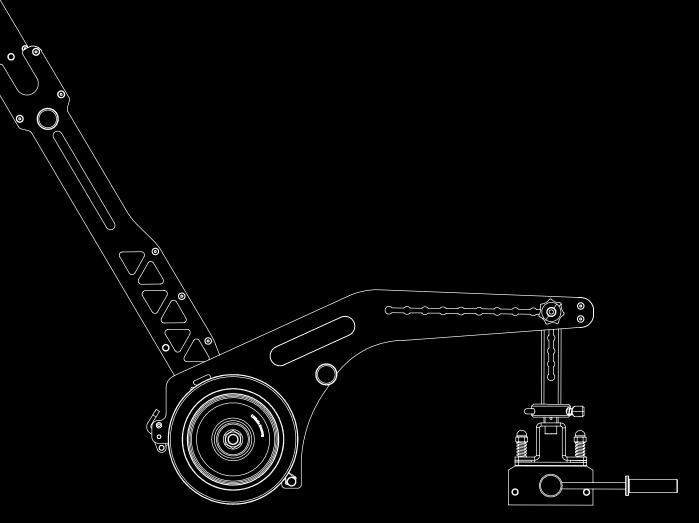


LIFT UP WORK **SAFETY** TODAY

# **MANHOLE COVER LIFTERS**



WWW.VALIFTER.COM



Valifter is Feda's new premium line of openers, aids and accessories based on the know-how gained in over 30 years of business.

VALIFTER devices guarantee the safety of workers, which has always been a corporate value of Feda, and meet the requirements of the national and international market.





Tradition and innovation4
Certifications6
The Valifter Choice8
Getting to know manhole covers10
Devices12
Accessories13
Dangerous habits and systems14
Suitable equipment15
Workers' safety16
Efficiency17
MANHOLE COVER LIFTERS19
Liftop21
Simplex27
COUPLING SYSTEM33
COUPLING SYSTEM
COUPLING SYSTEM
Rhino Slim Dumped Magnet
Rhino Slim Dumped Magnet       35         Hook       37         V & VS Keys       39         COVERS UNBLOCKERS, HANDLES, ACCESSORIES       41         Impact       43         Handle       45
Rhino Slim Dumped Magnet       35         Hook       37         V & VS Keys       39         COVERS UNBLOCKERS, HANDLES, ACCESSORIES       41         Impact       43         Handle       45         Muffler       47
Rhino Slim Dumped Magnet       35         Hook       37         V & VS Keys       39         COVERS UNBLOCKERS, HANDLES, ACCESSORIES       41         Impact       43         Handle       45         Muffler       47         Barriers       49         Valves Opener       51
Rhino Slim Dumped Magnet       35         Hook       37         V & VS Keys       39         COVERS UNBLOCKERS, HANDLES, ACCESSORIES       41         Impact       43         Handle       45         Muffler       47         Barriers       49



# TRADITION AND INNOVATION

#### FOR OVER 30 YEARS

**VALIFTER** is the new premium line of certified and patented manhole cover lifters, that are the result of FEDA's more than 30 years of experience in research and development.

#### **PRODUCT RANGE**

**VALIFTER** manufactures dedicated equipment for unblocking, lifting and moving manhole covers, such as levers, mechanical and magnetic trolleys, manhole cover lifters, and manhole cover unblockers.

The proper use of **VALIFTER** tools helps prevent occupational accidents and diseases.

With a particular focus on issues related to road work, construction sites, waterworks, electricity and natural gas sectors, VALIFTER contributes to and encourages the spreading of a "word safety culture".

#### WHY CHOOSE VALIFTER?

VALIFTER invests daily in research and development to provide customers with optimal solutions and advice on instrument use, offering quality equipment and continuous support right from the product selection phase.

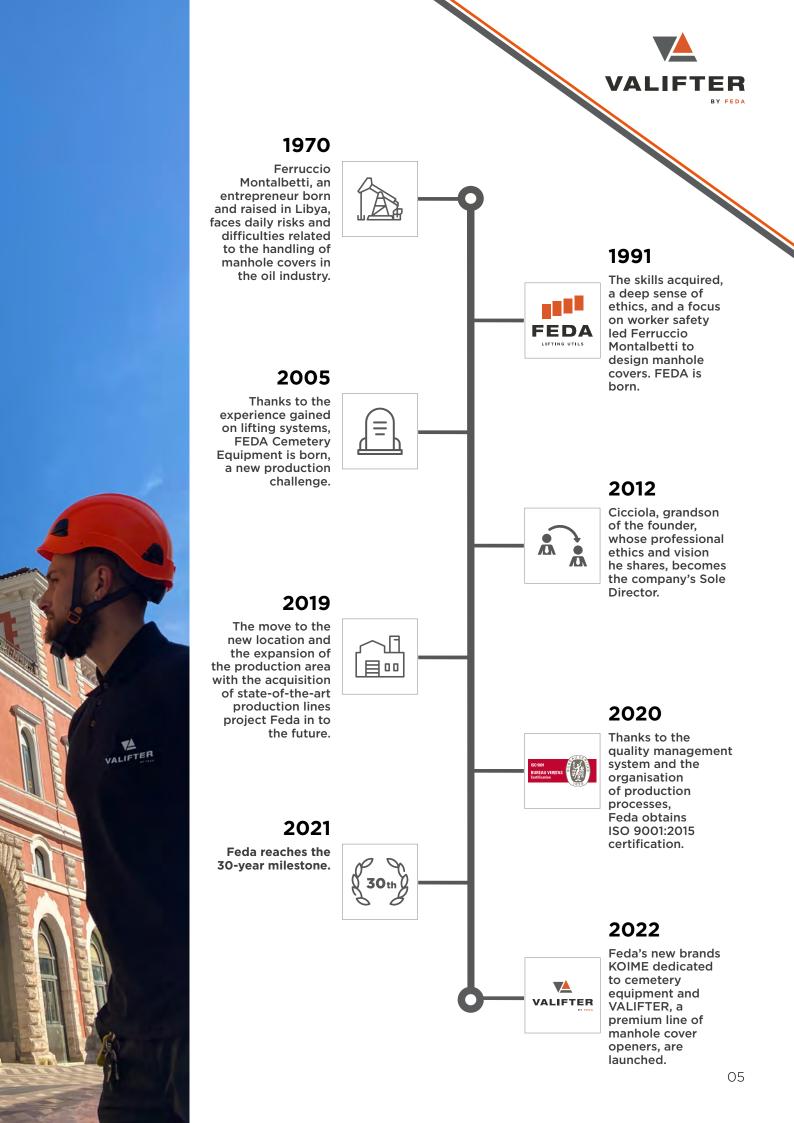
The direct relationship with customers and partners allows the brand to be constantly updated on critical issues in the industry, contributing to the continuous development and innovation that characterise its products.

The company listens to and values customers' opinions in order to improve day by day: the design team studies individual recommendations and turns them into new ideas.

#### **QUALITY PROJECTS**

Attention to the structural, construction and use parameters of the equipment, careful control in the design and production stages, make VALIFTER products durable and of high quality.







# **CERTIFICATIONS**

### **GUARANTEED QUALITY**

#### **Quality Certification**



The management system, optimisation of production processes and customer satisfaction have earned Feda the **UNI EN ISO 9001:2015 Quality Certificate.** 

All products manufactured and marketed by Feda comply with current regulations and are supplied with appropriate conformity certification and manuals. Where applicable, the accompanying documentation also includes warranty certificates and maintenance booklets.



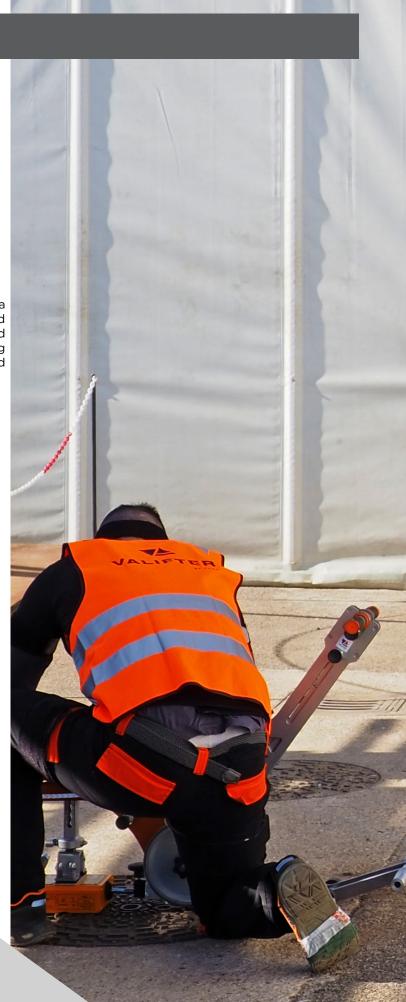
Atex-certified versions of VALI FTER products according to Directive 2014/34/EU.

