

A close-up photograph of a female scientist in a laboratory setting. She is wearing a white lab coat, blue safety goggles, and blue nitrile gloves. She is holding a clear glass test tube with her gloved hands. The background is a blurred laboratory environment with shelves and equipment. The overall color palette is dominated by light blue and white, with a semi-transparent blue overlay on the right side where the text is located.

Safe through Method

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We are **advocates** for **workers' health** and help companies **ensure safety in professional settings**.

We make professional environments and tools safe by **analysing and assessing the performance of protective equipment**, providing technical training on correct application and **maintenance**, disseminating information and raising awareness on the **culture of protection against risks** caused by superficial assessments.



Safeguard

The employer provides workers with compliant and adequate **health and safety equipment suitable for the work** to be carried out.

Those shall be used in accordance with the legislative provisions transposing EU directives.

Italian legislative decree no. 81 / art. 71 and subsequent amendments and additions

Structural suitability assessment

UNI EN 14175



TYPE OF SUBSTANCE
QUANTITY
HANDLING

**Proper
Risk Assessment**

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Eligibility assessment of services

UNI EN 11710



Technical reference standards UNI EN 14175:

14175 Part 1
Vocabulary

14175 Part 2
Performance and safety requirements

14175 Part 3
Methods for type-approval testing

14175 Part 4
Methods for on-site testing

14175 Part 5
Recommendations for installation and maintenance

14175 Parte 6
Variable air volume fume hoods

14175 Parte 7
High temperature and acidic fume hoods

UNI/TS 11710
Criteria of Acceptability



Performance = Suitability Compliance = Safety

“What is the right method to evaluate the performance of my fume hood?”.

The reference standards governing the methodologies and performance criteria are collected in the standards
UNI - Ente Nazionale Italiano di Unificazione.

List of Accredited Tests - Category 0

Laboratory collective protection equipment (chemical, aspiration and biological hoods)

NAME OF THE TEST	TEST RANGES	TEST METHOD
CONTAINMENT INNER PLANE	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 6, 7
CONTAINMENT OUTER PLANE	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 6, 7
ROBUSTNESS OF CONTAINMENT	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 6, 7
FACE VELOCITY	(0,05 - 1 m/s)	UNI EN 14175 parts 3, 6, 7

Accredia

Accredia is the Single National Accreditation Body designated by the Italian government, in application of European Regulation 765/2008, to certify the competence, independence and impartiality of certification, inspection and verification bodies, and of testing and calibration laboratories. Accredia is a recognised non-profit association under the supervision of the Ministero dello Sviluppo Economico (Italian Ministry of Economic Development).



ISP N° 364 E
Lab N° 1700

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC

Signatory of EA, IAF and ILAC
Mutual Recognition Agreement

Elenco prove Accreditate - Categoria III

Laboratory collective protection equipment (chemical, aspiration and biological hoods)

NAME OF THE TEST	TEST RANGES	TEST METHOD
CONTAINMENT INNER PLANE	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 4, 6, 7
CONTAINMENT OUTER PLANE	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 4, 6, 7
ROBUSTNESS OF CONTAINMENT	(≥0,01 ppm di SF6)	UNI EN 14175 parts 3, 4, 6, 7
FACE VELOCITY	(0,05 - 1 m/s)	UNI EN 14175 parts 3, 4, 6, 7
ROOM AIR VELOCITY	(0,05 - 0,3 m/s)	UNI EN 14175 parts 3, 4, 6, 7
LIQUID FLOW	(>81 m3/h)	UNI EN 14175 parts 3, 4, 6, 7

Key

UNI = Ente Nazionale Italiano di Unificazione EN = European Committee for Standardization

Activities



**Accredited tests
and measurements**



**Suitability
of performance**



**Performance
monitoring**



Certified Performance Measures



Tests on Speed

The analysis type that verifies the mere functioning of collective protection equipment (CPD). Instructions on the procedure to be adopted to execute the tests and measurements (EN 14175:4 - 2004 point 5.4.3) are given in EN 14175:3 - 2003 points 5.2.3 and 5.2.4. A flow measurement is performed, taking into account the front speed (in front of the hood) and the speed of the test environment individually.



Containment Testing

The analysis to be conducted in order to verify the degree of safety guaranteed to the user. The procedure to be observed and the data analysis are given directly in point 5.10.2 of EN 14175:4 - 2004. The standard refers to section 5.3 of EN 14175:3 - 2003 in points 5.2.3 and 5.2.4. It can be performed through three types of analysis: Inner Plane Measurement, Outer Plane Measurement and Robustness.

Performance tests and measurements

on collective protective equipment

IQ

Installation Qualification
Measurements in a static environment

Analysis under ideal conditions, i.e. if the laboratory is operating under non-operational conditions.

OQ

Operational Qualification
Measurement in a dynamic environment

Analysis under fully operational laboratory conditions.

