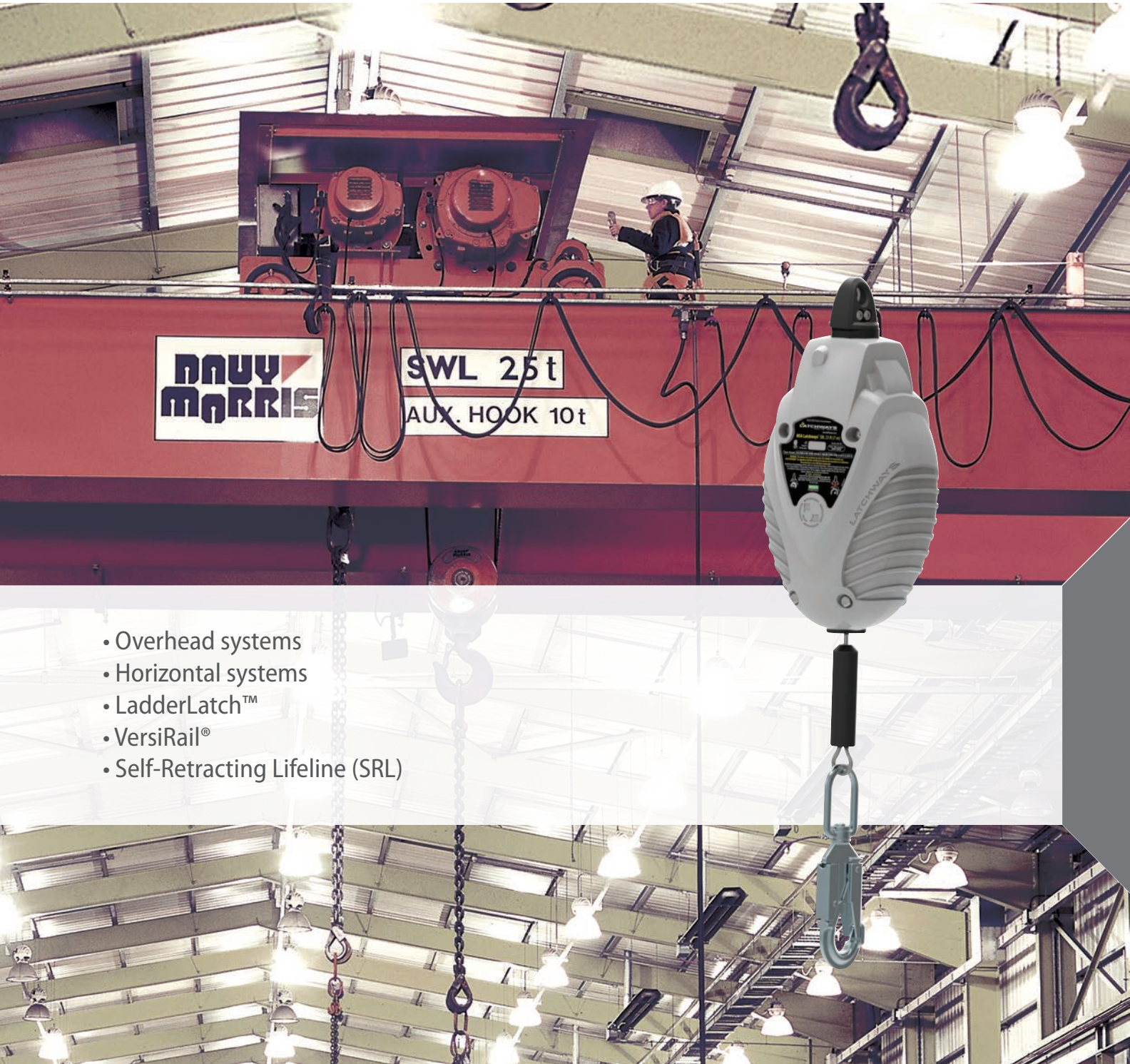


MSA Latchways® Solutions for Industry

Fall protection systems for industrial applications



- Overhead systems
- Horizontal systems
- LadderLatch™
- VersiRail®
- Self-Retracting Lifeline (SRL)

WE KNOW WHAT'S AT STAKE.