Atex-certified Valifter products comply with the harmonised standards applied for use in ZONE 1 and ZONE 2:

**EN ISO 12100** Safety of machinery - General principles for design - Risk assessment and risk reduction (2010)

**EN ISO 80079-36** Explosive atmospheres - Part 36 Non-electrical equipment for explosive atmospheres - Method and basic requirements

**EN ISO 80079-37** Explosive atmospheres - Part 37 Non-electrical equipment intended for use in explosive atmospheres - Type of protection for use safety 'c', ignition source control 'b', liquid immersion 'k'.









**FEDA** trelied on Ergocert, the first internationally accredited certification body, to certify the ergonomic characteristics of the new Liftop manhole cover lifter trolley from the VALIFTER brand.

Ergocert evaluated Liftop using state-of-the-art instrumentation such as pressure sensors, sensorised gloves, wi-fi motion capture systems, eye tracking to detect operator movement, posture, estimate load level and muscle activation.

The tests were carried out repetitively; for each manhole cover, three different operators to whom strainsensing sensors were attached performed the handling operation.

Tests were also carried out on other non-Feda devices, which, however, did not reach the required ergonomic standard.

Liftop is now the world's first openers to be Ergocert-certified according to the relevant standards:



### UNI EN 1005:2009

Human physical performance

ISO 11228-1:2022 ISO 11228-2:2009 ISO 11228-3:2009 Ergonomicas - Manual Handling

ISO 11226:200

Ergonomis - Evaluation of static working postures



# THE VALIFTER CHOICE

### A CONSCIOUS CHOICE



#### **GUARANTEE**

FEDA undertakes to repair machine faults and replace any defective parts free of charge with a 24-month warranty, limited to 12 months for electrical and hydraulic parts.

Third-party items, not produced directly by Feda, are subject to the cover and liability of the respective EU manufacturers. In any case, all warranties against manufacturing defects are extended up to 60 months and are never less than 12 months. All warranties are to be considered ex-works.



#### M PROTECTION

All equipment manufactured by **FEDA** is covered by third-party liability (TPL) with a limit of EUR 1,000,000 per claim.

FEDA disclaims all liability for damage to persons and/ or property resulting from improper use of the products sold and failure to observe the rules of use, as well as for any damage caused by use or weathering.



#### TAILOR MADE SOLUTIONS

Qualified technicians analyse any operating scenario and guide customers through the purchasing process. Careful training i n use and attention to after-sales service guarantee added value for customers.

Product selection and adaptations to safety regulations can be onerous and challenging. For this reason, **VALIFTER** offers customised solutions.



#### FREE TRIAL

Customers can receive the items free of charge for one month, use them on a trial basis and check their quality before proceeding to a possible purchase.



### PURCHASING PLATFORMS

We are present on all public administration network procurement platforms.







# LET'S DISCOVER MANHOLE COVERS

### THE RIGHT CHOICE

There are different types of manhole covers: they range from the smallest ones, i.e. manhole covers for gutters, different types of grates, culverts and roadside manhole covers, to large covers such as those located in ports and industrial areas.

Manhole covers may differ in shape, type, size and material.

Manhole covers may have different shapes (square, rectangular or circular) and must comply with standard UNI EN 124, which sets out the construction criteria for manhole covers (cast iron, steel, concrete, ...).

#### TYPES OF MANHOLE COVERS



**PARALLELLY REMOVABLE:** the cover lifts up entirely from the frame seat and displacement is parallel to the road surface.



**HINGED TO THE FRAME**: during opening, the cover remains anchored to the frame by its hinge.



**HINGED WITH LOCK:** this is a manhole cover hinged to the frame with a bayonet lock system that prevents accidental closure.



**ROTARY:** the most common is the Stabilo P.A.M. manhole cover. It can be opened and closed by screwing it on. It generally has three slots at the end of the cover.



**GTS (make Pont-à-Mousson)**: this manhole cover, of French origin, is characterised by its <Closed - Open> (Ouvert-Fermè) signs. It is opened and closed by means of a special rotation system. It is generally used for sewage pipes.



#### **REGULATION AND CLASSIFICATION**

Manhole covers are regulated by **UNI EN 124-1:2015** "Crowning and closing devices for traffic areas used by pedestrians and vehicles. Principles of construction, type testing, marking, quality control".

**UNI EN 124** stipulates that all manhole covers must be marketed with a marking about:

- · The relevant legislation.
- The corresponding class of use.
- The name or logo of the manufacturer.
- The brand IGQ (body accredited for certification of locking and crowning systems).
- The period of manufacture.







### CLASSES OF USE

The standard assigns six different classes to manhole covers, depending on their intended use and place of installation:



A15 Pedestrian and cycling areas only (breaking load > 15kN - 1.5 tonnes).



B125 Areas where very light vehicles can enter: pavements, pedestrian zones, parking areas and multi-storey car parks (breaking load > 125kN - 12.5 tonnes).



C250 Roadside verges extending up to 0.5m on traffic lanes and up to 0.2m on pavements, roadside verges, heavy vehicle parking areas, forecourts (breaking load > 250kN - 25 tonnes).



D400 Traffic routes, provincial and state roads, parking areas, areas accessible to cars and trucks (breaking load > 400kN - 40 tonnes



E600 Special areas subject to heavy loads, port floors.



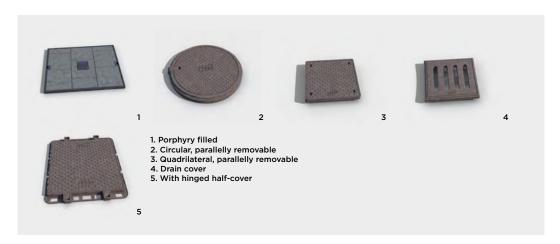
F900 Areas subject to particularly high axle loads, e.g. airport floors (breaking load > 900kN - 90 tonnes).

#### ATTACHMENT POINTS

Manhole covers can come with or without attachment points. The attachment points can be blind or through, of different types:

