenance programs.

The product's very simple design allows this requirement to be satisfied. It is built of single elements, often made of a single material (aluminium), and assembled mechanically: single elements or the entire product can be replaced by disassembling and working on those single elements.

In the case of a bench with an aluminium or steel seat, the percentage of reusability of the system components can exceed 95% of the bench's total weight.

MR C 4 - Content of recycled material (Max. value 2 points)

The Aeris product is built from structural extruded beam made of aluminium, which contains an average percentage of recycled material (pre and post consumption) of over 45%. The seats can be produced with different material for different destination and use with – at least a 30% of recycled material. Excluded from this calculation are the ironmongery elements, made of free-cutting leaded steel which amounts to 1,2% of the total weight of the bench.

MR C 5 - Regional Materials (Max. value 2 points)

All components used in the product are made within a range of 310 miles (about 500 kilometres) from Tecno Spa's factory and offices. The evaluation of the distance compared to the site of delivery/use of the product can be completed only after an evaluation with the customer.

MR C 6 - Rapidly renewable materials (Max. value 1 point)

Not applicable

MR C 7 – Certified Wood (Max. value 1 point)

Not applicable if the bench has a polyurethane or metal shell. Upon request, wood benches can be supplied with FSC certified raw materials.

EQ C 4.5 - Low Emission Materials (Max. value 1 point)

Materials used in the product do not emit substances which are toxic or dangerous for living organisms. Currently the certifications are under execution .

MR C 2 - Construction waste management (Max. value 2 points)

Materials contained in the packaging of the structure can be easily identified, separated and destined to the various waste location | collection centres. Raw materials which make up over 98% of the packaging (all consumable products are excluded, such as tape, packing staples, nails, labels, etc.) are listed below:

- · Corrugated cardboard made of recycled material
- · Pallets in fir wood, entirely recoverable for the same use if delivered to Tecno Spa
- Spacers / light covers for the system as well as blocking elements are made of pressed polystyrene, entirely recoverable for the same use if delivered to Tecno Spa.





| photo gallery |

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| features & benefits |



Material	Aluminium Alloy for foundry UNI 1676 - Assomet 46100, [AIS 11Qu2(Fe), EN AB 46100, UNI EN 1676] . Polyurethane Foam accordingly to BS 5852 : 1982
Modular System	All configurations can be built and interchanged making use of a few basic components. Minimum kit of parts (very low inventory). Full Interchangeability of different items without changing the overall architecture of the set of seats. Standardized shapes, dimensions and ergonomically characteristics.
Comfort & Ergonomics	Appropriate level of comfort related with the average waiting time. Ergonomically Designed : the shape of Aeris was developed to support the natural contour of human body. The waterfall seat front eliminates compression on the underside of the knees. Wide range of seat style with two armrest options allows the system to be tailored to varying comfort requirements.
Layout	Effective usage of space thanks to flexibility system range. Same corporate identity for all versions.
High grade materials	Product especially fit for heavy duty public spaces and/or outdoor use (full aluminium versions), even under extreme environmental conditions. (acid rain, large temperature variations, etc.).
Performance & durability	Easy and efficient maintenance, stand up to expected wear-and-tear . Easy replacement for seat shell without any disruption to passengers. Aluminkum Version suitable for indoor or outdoor use in all weather conditions .
Recyclable materials	 Environmental friendly. All components are recyclable, and production step apply to ISO 14001:2008 standards. Polyurethane Foam is fully recyclable and different ways of reconditioning can be applied, such as grinding and reuse or particle bonding. Upholstery cover fully exchangeable and replaceable for possible subsequent reuse after hygienic cleaning. Powder coated metal finishing produce negligible amount of harmful VOCs if compared with solved based coatings.



Security & Safety	 Designed to meet the requirements of security-conscious environments. Clear space beneath the seats permits easy inspection. The system follows safety standards, allow clear line of vision and is thought to prevent any acts of vandalism. Tamper-resistant hardware to discourage vandalism. Ring closed armrests shape prevents clothes from being accidentally caught in the seat and enhances safety in the event of accidental impacts, acting also as phisical "barrier" elements between seats. On request, tamper-resistant hardware to discourage vandalism can be provided. (Optional) Structural elements, Polyurethane Foam & upholstery options materials are fire rated.
Maintenance	Durable materials and high performance finishes resist abuse. The bench structure and surrounding floor are open and accessible for deaning. In event of damage the modular construction allows individual components to be replaced quickly. Deaning is easily achieved using textile micro-fibre doth, or synthetic mineral fibre doth with neutral detergent for normal domestic usage (No abrasive slurry or cream).
Assembly	Benches can be shipped with all structural elements fully assembled or KD. Seats are simply bolted to the main structural beam, to complete the bench.
Material treatment	 Metal shell receive a sandblasting treatment followed by a zinc/ calcium phosphate undercoating primer process Aluminium shell and / or surfaces receive a fine sandblasting treatment followed by an hot dip chromate undercoating. A durable polyester powder coated is then applied. Powder Coating [20Goss (±5), 65 Micron (±5) average] tested on Salt Spray, Humidity Cabinet, Stability, How, Particle distribution, Film hardness, Adhesion, Specific Anti Grafity treatment. Oxidation resistant surface, weather proof and corrosion test applied on an metal components

All Quality Control procedures at Techo SpA are undertaken during the whole design, manufacturing, pre-assembling and laying process accordingly to UNI EN Standards. Techo is accredited to UNI EN ISO 9001:2008 (Quality Management System) as well as to UNI EN ISO 14001:2004 (Environmental Management System) and employ a full time quality control officer.



| references |









Schiphol Amsterdam Airport - Netherlands









ARTIC Anaheim Regional Transportation Intermodal Center- USA









Van Nuys Flyaway - USA





Montpellier Station - Montpellier





Zuidtangent - Netherlands



Nadi Airport - Fiji



Grandi Stazioni Railway Network - Italy





| contacts |

Tecno spa via Milano 28, 22066 Mariano Comense (Co) T + 39 031 75381 F + 39 031 7538220 www.tecnospa.com OFFICIAL PARTNER TERMINAL plus Via Bolzano 78, 39011 Lana (IT) M +39 345 3861685 M +39 340 6036287 info@terminalplus.eu www.terminalplus.eu