
Master **SAFETY SERIES**™ **Lock.**

Safety Series & Security Solutions



Lockout Tagout

- 1. Who is Master Lock?**
- 2. What is Lockout?**
 - 1. Introduction**
 - 2. International Lockout Standards**
- 3. Master Lock Solutions**
- 4. Master Lock Service**
- 5. Exercise**



Who is Fortune Brands ?

Fortune Brands, INC
\$ 8.800.000.000

Golf & Leisure

- Titleist
- Foot Joy
- King Cobra.....



Distilled Spirits

- Jim Beam
- Couvoisier
- Starbucks
-



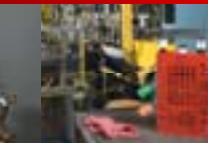
Home and office

- Therma Tru Doors
- Moen
- Kitchen Craft
-

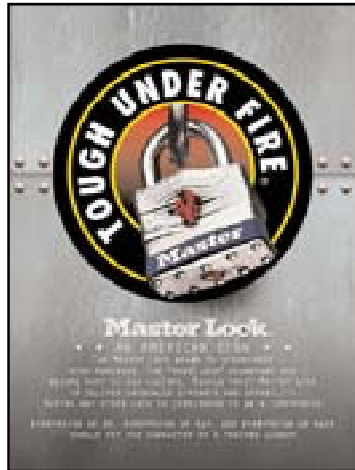
MASTER LOCK

- Master Lock
- Waterloo

Master
SAFETY SERIES Lock



LAFARGE



- ◆ Company started by Harry Soref in Milwaukee, Wisconsin in 1921
- ◆ Inventor of laminated steel padlocks in 1924
- ◆ As of today, sales revenue over \$400 million with 1,500 employees
- ◆ N°1 padlock manufacturer in the world
- ◆ N°1 in safety lockout / tagout (LOTO) in North America



What is Lockout / Tagout? LOTO

- ◆ Controls hazardous energy during equipment maintenance to prevent accidental start-up and possible injuries or death

- ◆ Electrical
- ◆ Mechanical
- ◆ Hydraulic
- ◆ Pneumatic
- ◆ Other

- ◆ Requires safety padlocks and/or lockout devices to **lockout** sources of hazardous energy



Circuit Breakers Locked Out to Prevent Accidental Energization



OSHA 1910.147
Lockout/Tagout Standard
at www.osha.gov



Step 1: Preparation

Prepare for a shut down of the energy source. Identify the type of energy used (electrical, mechanical, etc...) and its potential hazards. Locate the isolator(s) and prepare to “lock off” energy source.

Step 2: Notification

Inform operators and supervisors who may be affected by isolating the machinery and inform them of the work being undertaken.

Step 3: Shut-down

Turn off the equipment or machine.

Step 4: Lock Out

Lock out all energy sources using the proper Master Lock lockout devices to de-energize the equipment or machinery. Apply a lock so no one can turn the energy source (e.g. switch or valve) on while the work is being undertaken.



Step 5: Test

Test all machine controls and electrical circuits to ensure energy is completely isolated.

Step 6: Repair or Rework

Perform maintenance and/or service.

Step 7: Return to Service

When all work is done and lockout/tagout devices are removed, look to ensure all tools and lockout devices have been removed. Before re-energizing, be sure to warn all workers.



- ◆ Multinational organizations are also pushing the introduction of ISO-type procedures when it comes to safety programs
- ◆ VPP (Voluntary Protection Program) leads to lower incidents of lost time injuries and the costs associated with them
 - ◆ Visit www.osha.gov/dcsp/vpp/ and www.vpppa.org for more information
- ◆ Multinational firms are implementing lockout processes at their facilities worldwide



Master Lock End Users...

Master Lock sells LOTO padlocks and devices to virtually all end-users. Below is a partial listing by industry.

<u>Automotive</u>      	<u>Pharmaceutical/ Medical</u>    A Promise for Life	<u>Retail & Hospitality</u>  	<u>Semiconductors / High Technology</u>   
<u>Oil/Refinery</u>    	<u>Chemical</u>   	<u>Mining</u>  bhpbilliton 	<u>Food Industry</u>  

No One Has More LOTO Installations!