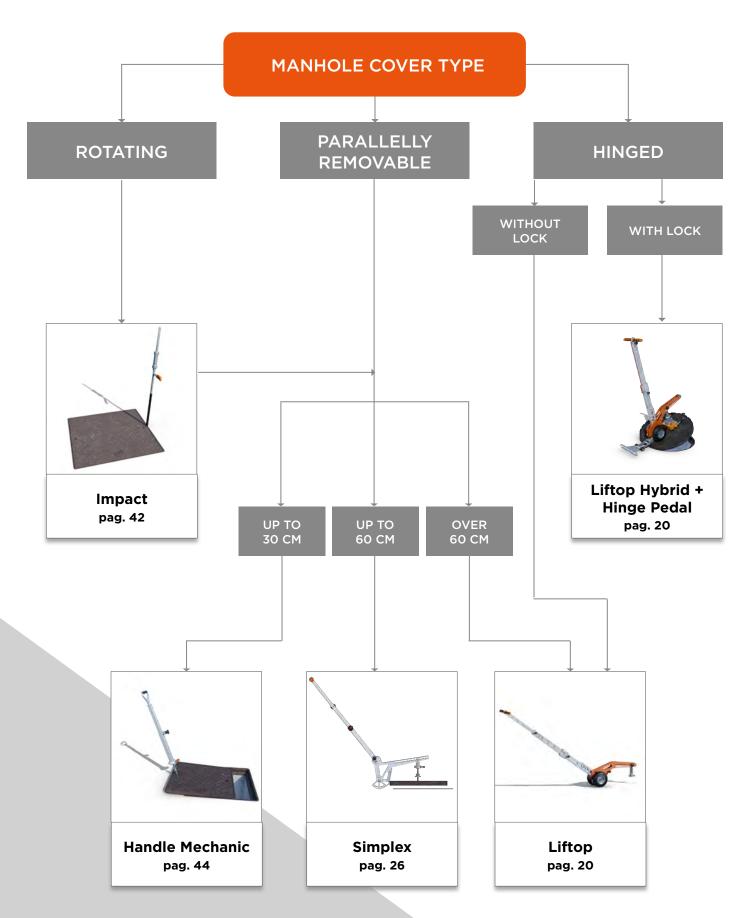


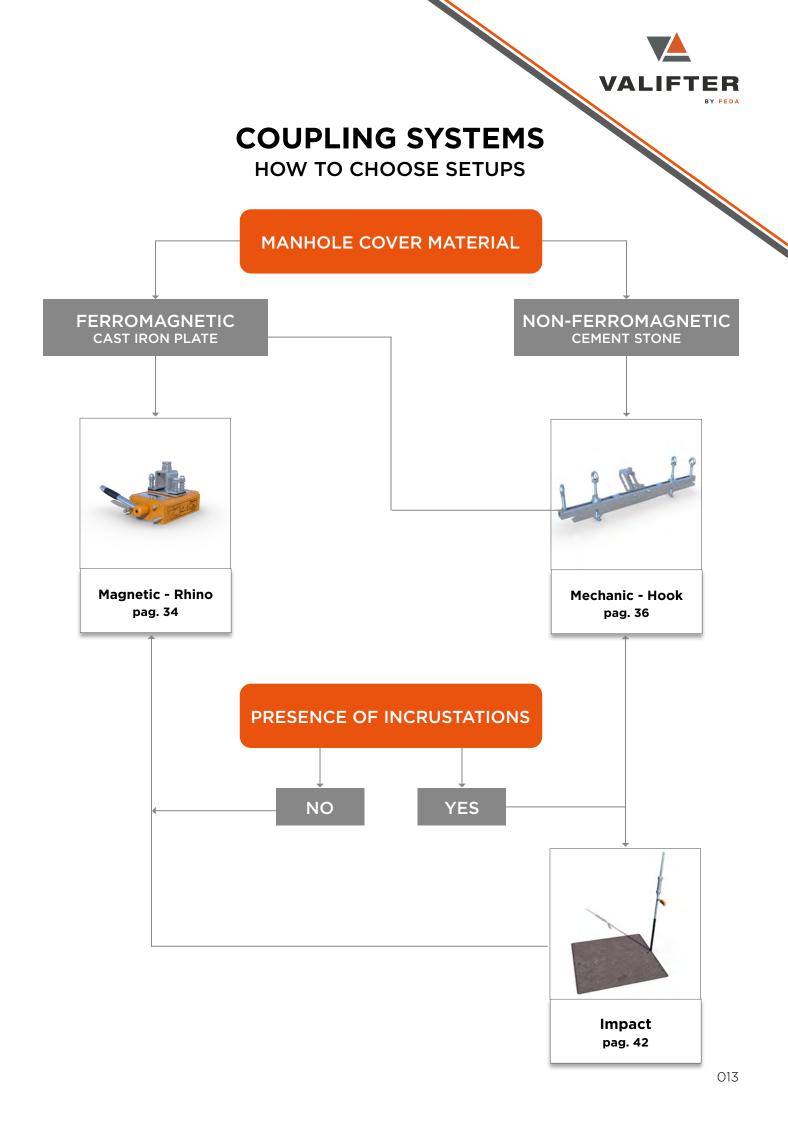
### SOME EXAMPLES OF MANHOLE COVERS





# **DEVICES**HOW TO CHOOSE THE RIGHT MANHOLE COVER LIFTER







# **DANGEROUS HABITS AND SYSTEMS**

### WHAT TO CHANGE



# IT IS DANGEROUS TO USE MAKESHIFT TOOLS

Using pickaxes and other inappropriate tools to open manhole covers, besides being ineffective, can lead to multiple injuries, occupational illnesses and material damage.



# IT IS DANGEROUS TO USE INAPPROPRIATE HANDLING METHODS

Carelessness or the use of inappropriate methods for handling manhole covers leads to accidents and even very serious injuries.



# IT IS DANGEROUS TO HANDLE MANHOLE COVERS IN SEVERAL PEOPLE

Opening covers with inappropriate systems, which hinder the correct gripping and safe control of the load, requires the joint intervention of several operators. Failure to coordinate the operators, a small mistake or distraction, jeopardise the safety of those involved.



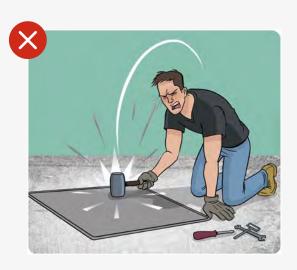
# IT IS DANGEROUS TO OPEN MANHOLES WITHOUT PROPER LOAD CONTROL

Moving manhole covers using the appropriate devices in relation to the weight of the manhole cover is essential to prevent operators from incurring accidents or health problems.



# APPROPRIATE EQUIPMENT

### **CHOOSE SAFETY**



# IT IS RISKY O ATTEMPT TO UNBLOCK MANHOLE COVERS WITH IMPROVISED TOOLS

Using direct percussion tools, such as mallets and picks, can cause eye damage, hearing damage and trauma.



# **DANGER** OF THE PERMANENTLY ACTIVE MAGNETIC FIELD

The always-on magnet exposes electronic devices, magnetic cards and ferrous equipment to unwanted effects and impairs their functioning. The effect on medical devices, such as pacemakers and implantable defibrillators, can lead to serious health risks.



# BEWARE OF PERMANENTLY ACTIVE MAGNETS

The inability to deactivate the magnetism makes it difficult to position the magnet on the manhole cover with respect to the centre of gravity; incorrect positioning can cause the manhole cover to accidentally fall off or complicate detachment from the magnet.



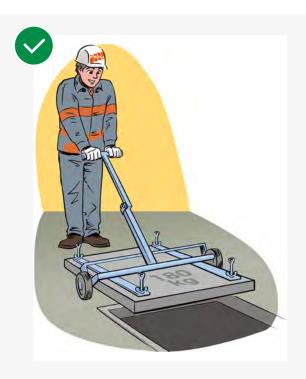
# IT IS DANGEROUS DANGEROUS TO USE DIRECT-PULL

The opening of heavy manhole covers by means of a direct-pull tool (in the absence of a lever system) does not ensure that the operator has the correct position, the correct safety distance to the manhole, and that the effort is reduced, leading to injuries and back injuries.



# **WORKERS' SAFETY**

### THE RIGHT VALUE OF EQUIPMENT



# **MANHOLE COVER LIFTER:** THE RIGHT VALUE OF YOUR TIME

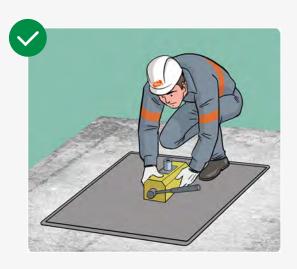


The use of VALIFTER manhole cover lifters requires a manual pushing and pulling force that complies with the current regulations on manual handling of loads, allowing workers to work with a correct posture that significantly reduces the incidence of accidents (crushing injuries of the limbs) and the most common occupational diseases (LBP and discopathy).

In addition, the main operations can be carried out by a single worker, providing greater autonomy in the organisation of interventions.

**VALIFTER** provides solutions for opening, closing and unblocking manhole covers, for maximum efficiency, speed of operation, and ergonomic aspects.

VALIFTER has obtained the world's first certificate of conformity on ergonomics.



# **RHINO SLIM DUMPED** THE POWERFUL MAGNET

Rhino Slim Dumped guarantees a load capacity of more than 80 kg on cast iron and a secure grip in all situations, on wet surfaces or in case of rain.



# RHINO SLIM DUMPED THE MAGNET YOU CAN CONTROL

The manually activated lever, with which the Rhino Slim Dumped is equipped, preserves its capabilities for a long time, ensuring that no energy is lost and that it can be manoeuvred without risk.



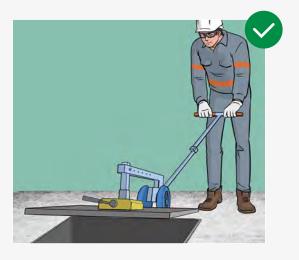
# **EFFICIENCY**

### RAPID AND SAFE OPERATIONS



# **VERSATILE** AND EASY TO USE MAGNETIC MANHOLE COVER LIFTERS

The mobility of the wheels makes the manhole cover lifters extremely versatile and practical, both when opening and handling the manhole cover. The upright posture guaranteed by the percussion system Impact, used to release manhole covers, prevents the spread of splinters that could cause eye injuries.



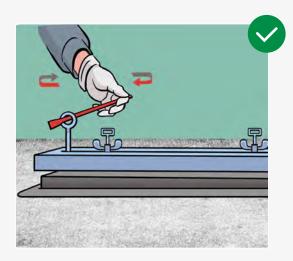
#### **MAGNETIC MANHOLE COVER LIFTERS**

The manhole cover lifters, which employ magnetic technology, free the operator from having to locate the attachment points and make operations fast, efficient, and safe.



#### **UNLOCKING A MANHOLE COVER**

Using **VALIFTER** tools, unblocking a manhole cover is a simple and safe operation. The mechanical system Hook guarantees versatility and functionality when handling manhole covers, thanks to its dual function of unblocking and lifting.