Fall protection matters

Falls from heights are the single biggest cause of death and one major cause of serious workplace injury. For businesses whose workers must operate quickly and effectively at heights, fall protection is already a major issue—and will become increasingly significant, per OSHA (U.S.) and the Temporary Working at Height Directive in Europe. These measures include:

- Where fall protection is needed
- Acceptable systems
- Responsible personnel

Whether companies or individuals, those who instruct or allow personnel to work at heights have a clear responsibility for their safety, including aircraft owners and managers.

Are you responsible?

The answer could well be yes. According to health and safety legislation, duty-holders are responsible for ensuring adequate fall protection and are potentially liable in the event of an accident.

- Designer/architect
- CDM co-coordinator
- Health and safety manager
- Principal contractors/sub-contractor
- Facilities manager
- Client/building owner

What you need to do

Official advice to duty-holders can be summarized as follows:

- Avoid work at heights, where possible.
- When working at heights is essential, ensure that workers are not exposed to unnecessary risks.
- Where it is not possible to eliminate fall risk, use a suitable fall protection system to minimize consequences of a fall.

MSA Latchways—the global leader in fall protection



Overhead System

Latchways overhead systems combine innovative Constant Force® technology with a robust mobile anchorage that offer outstanding levels of safety, convenience and versatility within virtually any industrial environment. Workers attached to the overhead system enjoy both unfettered mobility and continuous, hands-free security while working at heights.

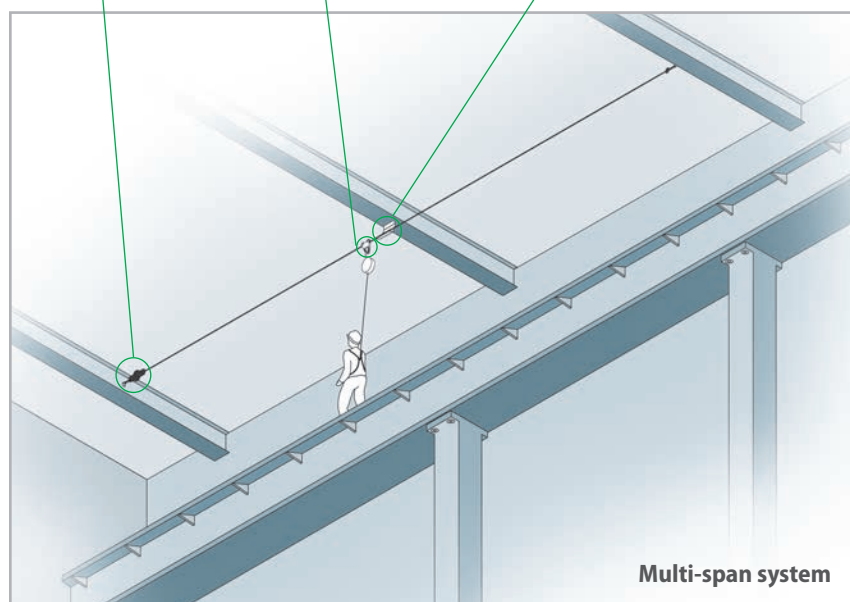
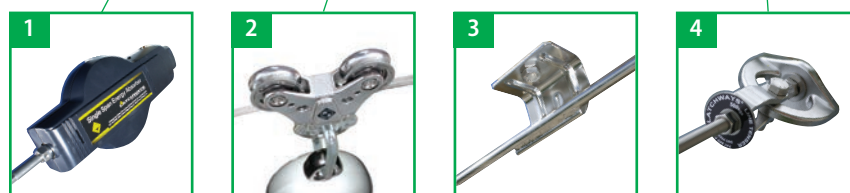
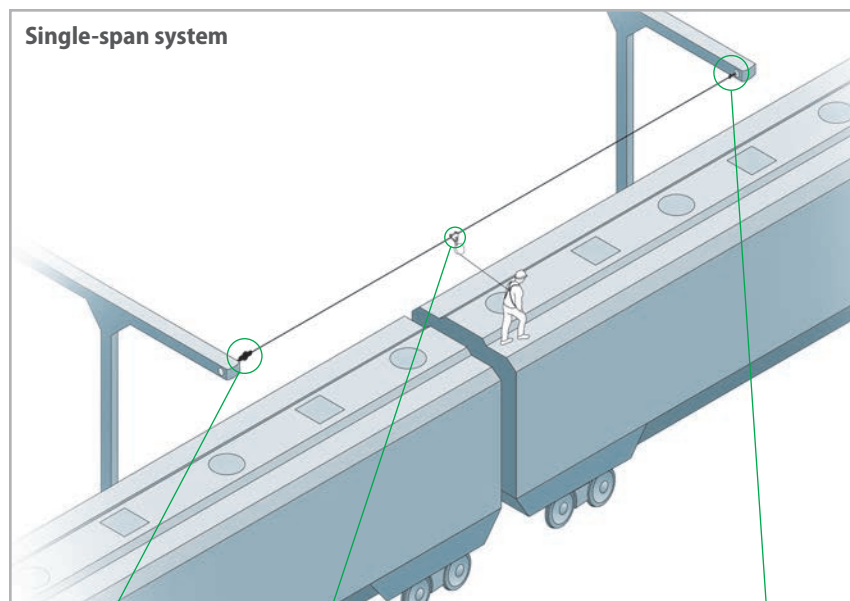
Safety

