The new generation of
antimicrobial single-wall flexible hoses
for air conditioning and ventilation

VMC High Performance
PATENTED
by TECNICA Italy

T-Esp™

by TECNICA

Sanitized® Protection

DURABILITY GUARANTED 10 years TECNICA

Contribute to obtain the **credits**
of the main world
sustainability ratings for buildings:
LEED®, WELL™ e BREEAM®

U.S. GREEN BUILDING COUNCIL LEED USGBC

INTERNATIONAL WELL™ WELL BUILDING INSTITUTE

BREEAM®



EN

Goals 2030 - UN

SUSTAINABLE DEVELOPMENT GOALS

TECNICA ™ has focused the **sustainability as a strategic lever** of the company policy, promoting **product innovation** (materials, technologies and production techniques) and the development of concrete actions. We evolved our approach to resources, **increased the circularity of our products life cycle**, we developed new potentials, promoted awareness of the principles of sustainability and transparency. **We reduced the use of plastic in our packaging by 30%,** for our boxes we use **FSC (Forest Stewardship Council) certified cardboard and we reuse 75% of the raw material waste in our production.**

TECNICA™ promotes the Sustainable Development Goals presented by UN.

TECNICA™

Efficient Indoor Air Project





In 2015, the UN launched the "**Sustainable Development Goals 2030**", an action program for people, the planet and the prosperity, which includes 17 Sustainable Development Goals (SDGs) for a total of 169 "targets" or objects.

Tecnica™ endorsed the schedule of the UN 2030 agenda plan since the beginning and focused its actions towards the Goals listed below

Goals 2030 - UN
SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING

13 CLIMATE ACTION

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

5 GENDER EQUALITY

17 PARTNERSHIPS FOR THE GOALS

10 REDUCED INEQUALITIES

8 DECENT WORK AND ECONOMIC GROWTH

15 LIFE ON LAND

11 SUSTAINABLE CITIES AND COMMUNITIES

TECNICA™ is a manufacturer company of components for the filtration, distribution and diffusion of air in confined spaces.

We design and manufacture products that reduce diseases from contamination and air pollution.

We concretely support the market transition towards sustainability with the aim of preserving our planet and promoting a conscious use of primary resources in an efficient and sustainable way for everyone.

We base our work on passion, technological progress and innovation, adopting cleaner and healthier technologies and industrial processes for the environment.

On the equal dignity of people, recognizing diversity as a fundamental resource for the development of humanity and promoting social inclusion.

On the responsibility, integrity and transparency of our actions.

We believe in long-term partnerships with the countries and communities that host us to create shared value



ENVIRONMENT, HEALTH, ENERGY



THREE WORDS JOINT BY A SINGLE COMMON DENOMINATOR: **THE CHANGE.**

We know everything about our cars: costs, consumptions, performances.

Do we know as much about our houses?

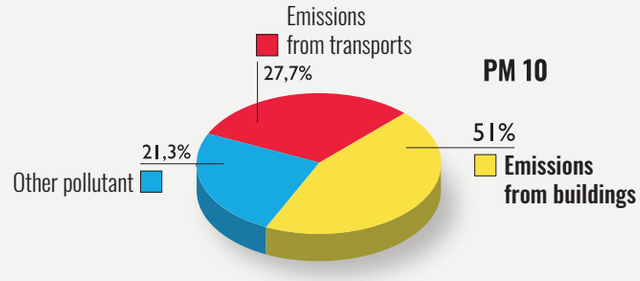
How many people knows that an **apartment of 100 m², in 6 months** of heating, enters in the atmosphere the **double of CO_2 compared to a car** driving in Milan for one whole Year?

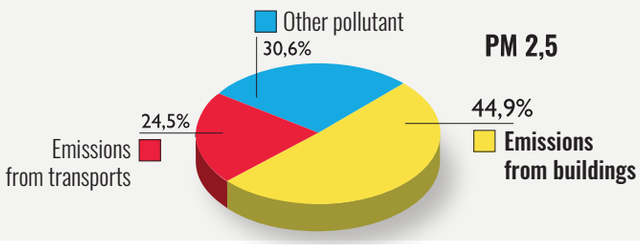
The European Environment Agency identified how the pollutant emissions of buildings (PM10 and PM2,5) are two or three times higher than the one produced by transports.

It is necessary to act on existing buildings with energetic upgrading projects, which drastically reduce the energetic needing of our houses and, consequently, the pollutant emissions in the environment.

The air pollution caused by fine particles has been valued as one of the main critical element for men's health by the World Health Organization.









TECNICA™, with its policy focused on the environmental sustainability in its most wide meaning, has always fostered the HRV as a good practices to grant people's welfare and to reduce the environment pollution elements caused by obsolete and highly polluting heating systems.

DAILY WELL-BEING

An individual's happiness is given by three elements:

50% by Genetics, the character propensity of everyone to be happy and positive in life.

10% by exceptional events, random or occasional, like the birth of a child, the achieving of a bonus at work or in studying, a friend's call, the winning of an amount of money.

40% by the everyday, in which way we live our daily life. **The comfort, health and wellness are part of everyone's life and determine a good quality of life.**



TECNICA™ Efficient Indoor Air Project

In over 30 Years of activity **we have changed the insulating materials** and **realized non-toxic film** with antibacterial additives, realized devices for the **independent climate control of diffusers** and **patented products.**

Tecnica™'s mission is to proceed in the **research for the innovation of materials and products**, testing and certifying them to assure the health of people, who pass their time in closed spaces, and the environmental sustainability.

The green frontier is the last big achievement by TECNICA™.

We checked all our products to document the **compliance to the main international rating** for the **sustainability certification of residential, office, commercial, medical, production and services buildings: LEED®, WELL™ and BREEAM®**



DEVELOPMENT IN EFFICIENCY

T-Esp™ by TECNICA™

It is the new generation of expanded foam single-wall flexible hoses with antimicrobial and antiviral material protection made in collaboration with Sanitized®, for air conditioning and ventilation systems in confined environments.

