GUIDE:

WHY EMERGENCY SHOWERS AND HOW TO CHOOSE THE RIGHT SOLUTION?

BROEN-LAB

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1. What is an Emergency Shower?

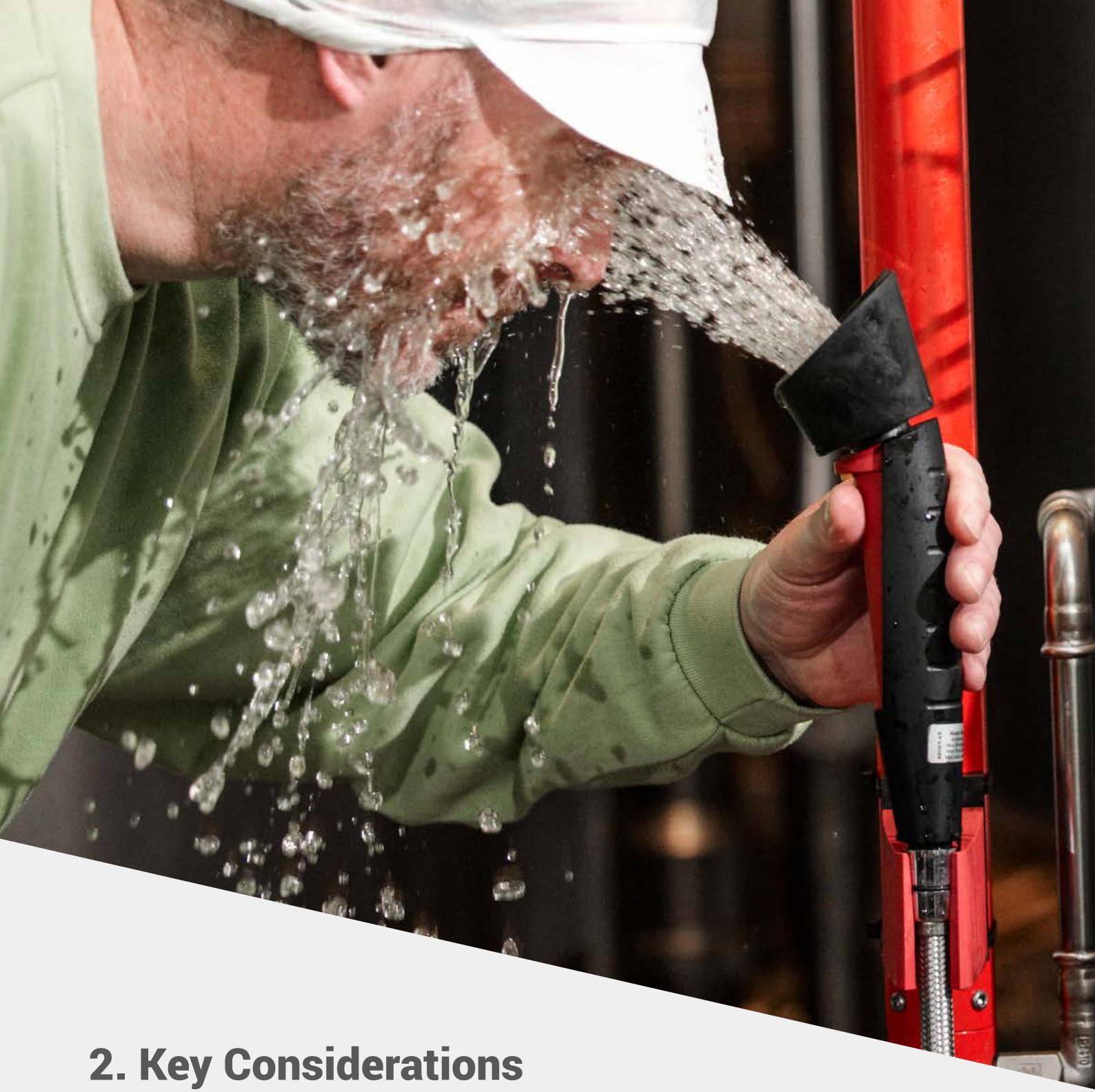
An emergency shower is a safety device designed to provide immediate decontamination/cleaning of a person exposed to hazardous substances such as chemicals, hot liquids, or biological agents.