- System tested to EN 795
- Mobile anchorage certified by SATRA
- Conforms to EN 362:1992
- System uses 1 x 19 stainless steel .31" cable. Cable has low stretch properties and breaking strength exceeding 10,000 lbf
- Inline Constant Force technology energy absorber ensures that maximum load on the worker and end anchor in event of a fall does not exceed 40,000 lbf
- System cable is tensioned to 1,100 lbf to prevent cable sag and possible whiplash in event of a fall
- Mobile anchorage glides freely through intermediate cable guides, allowing worker mobility at different angles for continuous hands-free protection

Ease of installation and use

- Quick and simple installation
- Suitable for virtually all industrial environments, such as warehouses and loading bays
- Less costly to install than I-beam systems
- Can be configured as single-span (at approximately 66 yards) or multi-span system
- Can be used by as many as three workers
- Mobile anchorages remain permanently attached to system
- Can be retrofitted to existing structures or incorporated at design stage of new facilities
- Easily able to accommodate changes of direction
- Written warranty available on system service life

Overhead—Single- and Multi-Span systems



Typical uses of overhead systems illustrated: rail car loading bay (top) and internal factory access (below).



Components

- 1. Constant Force technology energy absorber**
 Located at one end of system, energy absorber ensures that maximum load transferred to structure in event of a fall does not exceed 18 kN.
- 2. Overhead system mobile anchorage**
 Connects user via SRL (self retracting lifeline) to overhead fall protection cable.
- 3. Intermediate brackets**
 Support cable on multi-span systems and also accommodate change in direction.
- 4. Line tensioning device**
 Allows system to be correctly tensioned for use. Indicator disc will spin freely when correct tension is reached at 5 kN.

Self Retracting Lifeline

With the Latchways range of products, MSA has combined innovative engineering, superior materials and futuristic design with quick and easy maintenance to provide the most advanced self retracting lifelines available. SRLs are designed for use with Latchways overhead single- and multi-span systems, providing complete solutions for overhead industrial fall protection.

Latchways Sealed SRLs have been specifically designed for use within harsh marine environments such as offshore wind turbines and oil rigs. Their inherent flexibility allows devices to be installed on even the most complex structures for unhindered hands-free fall protection.



Latchways SRLs have been developed with many unique features to provide smarter, safer and stronger alternatives to traditional SRLs.

Smarter

Patented Latchways frictionless braking system won't go out of adjustment.

Safer

Advanced Full Contact™ technology is 100% reliable; users may check by feeling and hearing clicking as lifeline extends and retracts.

Stronger

Impact resistant cases are manufactured to protect SRLs and internal components from damage.

Better

Modular design allows quick and easy SRL servicing, ensuring minimal downtime.

Solutions for any situation

As expected from the global leader in fall protection systems, MSA products are designed for use within many industrial applications. Horizontal, LadderLatch and VersiRail Systems are as versatile and durable as overhead solutions, with the advantage that they can be used in situations where overhead systems are inappropriate.