All the T-Esp expanded foam flexible hoses contribute to obtain the credits of the **main world sustainability ratings for buildings: LEED®, WELL™ and BREEAM®.**


Residential


Business


Hospitality Industry


Management Centres


Hospital


Automotive


Railways


Naval

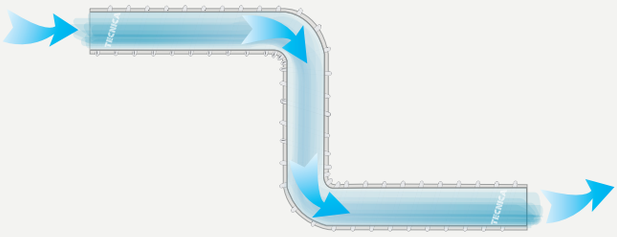


SINGLE-WALL

T-Esp™ flexible hoses are made of a **single insulating wall with thickness 4 or 8 mm**, which allows **to minimize the installation dimensions** in case of reduced spaces for the air conditioning or ventilation system in which high efficiency performances must be guaranteed.







FLEXIBLE

T-Esp™ hoses are **light and self-supporting** with a spiral in harmonic steel, which acts as a rib and allows to keep **the internal section unchanged even in the curves** and consequently keep **unchanged the pressure drop of the project.**

ANTIMICROBIAL

Thanks to the Master**San™** technology, developed and designed by Tecnica™ in collaboration with Sanitized®, **the internal wall of the T-Esp™** hose **is additivated** with Sanitized® compound, which **prevents smells or the accumulation of bacteria, fungi and molds**, which can also result in damage to the internal wall of the ducts. **Tests recently done have shown that the material is also protected against viruses.**

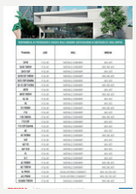
Sanitized Protection · antiviral performance · Material Protection · Hygiene Function · DURABILITY GUARANTEED 10 years TECNICA

The contribution to the rating LEED®, WELL™ and BREEAM® of each single T-Esp product are indicated in the general catalogue of the range **VENTILATION**



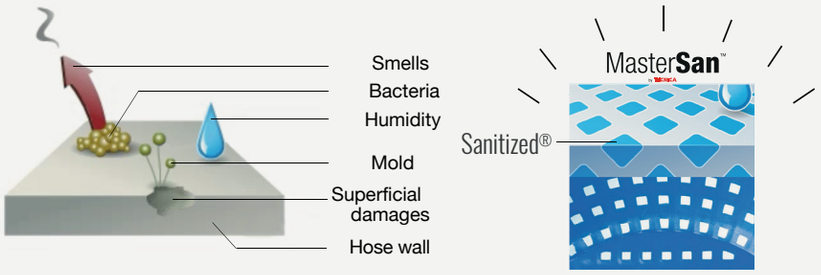
INSULATING AND ENERGETICALLY EFFICIENT

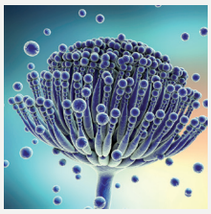
The wall of the T-Esp™ hoses is made of an **expanded closed-cell resin** which allows to obtain an insulating features and a **thermal transmittance of 9,5 Wm2K equal to 8.173 Kcal.**

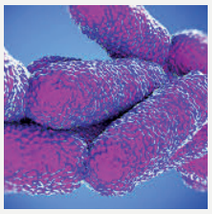


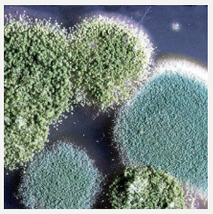
TECNICA™ AND SANITIZED®

The inner wall of the single-wall T-Esp flexible hoses is produced with the MasterSan technology as a result of Research and Development carried by TECNICA in collaboration with Sanitized. Thanks to the **exclusive partnership with SANITIZED, TECNICA is the only company in the aeraulic sector to produce a film with an integrated Sanitized® material protection with guaranteed durability for 10 years. A further guarantee for higher air quality in confined spaces.**




Aspergillus niger

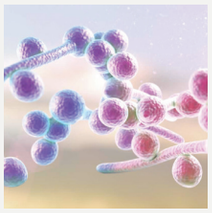

Legionella Pneumophila

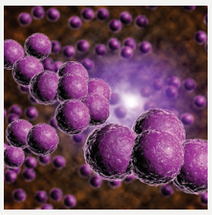

Molds


Pseudomonas aeruginosa

Sanitized® Protection

antiviral performance


Yeast Infection


Staphylococcus Aureus


Escherichia coli


Salmonella

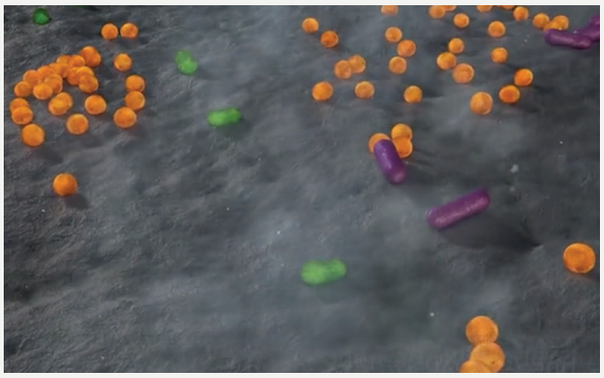

Listeria monocytogenes

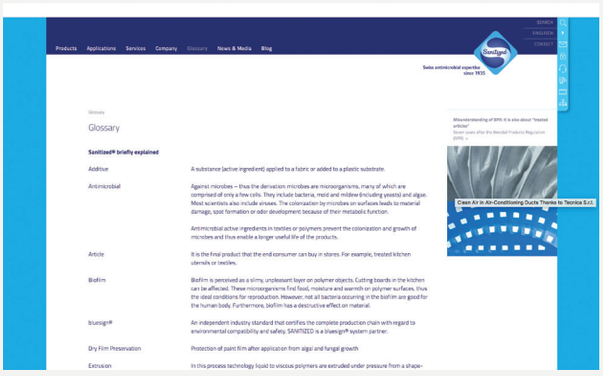
The air quality improvement and the internal environmental comfort guarantee **Indoor Air Quality high standards, as requested by the World Health Organization** and contributes to obtain the credits of the **main world sustainability ratings for buildings: LEED®, WELL™ and BREEAM®.**