#### **EASY WITH THE RIGHT TOOLS**

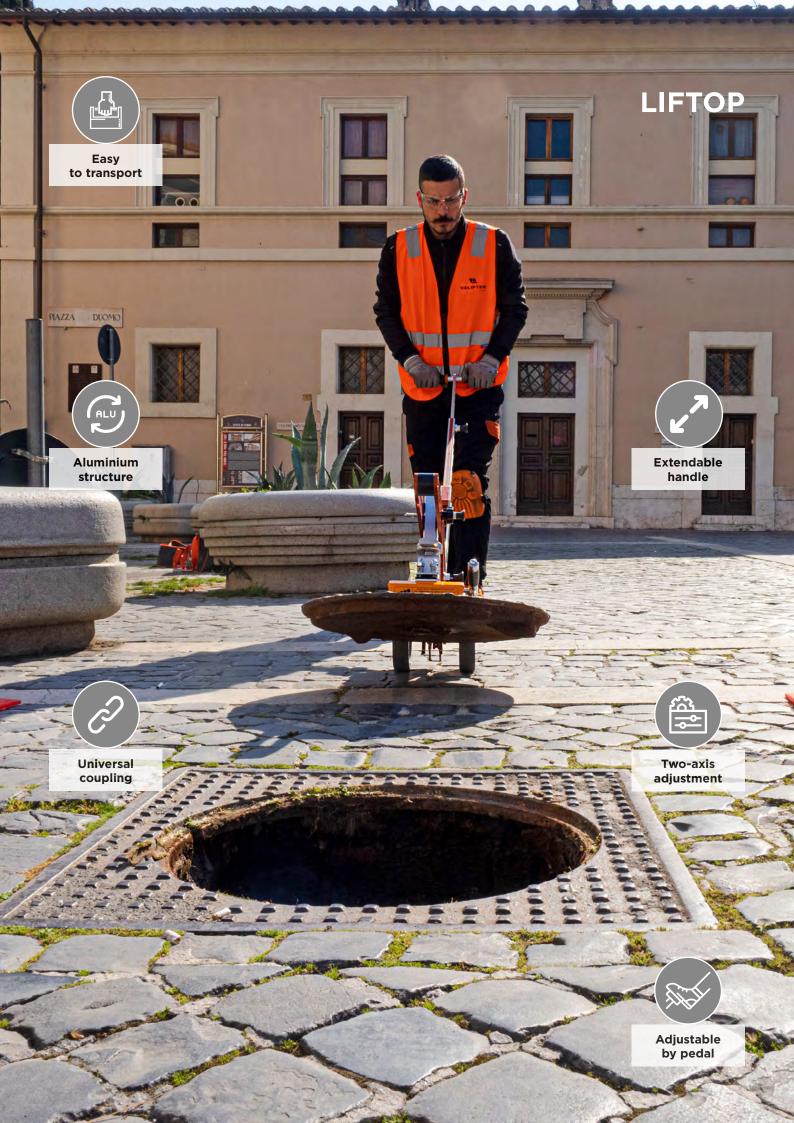
By means of the pressure exerted by the tie rods at the ends of the Hook mechanical bar, it is possible to break up all kinds of encrustations between the frame and the manhole cover.





# **MANHOLE COVER LIFTERS**

Systems that allow fast and safe opening, handling and closing of manhole cover opener trolley. They are characterised by their strength, lightness, compactness and versatility.



### **LIFTOP**



### THE UNIVERSAL AND ERGONOMIC MANHOLE COVER LIFTER



#### UNIVERSAL SYSTEM

It is the ideal manhole cover lifter for working quickly on manhole covers of all types, shapes and materials, safeguarding the health of the operator.

The coupling mode is hybrid since it can grip the manhole cover either by means of magnetic or mechanical technology, assuring the operator versatility for every situation.

The position of the wheels also allows operations with only one side of the manhole cover available, making emergency operations possible in tight spaces or in the presence of obstacles.

#### ERGONOMIC

Liftop is the world's only ergonomics-certified opener. Liftop allows the operator to work in total safety in any situation.

#### AVAILABLE IN ATEX VERSION

Liftop in Atex version can be used in high-risk explosive environments classified as ZONE 1 and ZONE 2.

#### FULLY INTEGRATED

Liftop structure has integrated positioning and adjustment elements, which optimise the speed of commissioning and use of the device.

This feature prevents the loss of moving parts, such as pins, so that the possibility of replacement with unsuitable components is totally eliminated.

WEIGHT	STRUCTURAL CAPACITY	WLL
9 KG	140 KG	80 KG

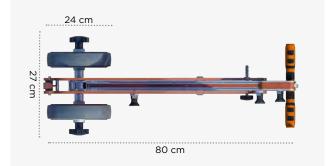
 $<sup>^{*}</sup>$  maximum liftable load in accordance with Legislative Decree 81/08 and Dir. 2007/30/EEC







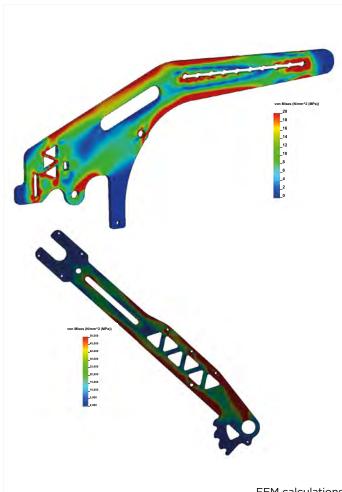




**DIMENSIONS LIFTOP CLOSED** 



#### THE IMPORTANCE OF DESIGN



#### FEM calculations

#### • RESISTANCE

Liftop is the result of meticulous material analysis and is made of special aluminium alloys, an innovative material that lightens the weight of the device in favour of portability.

The use of geometries and reinforcements in the most stressed parts of the structure ensure the robustness and high lifting capacity certified by stress tests and FEM calculations.

Liftop is subject to anodic oxidation treatment to reinforce corrosion resistance.

#### • LIGHTNESS

Liftop is the world's only ergonomics-certified cover lifter. Liftop allows the operator to work safely in any situation. The weight of only 9 kg and the small dimensions make Liftop the perfect device for storage and transport even in vehicles with limited loading space.

The manoeuvrability is amplified by the presence of the handle and the extended handle configuration, allowing Liftop to be carried like a trolley.

#### DESIGN

The choice of colour and the presence of reflective elements allow the device to be highly visible on the road.

The shape and design are the perfect combination of aesthetics and functionality.

The frame is designed to prevent load swaying and ensure stability.



# **LIFTOP**

### **TECHNICAL FEATURES**

### **SETUPS**

	LIFTOP	SLIM DUMPED MAGNET	ноок 80	HINGE PEDAL
MAGNETIC	✓	✓		
MECHANIC	✓		✓	
HYBRID	✓	✓	✓	
FULL OPTIONAL	✓	✓	✓	✓

Equipment and operating capabilities are the same for the Liftop and Liftop Atex model





Liftop Magnetic Liftop Mechanic

### **OPERATING CAPABILITIES**

MANHOLE COVER FEATURES						
MAX. WIDTH/DIAMETER	MAX. THICKNESS	SHAPE				
80 cm	18 cm	$\odot$ $\Box$ $\triangle$				

	MANHOLE COVER TYPE				TYPE OF (	COUPLING	MATE	RIAL	
	Parallelly removable	Hinged	Hinged with lock	Stabilo P.A.M.*with wedge	GTS* with Impact	00B <b>0</b> 0	NO ATTA- CHMENT POINT	CAST IRON PLATE	CEMENT STONE
MAGNETIC	~	~		~	~	~	~	~	
MECHANIC	~	~		~		~		~	<b>~</b>
HYBRID	~	~		~	~	~	~	~	<b>~</b>
FULL OPTIONAL	~	~	~	~	~	~	~	~	~

 $<sup>^{*}</sup>$ To open this manhole cover, it is necessary to combine the manhole cover lifter with the indicated accessory





#### **ERGONOMICS**

**LIFTOP** has the longest handle extension in its class. Thanks to its double extension, besides reducing effort during use, it guarantees the operator a safe distance from the manhole and reduces the risks of occupational injuries and illnesses.

The multiple adjustments of the device according to the load to be lifted and the physical characteristics of the user, the attention to posture and safety have allowed Liftop to be the first manhole cover opener trolley lifter in the world to obtain Ergocert ergonomics certification.



Liftop complies with:

#### EN ISO 26800

Ergonomics - General approach, principles and concepts.

#### **EN ISO11228**

Ergonomics - Manual handling of loads.

#### **EN ISO11226**

Ergonomics -Evaluation of static working postures.

#### **EN ISO 14738**

Ergonomics - Safety of the machinery.

#### UNI-EN 1005-3

Ergonomics - Safety of

machinery - Standards for recommended force limits in use.



#### **VERSIONE ATEX • 2022 II 2G h II T6 Gb**

**LIFTOP ATEX** complies with the provisions of the Machinery Directive 2006/42/EC, the Atex Directive 2014/34/EU and further harmonised regulations, for use in ZONES 1 and 2. The use of the Atex version is intended for use in environments with a high explosive risk or which may become so in the event of unforeseeable circumstances (gas, petrol and oil leaks, increased temperature, pressure or breakage of a component).

**Zona 0**: Situation in which an explosive atmosphere is permanently present.

**Zona 1**: Situation in which an explosive atmosphere is likely to form.

**Zona 2**: Situation in which an explosive atmosphere is not likely to form.

### **ACCESSORIES**





#### HINGE PEDAL

Foot pedal extension to be used in combination with the Liftop trolley, for the safe closing of hinged to the frame covers equipped with an anti-unintentional locking device.



#### • EXTENDED EXPANDERS

Extended expanders improve comfort when handling manhole covers



#### • PNEUMATIC WHEELS

Pneumatic wheels improve the manoeuvrability of the trolley on uneven terrain.

The use of pneumatic wheels does not allow LIFTOP to maintain the compliance conditions for ATEX.



#### TRANSPORT BAG

It allows easy storage and transport of the Liftop trolley and its accessories.



### **SIMPLEX**



#### THE SMART MANHOLE COVER LIFTER



#### QUICK AND EASY

Simplex integrates the functionality of the rocker lever and the new generation of manhole cover opener trolleys in a single product, making it the compact solution for safely handling of small manhole covers.