Its primary purpose is to reduce injury severity by flushing contaminants quickly and effectively from the body, eyes, or face.

Emergency showers are typically installed in environments where hazardous exposure may occur, including:

- Laboratories
- Pharmaceutical production
- Food & beverage facilities
- Chemical and industrial plants

When an accident happens, every second counts. The effectiveness of an emergency shower depends not only on the product itself, but on how well it is integrated into the working environment and how reliably it performs when needed.



2. Key Considerations When Choosing an Emergency Shower Solution (EN 15154)

Selecting the right emergency shower solution is not just about compliance. It is about ensuring real-world safety performance under critical conditions.

THE EUROPEAN STANDARD EN 15154 defines the requirements for emergency safety showers. Below are the most important factors to consider.

2.1 Accessibility and Placement

- The shower must be reachable within seconds from any risk area
- Access must always be unobstructed
- The location must be clearly visible and well-signposted

Correct placement is essential to ensure that injured personnel can act immediately without hesitation.

2.2 Activation and Ease of Use

- Operation must be simple and intuitive, even under stress
- Activation must be possible in one single movement
- The shower must remain activated without requiring continuous effort

In an emergency, users may have impaired vision or mobility. Complex operation is not acceptable.

2.3 Water Flow and Spray Performance

- The shower must deliver a sufficient and consistent water flow
- The spray pattern must ensure full coverage of the body or affected area
- For eye/face wash units, water must be gentle yet effective

Correct dispersion is critical to ensure thorough rinsing of hazardous substances.

2.4 Water Quality and Temperature

- Water must be clean and potable
- Temperature must be tepid (typically 15–37°C)
- Systems should prevent:
  - Scalding (too hot water)
  - Hypothermia (too cold water)

Temperature control is a key requirement under EN 15154, as it directly impacts user compliance during flushing.

2.5 Reliability and Maintenance

- The system must be ready for immediate use at all times
- Regular inspection, testing, and maintenance are mandatory
- Components should be:
  - Resistant to corrosion and scaling
  - Designed for long-term durability

Documented service programs help ensure compliance and operational reliability.

2.6 Risk Assessment and Customisation

A compliant solution is not necessarily the right solution.
You should assess:

- Type of hazards (chemical, thermal, biological)
- Exposure risk (full body vs. eyes/face)
- Number of users and workflow patterns
- Environmental conditions (indoor/outdoor, climate, hygiene requirements)

A tailored solution ensures that safety measures match the actual risk profile of the workplace.

BOOK A RISK ASSESSMENT

2.7 Integration, Monitoring, and Documentation

Modern emergency shower systems may include:

- Monitoring systems (flow, pressure, temperature)
- Alarm functions when a shower is activated
- Digital documentation for inspections and compliance

This enables proactive maintenance and ensures full transparency in safety performance.