U.S. GREEN BUILDING COUNCIL LEED USGBC

INTERNATIONAL WELL™ WELL BUILDING INSTITUTE

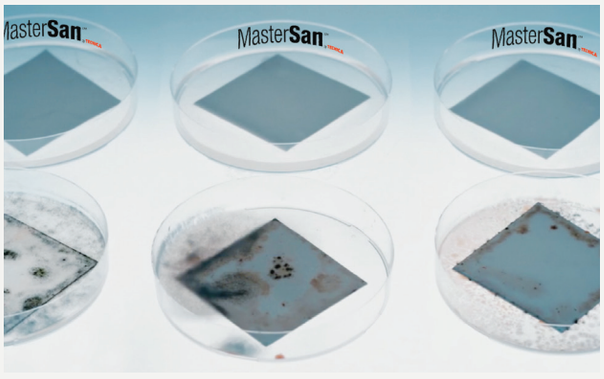
BREEAM®





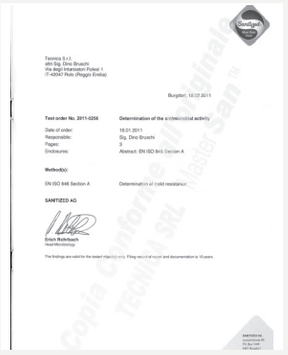
Material Protection

Hygiene Function









THE T-Esp™ PLUS

The T-Esp™ sanitized expanded foam single-wall flexible hoses with the integrated Sanitized® hygiene function are patented and have unique characteristics in the panorama of hoses for the aeraulic systems. In these pages, we list the technological uniqueness, which guarantee efficiency of the system, saving time in its execution and cost savings in its operation.

Sanitized® Protection

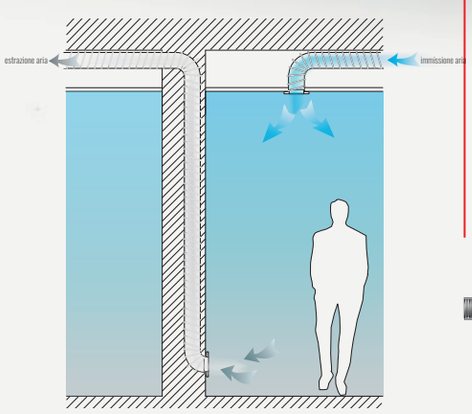
antiviral performance

VMC High Performance T PATENTED by TECNICA Italy

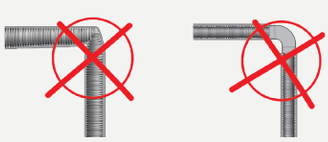
DURABILITY GUARANTEED 10 years TECNICA™

The **T-Esp™** expanded foam single-wall flexible hoses **are protected by** Sanitized® antimicrobial technology and have their durability **guaranteed and certified for 10 years.** The integrated hygiene function protects the material of the hoses against microbes. Recent laboratory testing have also confirmed an **antiviral performance.**





The spiral in harmonic steel acts as a rib and allows to keep **the internal section unchanged even in the curves** and consequently keep **unchanged the pressure drop of the project**



assembly time −
materials cost −
easiness +
quick installation +



SA10/ESP PATENTED Master**San**™



SLEEVE SA10/ESP Therm Master**San**™



SA10/ESP 8MM PATENTED Master**San**™

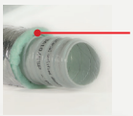


SA10/ESP THERM PATENTED Master**San**™

The walls of the T-Esp™ flexible hoses **are produced with thickness 4 or 8 mm** and this allows to **reduce the thermal dispersion** of the system and **facilitate the total energetic efficiency:**



Th. 8 mm
R= 0,24 m2K/W

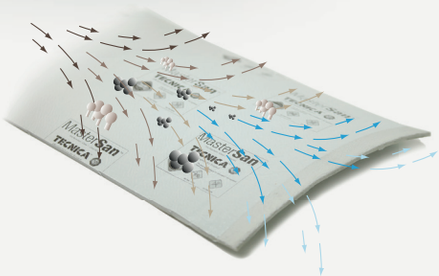


Th. 4 mm (hose)
insulation Therm (Th.25 mm)
R= 0,66 m2K/W



NO CONDENSATION

The internal surface of **T-Esp™** flexible hose is coated with Master**San** fil that **is protected against mold and proliferation of bacteria and germs.**

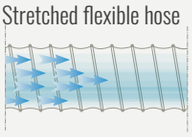


COMPARISON OF REAL PRESSURE DROP ON FLEXIBLE HOSES



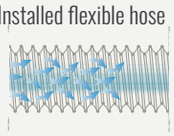
Flexible hose compliant to EN13180 to guarantee the pressure drop in stretched position