The device, made of stainless steel, is suitable for manhole covers with a maximum side length of up to 60 cm, of any shape and material.

The universal coupling allows the trolley to grip the manhole cover either by means of the lifting magnet or by means of one or more interchangeable mechanical keys.

#### AVAILABLE IN LEVER VERSION

The Simplex trolley is available in both wheeled and Lever versions, thanks to the rocking base that can be fitted as an alternative to wheels.

#### ALL INTEGRATED

The design of Simplex is equipped with integrated positioning and adjustment elements, which optimize the speed of commissioning and use of the device. This feature prevents the loss of moving parts such as pins, so that the possibility of replacing them with unsuitable components is totally eliminated.

WEIGHT	STRUCTURAL CAPACITY	WLL
6 KG	100 KG	60 KG

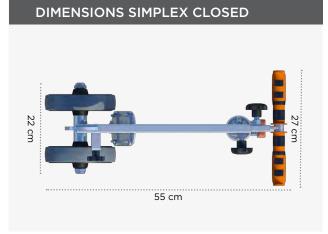
<sup>\*</sup> maximum liftable load in accordance with Legislative Decree 81/08 and Dir. 2007/30/EEC













#### **EASY TO USE**



#### • VERSATILE

The search for compactness and manageability did not prevent the VALIFTER team from ensuring the ergonomics of the product. The double-extension handle allows the inclination to be adjusted to three different angles. These features guarantee every user the correct posture and the least amount of effort.

#### • FAST

Using the trolley is straightforward thanks to the quick adjustment of the integrated coupling system along the slide rail. The shape of the frame prevents swaying of the lifted load.

#### ALTERNATIVE

Lever Simplex consists of a rocking base that replaces the wheels and turns the trolley into a manoeuvrable and compact lever.





### **TECHNICAL FEATURES**

### **SETUPS**

	SIMPLEX	MAGNETE SLIM DUMPED	ноок 60	VS KEYS
MAGNETIC	✓	✓		
MECHANIC	✓		✓	<b>~</b>
HYBRID	✓	✓	✓	<b>✓</b>

The magnetic, mechanic and hybrid configurations remain unchanged for Simplex Wheels and Simplex Lever. \*\*Simplex Lever can also be used with single VS Keys on small manhole covers and drains.





Simplex Magnetic Simplex Mechanic

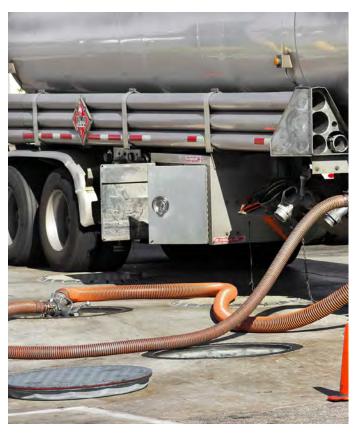
### **OPERATING CAPABILITIES**

MANHOLE COVER FEATURES							
MODEL	MAX. WIDTH/DIAMETER	MAX. THICKNESS	SHAPE				
Simplex Lever	60 cm	10 cm					
Simplex Wheels	60 cm	10 cm					

	MANHOLE COVER TYPE					TYPE OF (	COUPLING	MATE	RIAL
	Parallelly removable	HINGED	Hinged with lock	Stabilo P.AM.* with wedge	GTS* with Impact	008	NO ATTA- CHMENT POINT	CAST IRON PLATE	CEMENT STONE
MAGNETIC	~			~	~	~	~	<b>~</b>	
MECHANIC	~			~		~		<b>~</b>	<b>~</b>
HYBRID	~			~	<b>~</b>	~	<b>~</b>	<b>~</b>	<b>~</b>
KIT SINGLE KEYS **	~			~		~		<b>~</b>	<b>~</b>

<sup>\*</sup>Per l'apertura di questo chiusino è necessario abbinare l'aprichiusino all'accessorio indicato







#### VERSIONE ATEX • 2022 II 2G h II T6 Gb

**SIMPLEX** complies with the provisions of the Machinery Directive 2006/42/EC, the Atex Directive 2014/34/EU and further harmonised standards, for use in ZONES 1 and 2.

**Zona 0**: Situation in which an explosive atmosphere is permanently present.

**Zona 1**: Situation in which an explosive atmosphere is likely to form.

 ${\bf Zona~2:}$  Situation in which an explosive atmosphere is not likely to form.

### **ACCESSORIES**





#### ROCKER ARM

Simplex can be equipped with the rocking base, which can be mounted as an alternative to wheels, turning the trolley into a manhole cover lifter lever.



#### • STANDARD WHEELS

The wheels allow the conversion of the Simplex Lever into a manhole cover opener trolley.



#### • KIT VS KEYS

VS Keys can be inserted directly into the Simplex openers to perform operations without the need for additional lifting accessories.



#### TRANSPORT BAG

It allows easy storage and transport of the Simplex trolley and its accessories





## **COUPLING SYSTEMS**

Lifting systems to be used with VALIFTER trolleys to allow the attachment of all types of manhole covers. The coupling systems, using magnetic or mechanical technology, are designed and certified to ensure load stability.



### Q FOCUS ON



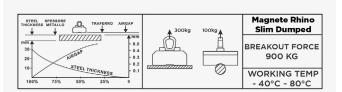
### • THE ONLY SHOCK-ABSORBING MAGNET

The Rhino Slim Dumped Magnet incorporates a stress-absorption system based on Valifter's experience.

The shock-absorbing system provides the magnet with an optimal grip on the manhole and distributes the mechanical stresses acting during maneuvering, optimising load retention and stability.

The mechanism allows the trolley to compensate for inclinations, facilitating the opening and closing of even manhole covers located on uneven terrain.

#### **DOUBLE MAGNETIC CIRCUIT**



Rhino Slim Dumped Magnet has a double magnetic circuit optimised to attract manhole covers of even minimal thickness.

### RHINO SLIM DUMPED MAGNET



#### MAGNETIC POWER UNDER CONTROL



#### STRENGTH AND EFFECTIVENESS

Rhino Slim Dumped Magnet is the magnetic lifting device that exploits the properties of neodymium and guarantees the same effectiveness as much heavier and bulkier magnets.

#### MANUAL ACTIVATION AND SAFETY

The magnet is activated manually by means of a lever fitted with a safety lock that prevents accidental deactivation. Activation is performed after positioning the magnet over the manhole cover. This operation eliminates the risk of injury from crushing fingers.

#### LONG LIFE

The deactivated magnet does not dissipate any magnetic field and permanently retains its capabilities. Rhino Slim does not require maintenance and periodic checks when used with the trolley openers and not for lifting suspended loads.

The Rhino Slim Dumped Magnet is available in Atex version.

#### RAPIDITY OF INTERVENTION

The magnet does not require a power supply. It allows quick operations without sacrificing safety, and frees the operator from searching for, cleaning and using the attachment points in manhole covers.

#### • NO UNDESIRABLE EFFECTS

The strength of the neodymium, the manual activation and the aluminium insulating coating prevent the circuit from attracting unwanted materials, limit the person's exposure to the magnetic field and ensure the equipment's longevity and safe performance over time.

It is not necessary to use non-magnetic bags for transport.

#### UNIVERSAL

The Rhino Slim Dumped Magnet incorporates the unified quick coupling, making the magnet compatible with every VALIFTER lifting system.

BREAKOUT FORCE	WEIGHT	CAPACITY ON CAST IRON (MIN)	DIMENSIONS
900 KG	10 KG	80 KG*	20,5x13,2x16

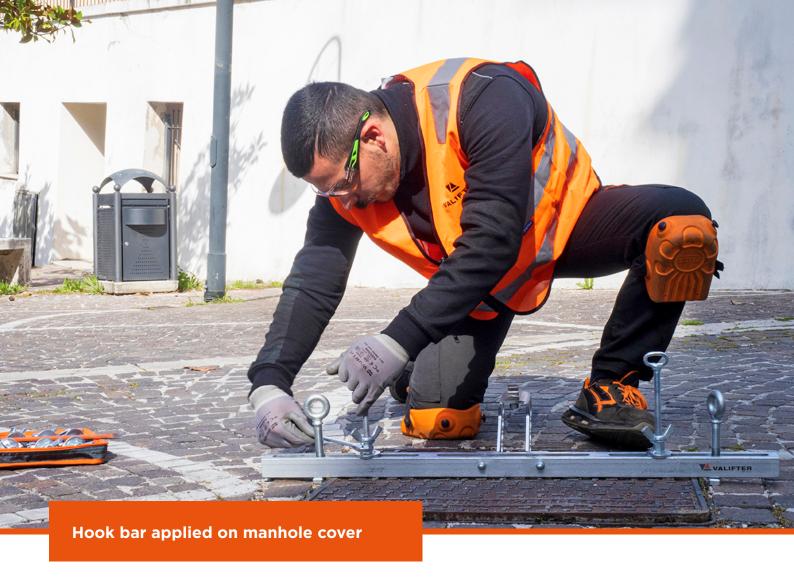
The Atex version has a reduced capacity of approximately 12%



#### **ACCESSORIES**

Bag for transporting the magnet STANDARD

Attachment for crane and overhead crane OPTIONAL



### Q FOCUS ON

# • OPEN MANHOLE COVERS WITHOUT ATTACHMENT POINTS

For all non-magnetic manhole covers without an attachment point (stone or concrete), it is recommended to create a new attachment point that ensures a secure grip by means of the manhole openers.