Horizontal systems

Latchways horizontal systems are built around the innovative Transfastener™ and patented Constant Force technology, providing continuous hands-free security and guarantee unrivalled fall protection. System range is inherently flexible using 7 x 7 .31" stainless steel cable with a variety of inline components, and can be designed for as many as five simultaneous users. Suitable for use on virtually any structure or roofing arrangement, this system can be specified as a single cable system or multifaceted system that follows the facility's structural contours.



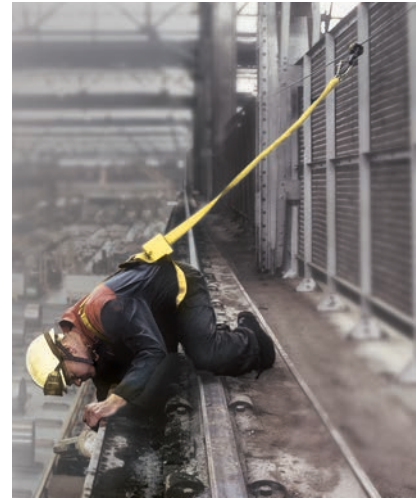
VersiRail Guardrail

VersiRail guardrail provides comprehensive protection solutions for worker safety at heights. Four style variations are offered as a non-penetrative self-weighted system or alternatively, permanently installed with choice of fixing plates. VersiRail is quick and easy to install and can be used on virtually any flat surface.



LadderLatch Systems

The Latchways LadderLatch system can be fitted to any fixed industrial ladder and installed to follow contours of any structure to which it is attached, maximizing user safety. As with horizontal systems, LadderLatch solutions employ Latchways Transfastener and Constant Force technologies to provide hands-free security and industry-leading fall protection. LadderLatch systems can be installed as part of a new build or retrofitted, and are suitable for use by as many as four workers at a time.



Why choose MSA?

With more than 100 years of experience and a worldwide installer network, MSA is the global leader in fall protection. MSA revolutionized fall protection with patented Latchways Transfastener and Constant Force technologies and continues to innovate, with new products designed and manufactured specifically for use across varied industrial environments.

Engineering excellence

All Latchways systems are manufactured to the highest international standards, using only the best materials. System components are individually numbered, batch conformance- and dye penetrant-tested to meet unsurpassed quality standards. In addition to rigorous in-house testing, all Latchways products undergo external verification to ensure that they meet or exceed relevant industry standards. Latchways products are specifically designed for use with the latest structural designs. MSA's commitment to excellence means that its systems have a proven track record of safety and reliability—even within the most extreme environments.



Standards

Key standards relating to fall protection systems for industrial use:

- EN 353-1 Personal Protective Equipment (PPE) against falls from heights—specification for guided-type fall arresters on rigid anchorage line
- EN 353-2 PPE against falls from heights—guided type fall arresters including flexible anchor line
- EN 341 PPE against falls from heights—descender devices
- EN 354 PPE against falls from heights—lanyards
- EN 355 PPE against falls from heights—energy absorbers
- EN 358 PPE for work positioning and prevention of falls from heights—belts for work positioning and restraint and work positioning lanyards
- EN 360 PPE against falls from heights—retractable type fall arresters
- EN 361 PPE against falls from heights—full body harness
- EN 362 PPE against falls from heights—connectors
- EN 363 PPE against falls from heights—fall arrest systems
- EN 364 PPE against falls from heights—test methods
- EN 795 PPE against falls from heights—anchor devices. Requirements and testing

MSA—The Safety Company

Our business is safety. We've been the world's leading manufacturer of high-quality safety products since 1914. MSA products may be simple to use and maintain, but they're also highly sophisticated devices and protective gear — the result of countless R&D hours, relentless testing and an unwavering commitment to quality that saves lives and protects millions of men and women each and every day. Many of our most popular products integrate multiple combinations of electronics, mechanical systems and advanced materials to help ensure that users around the world remain protected in even the most hazardous of situations.

Our Mission

MSA's mission is to see to it that men and women may work in safety and that they, their families and their communities may live in health throughout the world.

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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