Stretched flexible hose



ø	102 mm
V	5 m/s
ΔPa	**6,5 Pa**

Installed flexible hose



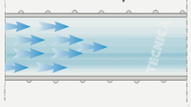
ø	102 mm
V	5 m/s
ΔPa	**8,0 Pa**

Real increase of pressure drop: **+18%**



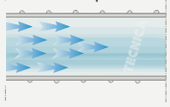
T-Esp™

Stretched T-Esp™ hose



ø	102 mm
V	5 m/s
ΔPa	**5,5 Pa**

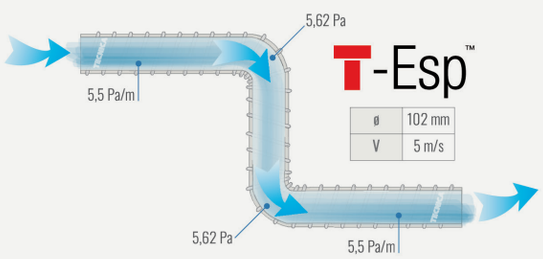
Installed T-Esp™ hose

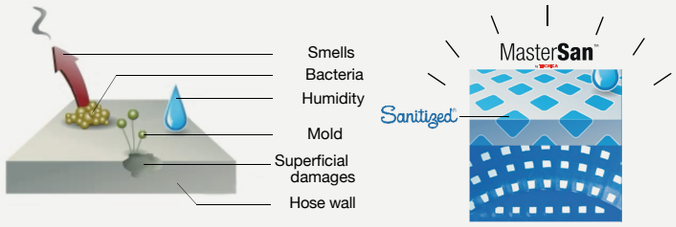


ø	102 mm
V	5 m/s
ΔPa	**5,5 Pa**

No increase of pressure drop

The airflow **section** remains **unchanged even in the curves** and allows to keep **unvaried the pressure drop of the project**





T-Esp™ AND THE ENVIRONMENT

VMC High Performance T PATENTED by TECNICA Italy

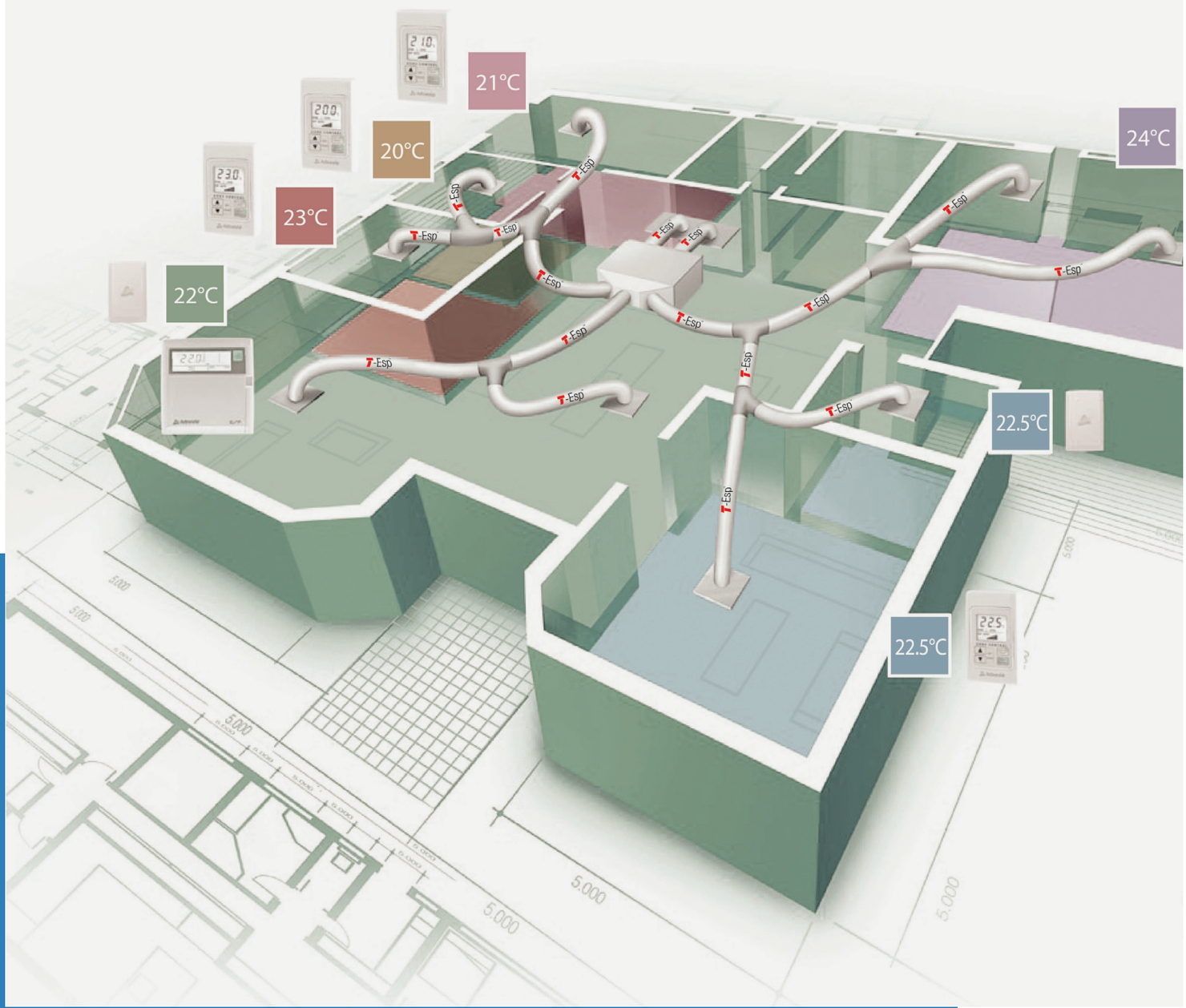
DURABILITY GUARANTED 10 years TECNICA™

Sanitized® Protection

antiviral performance

by TECNICA™

The high performances of **energy efficiency and antimicrobial material protection** of the **T-Esp™ single-wall expanded flexible hoses** facilitate the adoption of **Controlled Mechanical Ventilation** as a technology that best contributes to the inside the confined spaces in which we live, work or we spend our free time.