The permanent conversion of covers will make the opening, handling and reclosing of manhole covers easy and compliant with current regulations.

Converted manhole covers can be opened using the Hook bar with the PLUS connection.





# HOOK



# **UNLOCK AND OPEN: A COMPLETE SYSTEM**



### MECHANICAL FORCE

The Hook system extends the opening capability of Valifter lifting systems, allowing them to be mechanically anchored on manhole covers. Hook is available in different sizes, allowing it to operate on manhole covers of different sizes.

#### DUAL FUNCTION

**Hook** makes it possible to break up even the heaviest fouling on manhole covers through the action of the tie rods.

The mechanical bar can be used as an unlocking or a lifting system together with the trolleys.

#### ATEX

**Hook** complies with the provisions of the Machinery Directive 2006/42/EC, the Atex Directive 2014/34/EU and further harmonised regulations, for use in ZONE 1 and ZONE 2.

### PLUS CONNECTION

Plus connection is an accessory of the Hook bar for opening covers fitted with screws and concealed handles.

### • EXTREME ARMS

Extreme Arms improve the functionality and performance of manhole trolleys for lifting manhole covers with attachment points at the edges.

Easily attached to the Hook bar, they shift the centre of gravity of the load in favour of effort reduction and improved ergonomics.

### **ACCESSORIES**

**Hook carrying bag STANDARD** 

Open Ratchet OPTIONAL Plus connection OPTIONAL

**Extreme Arms for Hook OPTIONAL** Set V Keys STANDARD con Hook 80 - 100 - 120

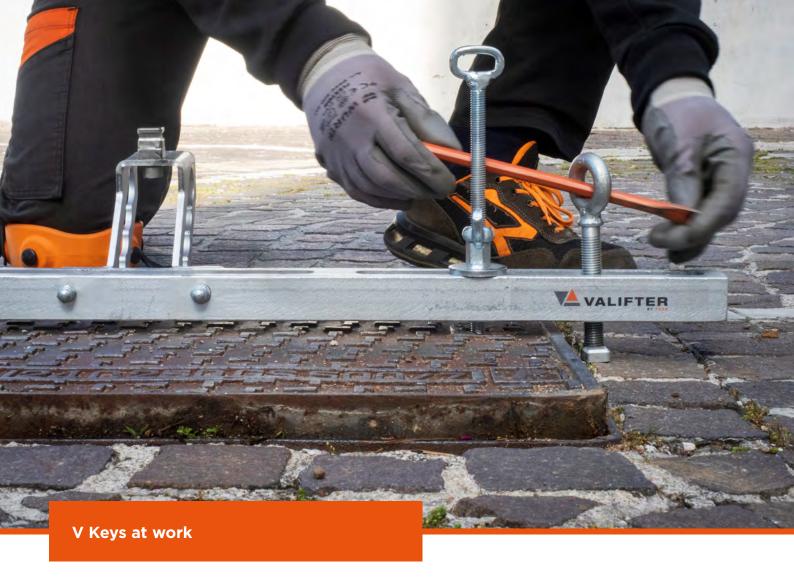
Set VS Keys STANDARD con Hook 30 - 60











# Q FOCUS ON



V & VS Keys can be used in an Atex environment.

The use of the Atex version is envisaged in environments with a high explosive risk or which may become so in the event of unforeseeable circumstances (gas, petrol and oil leaks, increased temperature or pressure, rupture of a component)

**Zona 0**: Situation in which an explosive atmosphere is permanently present.

 ${\bf Zona}~{\bf 1}\!\!:$  Situation in which an explosive atmosphere is likely to form.

**Zona 2**: Situation in which an explosive atmosphere is not likely to form.





# V & VS KEYS



### FOR EACH TYPE OF COUPLING







### • INTERCHANGEABLE KEYS

The key types are compatible with almost all attachment points. For special attachment slots, VALIFTER can custom-configure keys. All setups are supplied with an accessory kit consisting of a pouch for the transport of the keys, a chisel, a spatula and a cleaning tool, the Slit Cleaner.

#### V KEYS SERIES

V-Keys allow quick and safe attachment of manhole covers thanks to the screw-on clamping element that ensures a grip. They are used together with the Liftop manhole cover opener and the mechanical bar Hook 80, 100 and 120.

### • VS KEYS SERIES

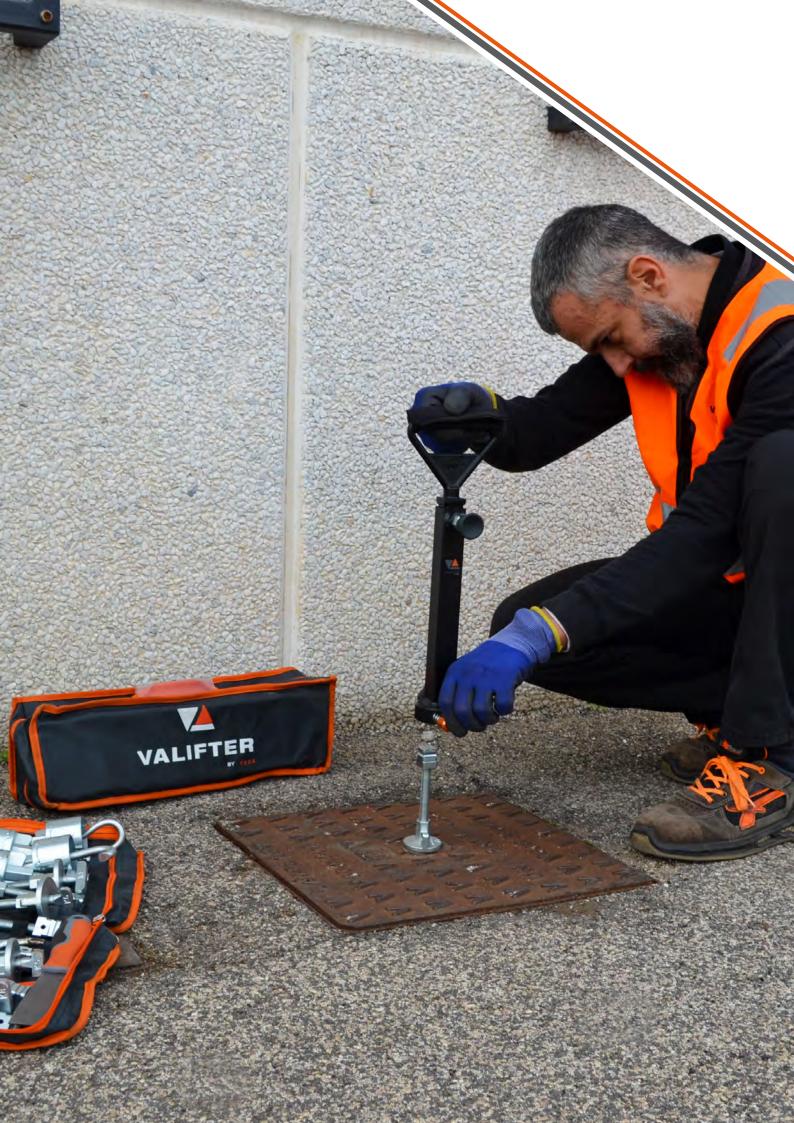
Specially designed for fast and effective use, VS Keys are used together with the Simplex manhole cover lifter and the mechanical bar Hook 30 and 60.

#### CERTIFICATES FOR SUSPENDED LOADS

V Keys and VS Keys are certified as lifting accessories in accordance with Art. 2d of Legislative Decree No. 17 of 27 January 2010. It is possible to attach eyebolts to the keys to perform mechanical lifting using cranes or overhead cranes.