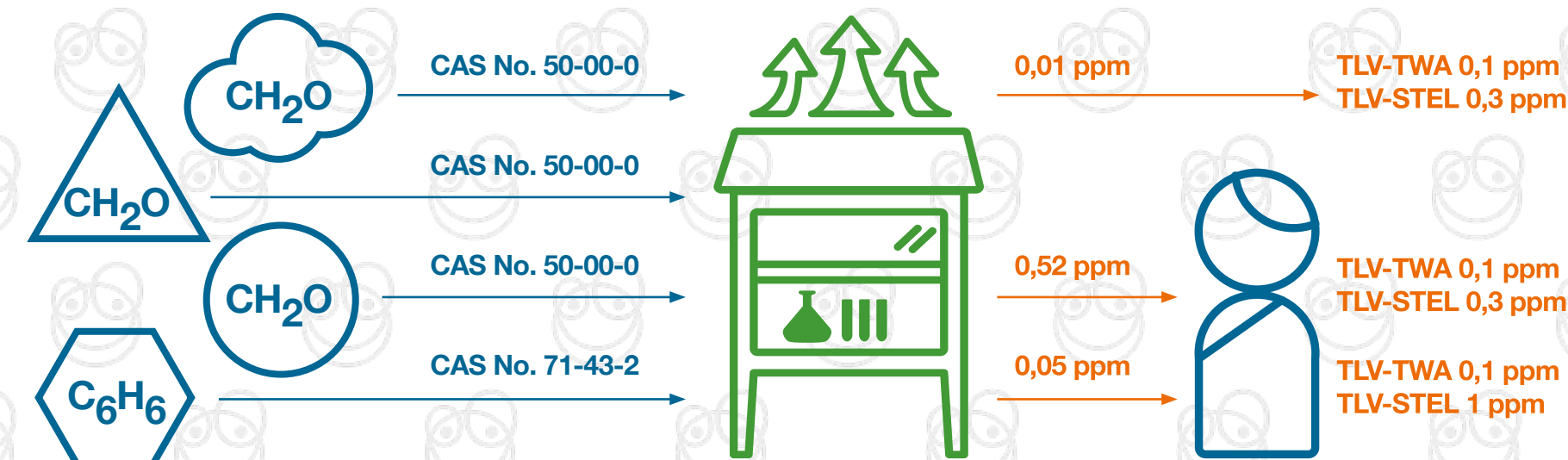


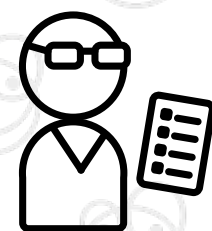
Risk Assessment - Worst Case

Performance assessment to the intended uses

Determining the suitability of the performance of a collective protection device, assessed in relation to the type and quantity of substance handled, is fundamental to guaranteeing the safety conditions laid down in Italian Legislative Decree 81/2008.

Marco Ortelli srl provides a digital platform that allows performance data to be cross-referenced with the risk assessment associated with the intended use.





HSMT App by Marco Ortelli Srl

- **Customised** management of the entire life span of **industrial tools**
- **A single solution to easily share information, updates and status reports, between company users, Prevention and Protection Service Managers, HSE, maintenance staff, according to the access authorisations allowed**
- **Maintenance**, technical **notes** and **deadlines** management
- **A digital archive, always accessible and up-to-date, for monitoring the operation and status of devices**



Performance monitoring through Health & Safety Management Tool

Information is the set of activities aimed at providing useful knowledge for identifying, reducing and managing risks in the workplace. It can be used in terms of the training of employees, for whose health protection the employer is criminally responsible (Italian Legislative Decree 81). In turn, proper training of workers and their representatives (Art. 37) contributes to reinforcing the general prevention action, by having knowledge of the risks involved. Correct information and an efficient way of transmitting it are the indispensable conditions for fulfilling legislative obligations. HSMT App comes to the aid of the user, employer or operator, combining correct information on the risk with adequate information on the protection to be adopted.

Development of computer-based control systems

Through the support of a dedicated APP it is possible to obtain:

- Suitability of the performance with respect to the types of products used
- Periodic surveillance and monitoring established by the chemical risk assessment; generation of a control card

Safety is a Social Value

We care about the health of workers, the tranquillity of users and suppliers. We work alongside companies to ensure safety in the workplace and the effective protection of the equipment they install and use.

We have always had a concept in mind that has become a mission for us: **“Safe through Method”**. We are committed to making professionals more aware of their choices and actions regarding the adoption of protective equipment.

For us it is essential to know and to make known.

We like to think that we contribute in creating and spreading Risk Protection Culture, in order to increase awareness about these issues, the correct use of safety devices and the rules governing their application.

The **#riskprotectionculture** concept is a message that the company wants to spread as much as possible to raise awareness among more and more people, workers and professionals about protection, about making sure that safety conditions are in place, that the devices installed and used are compliant and that they are used in the most appropriate way to safeguard people's lives and the environments in which they work and live.

Safety should not be seen as an obligation, as an extra 'expense', it is a **necessity that protects our lives**. It is an investment in greater tranquillity that can prevent major damage and is to all intents and purposes the responsibility of those in charge.

Investing in a safe working environment means in fact, guaranteeing the necessary alignment with legal obligations

by enhancing the company's operational processes and the functioning of the equipment installed and used in the company.

Social empowerment is nowadays a crucial aspect to create trust in your customers, caring about your company's workers is a competitive advantage, not just a moral and legal responsibility. A **company that invests in safety protection** and relies on specific and approved certifications **gains more social relevance in the market**.

Not taking these aspects into account and not understanding their deep meaning today can be very expensive in terms of the legal responsibilities of the employer and the employees in charge, can create serious

problems for the health of people and the environment in which they work and can also cost a lot in economic planning and business prosperity in the long run.

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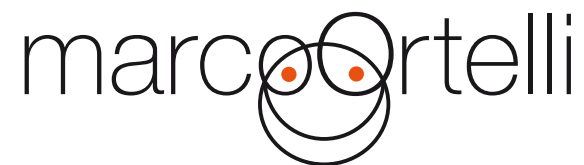
A selection of documents and further reading can be found in our Blog “Safe Through Method” with special content and insights to download.

www.sicuriconmetodo.it

Risk Protection Culture

In-depth videos and interviews with industry experts can be watched and listened to on our YouTube channel ‘Risk Protection Culture’

www.culturatutelarischi.it



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