The reduced electrical consumption of modern ventilation systems with heat recycling, combined with t**he technical performance of T-Esp™ flexible** hoses, represent **the future of residential aeraulic systems**, but also of stores, offices, laboratories and other confined environments of daily life. In case of dual flow CMV systems, in which is important that the aeraulic hoses **guarantee project performance, the T-Esp™ flexible hoses ensure uniformity and balance** for the equivalence of the flow rates and extraction flow rates, avoiding pressurize or vacuum areas of the house, **ensuring that the air flow rates reached** are able to satisfy the ideal conditions of temperature and humidity of the project. This allows a high-energy yield with low energy consumption satisfactory with common **renewable energy systems.**





TECNICA ™, with its policy focused on **environmental sustainability** in its broadest sense, has always promoted the **CMV as a good construction practice** to ensure the **well-being of people and decrease the factors of environmental pollution** caused by obsolete and highly polluting heating systems





TECNICA™ has always stood out for **innovation in materials, operating performances, high quality standards of products,** compliance with the **main regulations** regarding **indoor environmental quality, antimicrobial protected hoses, non-toxicity of materials and reaction to fire.** For this reason, **the T-Esp™ Sanitized® protected foam single-wall flexible hoses** contribute to obtain **the credits of the main world sustainability ratings for buildings: LEED®, WELL™ and BREEAM®.**

THE INSTALLATION ADVANTAGES

T-Esp™

The T-Esp™ Sanitized® protected single-wall flexible hoses prevent those installation errors that in many cases affect the correct functioning of an aeraulic system. **T-Esp™ hoses are easy to install** thanks to their **lightness and self-supporting and avoid to waste materials and time on construction site** because they are not compressible and can be cut to measure on site.



No to additional costs for the hoses insulation since the **T-Esp™ hoses are pre-insulated**



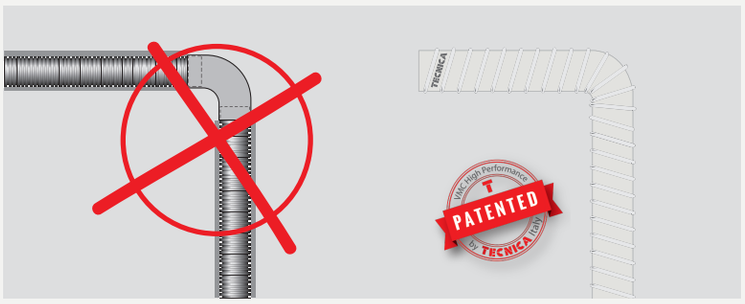
No to axial compressions of the hose thanks to the rib in harmonic steel of the T-Esp™



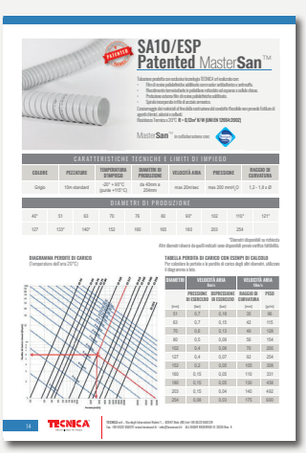
No to the formation of condensation inside the T-Esp™ hoses



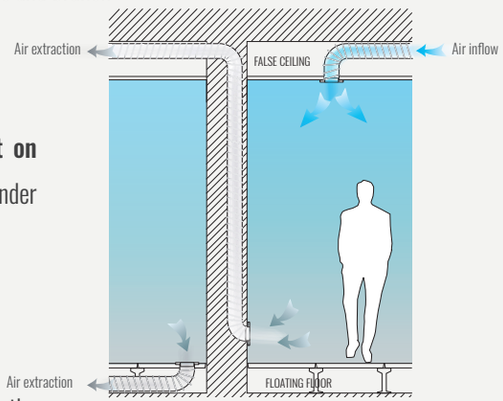
No to crushing in case of narrow radius curvatures



No connection systems, the **T-Esp™** flexible hoses can be installed simply with the most common CMV accessories for deviations and branch



The **T-Esp™** can be **installed below duct on the wall** or on sight in the **false ceiling** or under **floating floors**



T-Esp™ ensures that the pressure drops indicated in the catalog technical sheets **are respected** once the hoses of the system are installed



CUSTOMER SERVICE

TECNICA™ 's approach towards its customers is to ensure assistance in finding the most **suitable technical solutions** to meet **specific needs** and in the **production choices** that permit to create **highly customized products**. The decades of experience of TECNICA™ technical and production staff is available for customers to solve special needs which may concern the composition of the raw materials or **flexible hoses sizing needs (diameters, lengths, spiral pitch, wire etc.),**



It is possible, on request, to measure the diameters of T-Esp™ flexible hoses to adapt them to the construction sites CMV accessories





Our logistic allows to promptly handle the orders execution.

It is possible, on request, to customize the packaging to solve both the warehouses and construction sites needs



SA10/ESP Patented MasterSan™

Flexible hose produced with exclusive technology by TECNICA SRL made of:

- Addivated polyolefin resins film with anti-bacterial, anti-mildew and anti-viral material protection.
- Thermo-insulating coating in netted and closed-cell of polyethylene foam. (sp. 4mm)
- External protection in addivated polyolefin resins film.
- Embedded steel wire helix.

The assembly of materials for the construction of the flexible conduit does not require the use of chemical agents, glues or adhesives.

Thermal resistivity at 20°C **R = 0,12m² K/W (UNI EN 12664:2002)**

MasterSan™ in collaboration with:

TECHNICAL SPECIFICATIONS AND USAGE LIMIT

COLOR	LENGTH	WORKING TEMPERATURE	PRODUCTION DIAMETERS	AIR SPEED	PRESSURE	CURVATURE RADIUS
Grey	10m standard	-20° + 90°C (peak +115°C)	from 40mm to 254mm	max 20m/sec	max 200 mmH_2O	1,2 - 1,8 x Ø