### **ACCESSORIES**

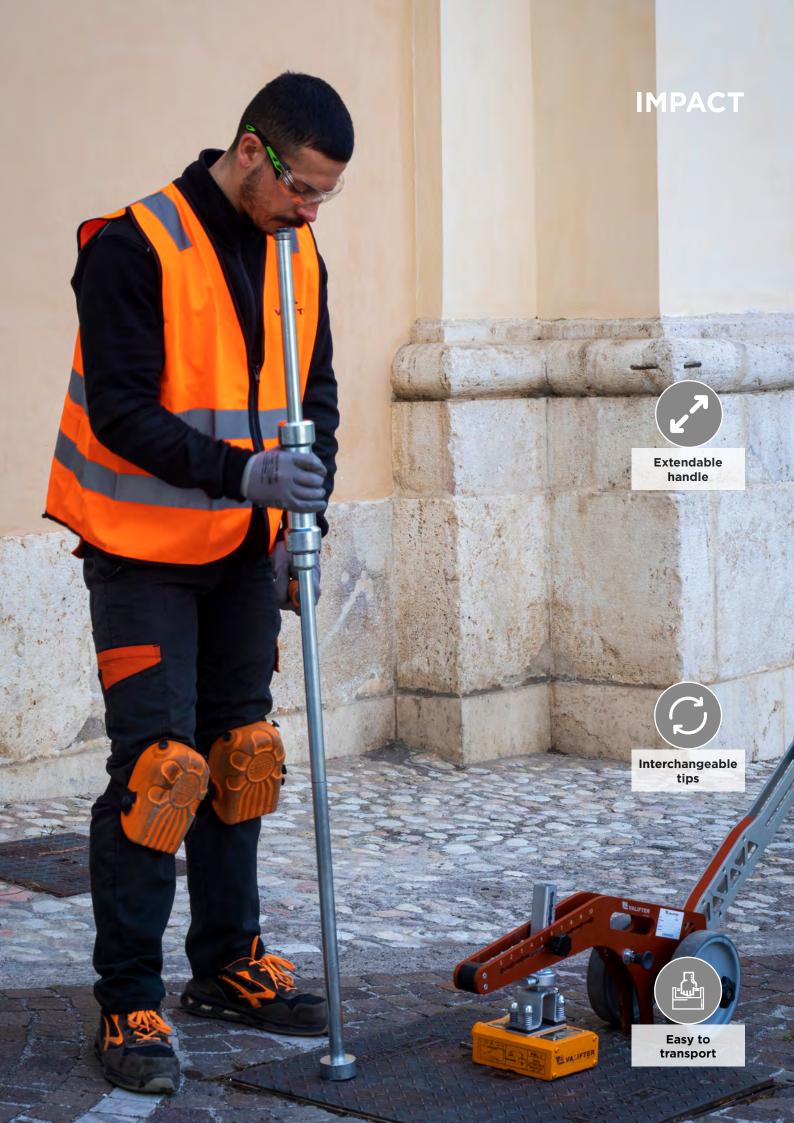
Key pouch STANDARD
Cleaning kit STANDARD
Open Ratchet OPTIONAL





# MANHOLE COVER UNBLOCKERS, HANDLES, ACCESSORIES

Devices and equipment that extend and improve the functionality of manhole cover lifters and contribute to safer and faster road maintenance.



# **IMPACT**



# **QUICK UNBLOCKING**



Use of the flat tip terminal in the gap between the frame and the cover.



Use of the pestle tip terminal on the surface of the cover



### ERGONOMIC SYSTEM

**Impact** is the quick solution for unblocking manhole covers that are particularly difficult to lift due to encrustations such as tar, frost, salt and various sediments, oxidation, and soil deformation. The Impact is used in an upright position, thus limiting the risks of occupational diseases due to incorrect posture.

#### ENERGY WHERE IT IS NEEDED

Made with interchangeable special steel terminals (one with a flat tip and the other with a pestle) that concentrate the energy of percussion at the exact point where the fouling acts, i.e. between the edge and the manhole cover frame.

### SAFE UNBLOCKING

**Impact** ensures the right distance to the point of impact, protecting the operator from the possible release of hazardous materials.

Dimensions: 24 x 6 x 138 cm - weight 11,03 Kg

### **ACCESSORIES**

Flat tip terminal STANDARD

Pestle tip terminal STANDARD







# HANDLE MECHANIC

# **EASY TO USE**



### HANDY

Handle Mechanic is a handy and durable manhole cover lifter handle, suitable for opening small manhole covers, such as those for gates and valves or various types of grates and drains.

### RESISTANT

The tool is made of electrolytically galvanised carbon steel and is extendable to improve ergonomics when lifting loads. The handle is covered with neoprene for a soft and secure grip.

### VERSATILE

Thanks to the Valifter universal coupling, interchangeable VS Keys can be quickly attached to Handle Mechanic.

Handle Mechanic complies with the provisions of the Machinery Directive 2006/42/EC, the Atex Directive 2014/34/EU and further harmonised standards, for use in ZONE 2.

### **OPERATING CAPABILITIES**

DIMENSIONS	CAPACITY	WEIGHT	
37,6/58,8 CM	80 KG	1,5 KG	
MANHOLE COVER FEATURES			
MAX. WIDTHDIAMETER	MAX. THICKNESS	SHAPE	
30 cm	10 cm		
TYPE	ATTACHMENT POINTS	MATERIAL	
	1 + 1	Cast Iron/Plate Cement/Stone	

### **ACCESSORIES**

**Pouch STANDARD VS Keys OPTIONAL** 











### Q FOCUS ON

### EASY APPLICATION

The included accessories facilitate the application of antinoise systems.

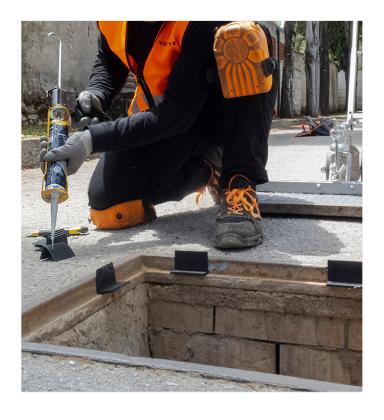
Mufflers can be adapted to the shape of the frame through the use of the cutter, they are fixed firmly to it by means of a special adhesive, following cleaning of the support surfaces with the brush and spatula.

### • GUARANTEED ADHESIVE

Fast-curing, high-modulus, single-component, polyurethane adhesive sealant for caulking, bonding and waterproofing.

The adhesive reacts and hardens due to moisture, turning in to a flexible, durable and resistant elastomeric joint, so it is preferable to preliminarily moisten one of the two areas to be bonded.

It can also be used on vertical surfaces.



# **MUFFLER**



### **NOISE SUPPORTERS**



Frame-mounted mufflers



Accessory kit for Muffler



### ANTI-VIBRATION SYSTEMS

Mufflers are shock-absorbing support made of thermoplastic polyurethane: they solve the problem of wobbly manhole covers that generate the annoying metallic sound as vehicles pass by.

Mufflers fit and fasten with special high-strength adhesives supplied to any parallelly removable manhole cover.

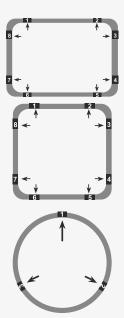
Resistant to abrasion and compression, they counter the formation of encrustations and withstand very high or very low temperatures (-40/60 °C).

### **EASY TO APPLY**

# A FEW PIECES FOR A GREAT RESULT

Eight Mufflers are sufficient to be fixed near the corners of the frame on square or rectangular manhole covers.

For round manhole covers, three Mufflers fixed in a triangle position are required to achieve the optimum result.

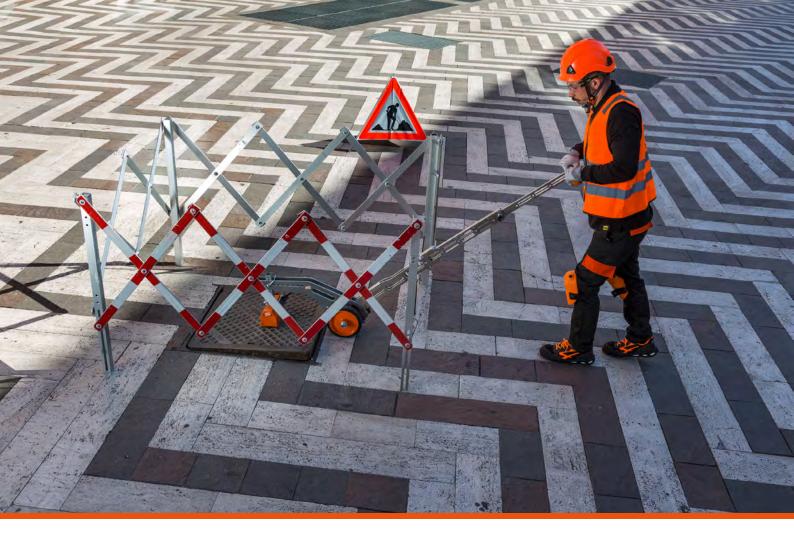


### **ACCESSORIES**

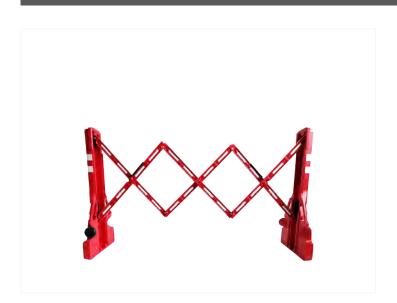
**Bag STANDARD** 

Accessory kit STANDARD





# **EXTENSO**



Extenso closed



High-visibility polypropylene stretch barrier available in red and white and reflective yellow and black.

Easy to transport and open, it has a safety lock that guarantees the desired opening.

Extenso can be filled with up to 10 litres of water for additional stability.