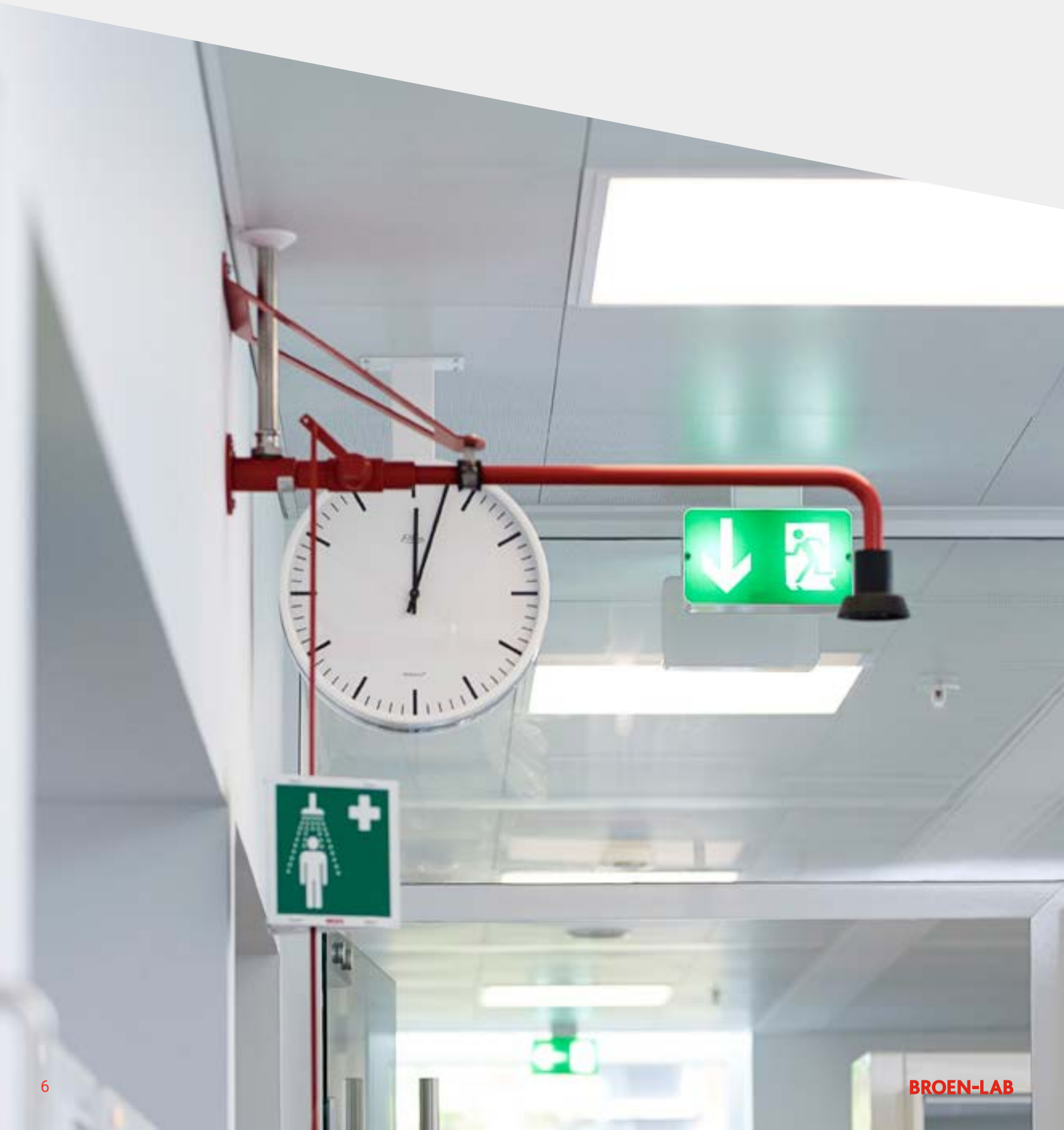
THE FALCON MONITORING SYSTEM will alert you if accidents happen and help you with your maintenance planning and documentation.

3. Beyond Compliance: From Standard to Safety Strategy

While EN 15154 defines the minimum requirements, leading organisations go further by:

- Establishing a “one standard” safety level across all sites
- Implementing regular service and training programmes
- Treating emergency showers as part of a broader risk management strategy

The goal is not only compliance, but protecting employees, operations, and corporate reputation.



4. Summary

An emergency shower is a critical safety system designed to protect people in high-risk environments.

Choosing the right solution requires a holistic approach that includes:

- Correct placement and accessibility
- Reliable performance and proper water conditions
- Compliance with EN 15154
- Ongoing maintenance and documentation
- Alignment with the specific risks of the workplace

When implemented correctly, an emergency shower solution becomes more than a product. It becomes a key component of your safety infrastructure.

LEARN MORE ABOUT EMERGENCY SHOWER SYSTEMS

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