PRODUCTION DIAMETERS

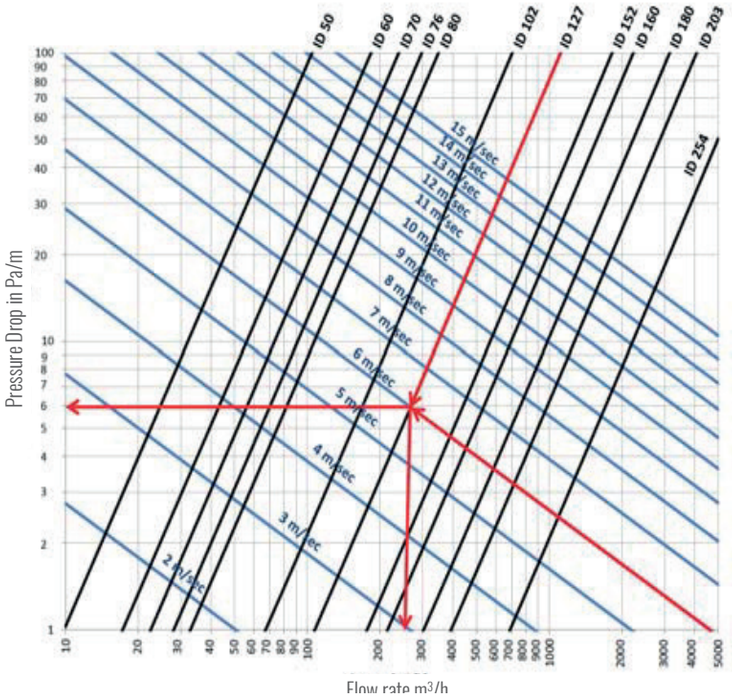
40*	51	63	70	76	80	90*	102	110*	121*
127	133*	140*	152	160	165	180	203	254	

*Diameters available on request

Diameters other than those indicated are available by prior feasibility check.

PRESSURE DROPS DIAGRAM

(Air Temperature 20°C)



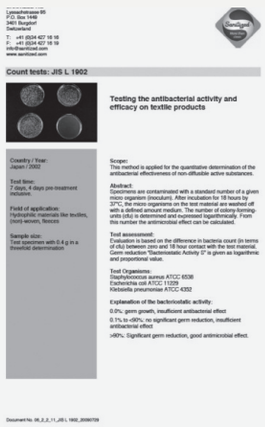
PRESSURE DROPS TABLE WITH CALCULATION EXAMPLES

To calculate the flow rates and pressure drops of the other diameters, use the beside diagram.

DIAMETER	AIR SPEED 8m/s		AIR SPEED 10m/s	
	WORKING PRESSURE	WORKING VACUUM	CURVATURE RADIUS	WEIGHT
[mm]	[bar]	[bar]	[mm]	[gr/m]
51	0,7	0,18	35	96
63	0,7	0,15	42	115
70	0,6	0,13	49	128
80	0,5	0,09	56	154
102	0,4	0,08	70	200
127	0,4	0,07	92	254
152	0,2	0,05	105	308
160	0,15	0,05	110	331
180	0,15	0,05	130	438
203	0,15	0,04	140	492
254	0,08	0,03	175	600

CERTIFICATIONS

MATERIAL PROTECTION


Count tests: JIS L 1902

Testing the antibacterial activity and efficacy on textile products

ANTIMICROBIAL PROTECTION

MasterSan™ is produced with new generation polyolefin film with Sanitized® antimicrobial and antiviral technology which protects the internal surface from damages due to microbial load and reduces the formation of potential microbial odors inside the ventilation system for a better IAQ rate.

antiviral performance · Material Protection · Hygiene Function

FIRE REACTION

IT	Class 1 (D.M. 26/06/84) Omologation nr.: RE1205C20D100011
EU	Class B-s1, d0 (EN 13501-1:2019)

GREEN BUILDING

Thanks also to the support of GreenMap, products manufactured by Tecnica srl contribute to obtain the credits of the major international rating systems for sustainable buildings:

LEED
Contributes to credits:
IP, EA, MR

WELL
Contributes to credits:
MATERIALS, COMMUNITY

BREEAM
Contributes to credits:
MAN, ENE, WST

For further details regarding the specific contributions to the credits indicated, contact Tecnica Srl

APPLICATIONS

OEM	Residential	Smooth surface	Flexibility	Easy Pack	Self-extinguishing	Mold Resistant	Microorganism Resistant	Tear Resistant
Calibrated Diameters*	REACH Certifie	RoHS Certifie	Halogen Free	Building	Transport	Air Conditioning	CMV	Non-magnetic*
Wall Trace	CMV transport means	CMV mech. means	Prolonged anti condensation	Recreational Boats				

*on request

WIRE OPTIONS	ADDITIVE OPTIONS	SERVICE OPTIONS
AM non-magnetic inox wire	UV * anti UV	MP customized marking



Sleeve SA10/ESP Patented MasterSan™

Insulating sleeve produced with exclusive technology by TECNICA SRL made of:

- Addivated polyolefin resins film with anti-bacterial, anti-mildew and anti-viral material protection.
- Thermo-insulating coating in netted and closed-cell of polyethylene foam.
- External protection in addivated polyolefin resins film.

The assembly of materials for the construction of the flexible conduit does not require the use of chemical agents, glues or adhesives.

MasterSan™ in collaboration with:

TECHNICAL SPECIFICATIONS AND USAGE LIMIT

COLOR	LENGTH	WORKING TEMPERATURE	PRODUCTION DIAMETERS	AIR SPEED	PRESSURE	CURVATURE RADIUS
Grey	10m standard	-20° + 90°C (peak +115°C)	from 40mm to 254mm	max 20m/sec	max 200 mmH_2O	1,2 - 1,8 x Ø

PRODUCTION DIAMETERS

40*	51	63	70	76	80	90*	102	110*	121*
127	133*	140*	152	160	165	180	203	254	

*Diameters available on request
Diameters other than those indicated are available by prior feasibility check.