Minimum size:  $100 \times 40 \times 100 \text{ cm}$ Maximum size:  $100 \times 40 \times 240 \text{ cm}$ 

Weight: 7,5 Kg

# **BARRIERS**



### **PVC BARRIER**



High-visibility PVC and polyester compound barrier, modular and extendable: countless individual units can be added to the initial three modules.

Lightweight, easy to transport and install. The barrier is indispensable for delimiting work areas, making danger zones visible and protecting pedestrians from accidental falls.

Customisable with company logo.

Size: 170x2,6x100 cm - Wheight 4,1 kg

## **QUADRILATERAL BARRIER**



Quadrilateral Barrier is the versatile and functional solution for delimiting and protecting work areas and preventing accidents. Made of durable steel with powder coating and UV treatment, it offers optimal visibility even in low light conditions.

Minimum size: 200 x 200 x 1000 mm Maximum size: 1300 x 1300 x 1150 mm

Weight: 11 kg

**Quadrilater Barrier Bag OPTIONAL** 

### **SQUARE BARRIER**

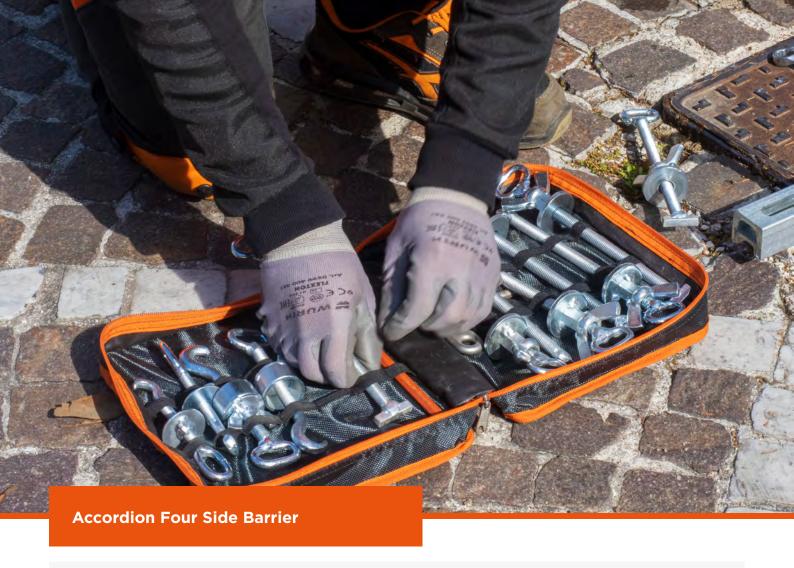


Square Barrier provides effective protection for work areas.

Made of aluminium for lightness and comfort, it is easy to assemble and closes with a practical belt.

Size: 1060 x 1060 x 900 mm

Weight: 6,26 kg



### SLIDING GUIDE



Aluminium ramp with antislip surface that allows easy operations with Valifter manhole cover lifters even when the ground around the manhole is uneven or rough.

Dimensions: 100x28X3 cm - Weight: 4 Kg

### OPEN RATCHET



Openable ratchet spanner for V and VS Keys tightening. It simplifies and speeds up the operations of manhole cove opening and lifting.

### • WEDGE



The steel wedge has to be inserted into one of the three attachment points of the Stabilo P.A.M. manhole cover. It is used to release the locking device and allows it to be opened as if it were a normal manhole cover, using the Valifter manhole cover lifters.

### ADJUSTABLE SPANNER



Adjustable spanner (24 to 56 mm), with millimetric opening. Satin chrome-plated.

# **VALVES OPENER**



### TO MANOEUVRE UNDERGROUND VALVES



**Ergonomic position** 



### **OPERATING CAPABILITIES**

EXTENSION MIN/MAX (CM)	CAPACITY (NM)	WEIGHT (KG)
100/300*	400	5

<sup>\*</sup>with telescopic extension



### TELESCOPIC AND COMPACT

**Valves Opener** is a stainless steel telescopic operating spanner to actuate deep-seated gas and water valves.

#### ERGONOMICS

Thanks to its technical and ergonomic features, Valves Opener allows the operator to maintain an upright position by adjusting the handle thanks to the possibility of attaching the extension.

#### VERSATILE

**Valves Opener** offers several accessories: interchangeable bushings allow various types of valves to be opened and closed, the ratchet can be used as an alternative to the T-handle in tight spaces.



### **VALVE OPENER STARTER KIT**

Telescopic T-handle STANDARD

Telescopic rod length 1/1.5 m STANDARD

Female bushing 27/31 mm STANDARD

Storage bag STANDARD

Ratchet spanner with quick coupling OPTIONAL

Swivel joint with quick coupling OPTIONAL

Female bushing (12/14 mm) OPTIONAL

Female bushing (14/16 mm) OPTIONAL

Female bushing (17/20 mm) OPTIONAL

Female bushing (19/22 mm) OPTIONAL

Female bushing (24/27 mm) OPTIONAL

Female bushing (21/24 mm) OPTIONAL

Female bushing (32/36 mm) OPTIONAL

Hand wheel fork OPTIONAL





# **SERVICES AND SOLUTIONS**

Valifter is always at the customer's side and offers services such as free product trials, tailor-made solutions, and theoretical and operational training courses with certificates.



# VALIFTER

# **CONSULTANCY AND TRAINING**

### CONSULTANCY, DEMONSTRATIONS AND INSPECTIONS

### CUSTOMER-ORIENTED CONSULTANCY

Our sales staff is always available to support customers in correctly identifying the most suitable products for their specific needs.

**FEDA** works with commitment and passion because the objective is to always offer high quality solutions, so as to become a point of reference for every need or problem.

Each customer is entrusted to a dedicated consultant who will identify the product, elaborate the offer and assist him from dispatch to delivery and the feedback on the purchased product/service.

We can plan online meetings and consultations in order to submit to our technicians the various critical issues in the specific field of operation or to learn more about about the features and functionality of the products.

#### OPERATIONAL DEMONSTRATION

Our skilled technicians carry out operational demonstrations to show the functionality of devices and test their use at the customer's premises.

With FEDA the following takes the field:

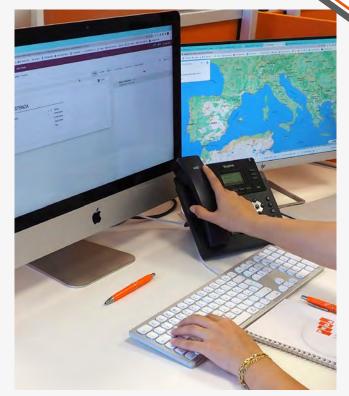
- the know-how of the FEDA team, with the possibility of exploiting the in-house engineering office for the design of prototypes or special executions;
- in-depth knowledge of issues and legislations related to the sector:
- a qualified team that is continuously updated through specialisation and qualification courses.

### • CUSTOMER SERVICE

FEDA supports its customers with an after-sales service to ensure a quick resolution of complaints.

Within 24 hours, the responsible department takes over the request and contacts the customer requesting all necessary information. Depending on the case, resolution is by telephone assistance, on-site intervention or in the factory by FEDA technicians.

At the end, the customer is asked to evaluate the service with the aim of identifying the level of satisfaction, with a view to continuous improvement.



### **TRAINING**

### • ONLINE AND OUTSITE TRAINING IN THE USE OF EQUIPMENT

The Employer, as prescribed by Directive 2007/30/EEC, must provide workers with adequate training and instruction in the use of equipment, machinery and facilities.

Apart from the specific training courses required by law and mandatory for certain types of machinery and equipment, the main reference is always the Use and Maintenance Manual, which becomes "law" to all intents and purposes, or Annex VI, which the Employer (and also Workers) must comply with.

Upon request, FEDA organises and carries out on-site and online training courses dedicated to the correct use of equipment. The courses are held by specialised technicians in possession of the qualification of trainer in compliance with the provisions of the regulations (Art.6 paragraph 8, letter m-bis - of Legislative Decree 81/08 and the Interministerial Decree of 6 March 2013).

At the end of the training, a certificate is issued to each participant.



# A LOOK TO THE FUTURE

### **OUR PROJECTS**

FEDA IS LOOKING FURTHER AHEAD AND IS ALREADY WORKING ON THE NEXT PROJECTS THAT WILL BRING IT EVEN CLOSER TO ITS CUSTOMERS.
THE GOAL IS TO CREATE A LINK FOR CLOSER RELATIONSHIPS FOR A MORE RESILIENT, INCLUSIVE AND SUSTAINABLE FUTURE.

# Export

Since its foundation in 1991, FEDA has strived to provide its customers with customised safe solutions to ensure maximum protection for operators.

With its new project to export abroad, FEDA takes a step forward in its corporate mission by committing itself to supplying manhole cover lifters that meet the requirements of international markets and different legislations.

## Training course for AWP licence

Issuing of machine licence as required by legislation. Lessons and test at times and days chosen by the customer. Individual tutor for learning and tests support.

Patent update.

# Safety training courses

Courses aimed at protecting the health and safety conditions of workers during work.









0



VALIFTER is a brand of



FEDA SRL VIA M. CORRIERI, 16 05100 TERNI - ITALY