CERTIFICATIONS

MATERIAL PROTECTION


Count tests: JIS L 1902

Testing the antibacterial activity and efficacy on textile products

ANTIMICROBIAL PROTECTION

MasterSan™ is produced with new generation polyolefin film with Sanitized® antimicrobial and antiviral technology which protects the internal surface from damages due to microbial load and reduces the formation of potential microbial odors inside the ventilation system for a better IAQ rate.

antiviral performance · Material Protection · Hygiene Function

FIRE REACTION

IT	Class 1 (D.M. 26/06/84)
EU	Class B-s2, d0 (EN 13501-1:2009)

GREEN BUILDING

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LEED

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IP, EA, MR

WELL

Contributes to credits:
MATERIALS, COMMUNITY

BREEAM

Contributes to credits:
MAN, ENE, WST

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APPLICATIONS

OEM	Residential	Smooth surface	Easy Pack	Mold resistant	Microorganism Resistant	REACH Certifie	RoHS Certifie	Building

TESTS PERFORMED

TEST	METHOD	OUTCOMES
Resistance to aggression by chemical agents	Test performed on non-insulated SA10/ESP duct - Application on the external surface of the specific chemical agent and check for any changes after 48h.	ETHANOL No modification and/or damag
		AMMONIA No modification and/or damag
		HIGH CONC. DEGREASER No modification and/or damag
		COOLANT FLUID No modification and/or damag
Maximum operating temperature peak	Test performed on non-insulated SA10/ESP duct - Identification of the maximum temperature peak bearable by the duct and all its components.	+115°C no longer than 2min.



SA10/ESP 8mm Patented MasterSan™

Flexible hose produced with exclusive technology by TECNICA SRL made of:

- Addivated polyolefin resins film with anti-bacterial, anti-mildew and anti-viral material protection.
- Thermo-insulating coating in netted and closed-cell of polyethylene foam (th. 8mm).
- External protection in addivated polyolefin resins film.
- Embedded steel wire helix.

The assembly of materials for the construction of the flexible conduit does not require the use of chemical agents, glues or adhesives.

Thermal resistivity at 20°C **R = 0,24m² K/W (UNI EN 12664:2002)**

MasterSan™ in collaboration with:

TECHNICAL SPECIFICATIONS AND USAGE LIMIT

COLOR	LENGTH	WORKING TEMPERATURE	PRODUCTION DIAMETERS	AIR SPEED	PRESSURE	CURVATURE RADIUS
Grey	10m standard	-20° + 90°C (peak +115°C)	from 40mm to 254mm	max 20m/sec	max 200 mmH_2O	1,2 - 1,8 x Ø

PRODUCTION DIAMETERS

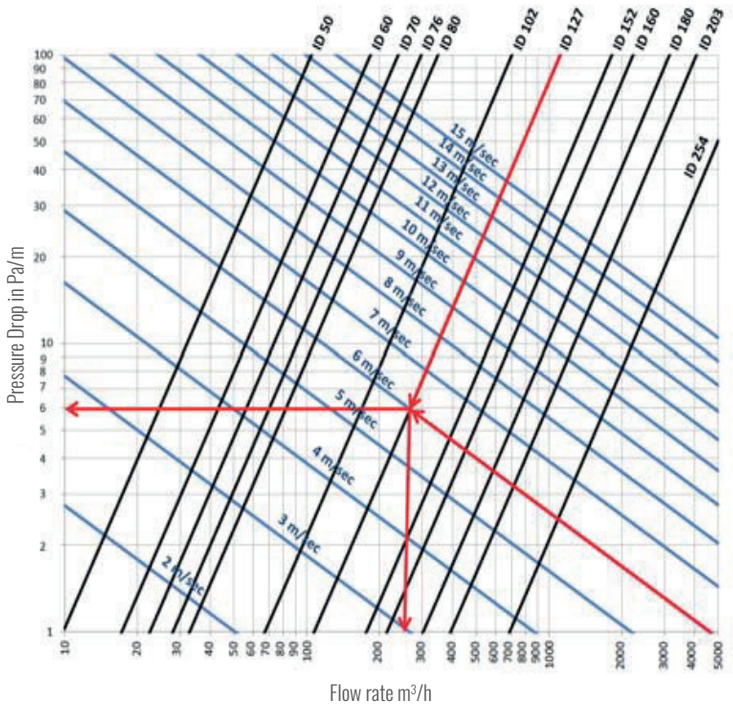
40*	51	63	70	76	80	90*	102	110*	121*
127	133*	140*	152	160	165	180	203	254	

*Diameters available on request

Diameters other than those indicated are available by prior feasibility check.

PRESSURE DROPS DIAGRAM

(Air Temperature 20°C)



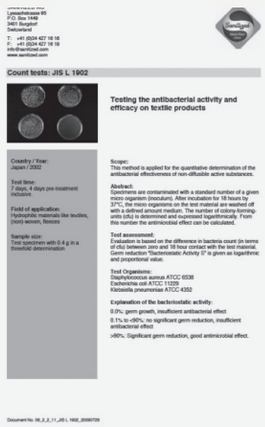
PRESSURE DROPS TABLE WITH CALCULATION EXAMPLES

To calculate the flow rates and pressure drops of the other diameters, use the beside diagram.

DIAMETER	AIR SPEED 8m/s		AIR SPEED 10m/s	
	WORKING PRESSURE	WORKING VACUUM	CURVATURE RADIUS	WEIGHT
[mm]	[bar]	[bar]	[mm]	[gr/m]
51	0,7	0,18	35	96
63	0,7	0,15	42	115
70	0,6	0,13	49	128
80	0,5	0,09	56	154
102	0,4	0,08	70	200
127	0,4	0,07	92	254
152	0,2	0,05	105	308
160	0,15	0,05	110	331
180	0,15	0,05	130	438
203	0,15	0,04	140	492
254	0,08	0,03	175	600

CERTIFICATION

MATERIAL PROTECTION


Count tests: JIS L 1902

Testing the antibacterial activity and efficacy on textile products

ANTIMICROBIAL PROTECTION

MasterSan™ is produced with new generation polyolefin film with Sanitized® antimicrobial and antiviral technology which protects the internal surface from damages due to microbial load and reduces the formation of potential microbial odors inside the ventilation system for a better IAQ rate.

Sanitized Protection · antiviral performance · Material Protection · Hygiene Function

FIRE REACTION

EU	Class B-s2, d0 (EN 13501-1:2009)

GREEN BUILDING

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LEED
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IP, EA, MR

WELL
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MATERIALS, COMMUNITY

BREEAM
Contributes to credits:
MAN, ENE, WST

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APPLICATIONS

OEM	Residential	Smooth surface	Flexibility	Easy Pack	Self-extinguishing	Mold Resistant	Microorganism Resistant	Tear Resistant
Calibrated Diameters*	REACH Certifie	RoHS Certifie	Halogen Free	Building	Transport	Air Conditioning	CMV	Non-magnetic*
Wall Trace	CMV transport means	CMV mech. means	Prolonged anti condensation	Recreational Boats				

*on request

WIRE OPTIONS	ADDITIVE OPTIONS	SERVICE OPTIONS
AM non-magnetic inox wire	UV * anti UV	MP customized marking



SA10/ESP Therm Patented MasterSan™

Flexible hose produced with exclusive technology by TECNICA SRL made of:

- Addivated polyolefin resins film with anti-bacterial, anti-mildew and anti-viral material protection.
- Thermo-insulating coating in netted and closed-cell of polyethylene foam.
- External protection in addivated polyolefin resins film.
- Embedded steel wire helix.
- Thermo-insulating covering in polyester fibre (th. 25mm-16kg/m³).
- Outer aluminized polyolefin film protection (flame retardant).

The assembly of materials for the construction of the flexible conduit does not require the use of chemical agents, glues or adhesives.

Insulation: 25mm / 16kg/m³ - standard
50mm / 16kg/m³ - on request

Thermal resistivity at 20°C **R = 0,66m² K/W (UNI EN 12664:2002)**

MasterSan™ in collaboration with:

TECHNICAL SPECIFICATIONS AND USAGE LIMIT

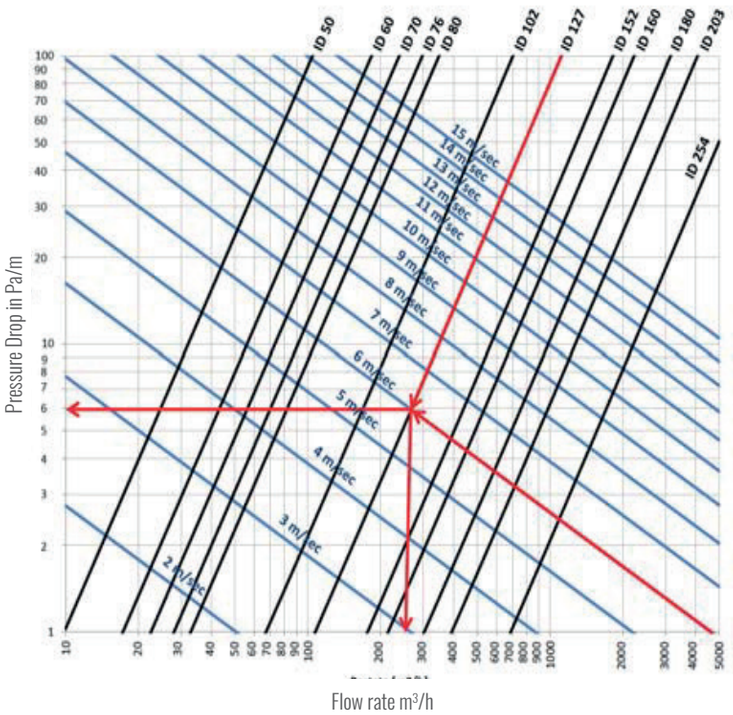
COLOR	LENGTH	WORKING TEMPERATURE	PRODUCTION DIAMETERS	AIR SPEED	PRESSURE	CURVATURE RADIUS
Grey	10m standard	-20° + 90°C (peak +115°C)	from 70mm to 254mm	max 20m/sec	max 200 mmH_2O	1,2 - 1,8 x Ø

PRODUCTION DIAMETERS

70*	76*	80	90*	102	127	152	160	165	180	203	254			

*Diameters available on request
Diameters other than those indicated are available by prior feasibility check.

PRESSURE DROPS DIAGRAM
(Air Temperature 20°C)



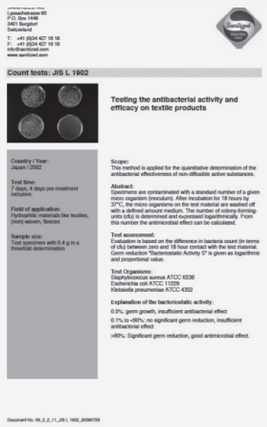
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[mm]	[bar]	[bar]	[mm]	[gr/m]
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Sanitized Protection · antiviral performance · Material Protection · Hygiene Function

FIRE REACTION

EU	Vapor barrier: class B-s1, d0 (EN 13823:2010) Inner tube and Thermal insulation: class B-s2, d0 (EN 13501-1:2009)

GREEN BUILDING

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APPLICATIONS

OEM	Residential	Smooth surface	Flexibility	Easy Pack	Self-extinguishing	Mold Resistant	Microorganism Resistant	Tear Resistant
Calibrated Diameters*	REACH Certifie	RoHS Certifie	Halogen Free	Building	Transport	Air Conditioning	CMV	Non-magnetic*
Wall Trace	CMV transport means	CMV mech. means	Prolonged anti condensation	Recreational Boats				

*on request

WIRE OPTIONS	ADDITIVE OPTIONS	SERVICE OPTIONS
AM non-magnetic inox wire	UV * anti UV	MP customized marking

*on request

TECNICA srl
is a company certified
UNI EN 9001:2015
issued by TÜV ITALIA.
Certificate number 50100 15241

TECNICA™

Efficient Indoor Air Project

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