Master
SAFETY SERIES Lock



LAFARGE

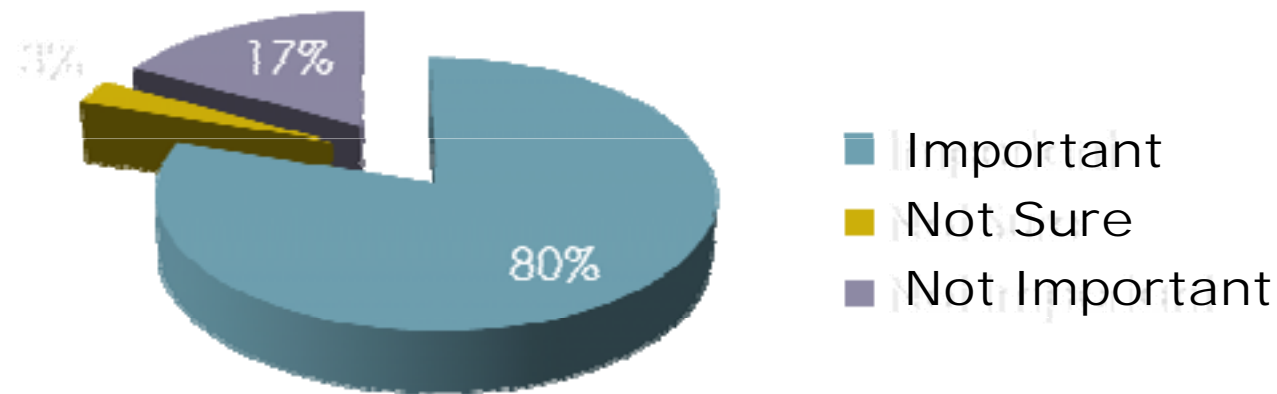
Safety Padlock Survey

So that we can continue to provide the best solutions for our customers, we conducted some market research within the safety padlock market to find out what was most important to safety padlock users.

We compiled the results and have provided this summary.



One Key Per Padlock

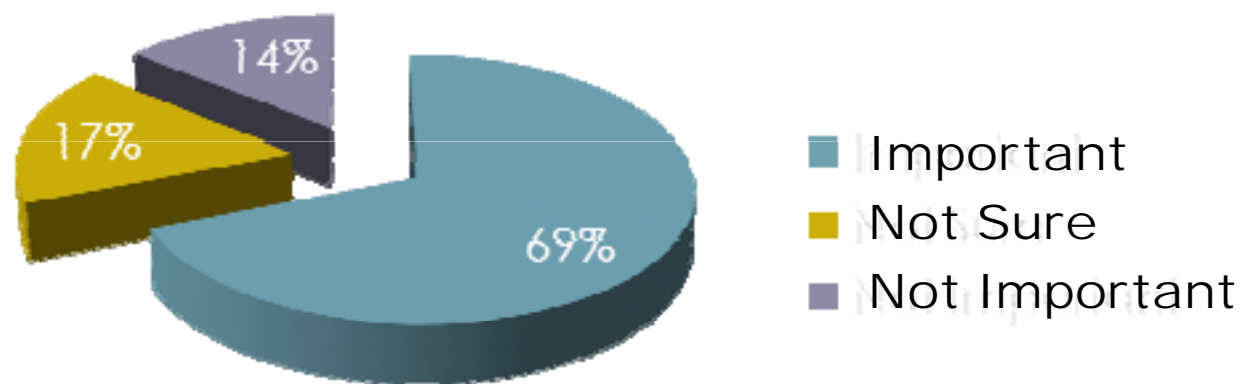


IMPLICATIONS: More than one key per padlock is non-compliant to OH&S standards, key duplications can cause incorrect and unauthorised removal of safety padlocks, reducing workplace safety.

All Master Lock Xenoy safety padlocks are supplied with one key per padlock as standard.



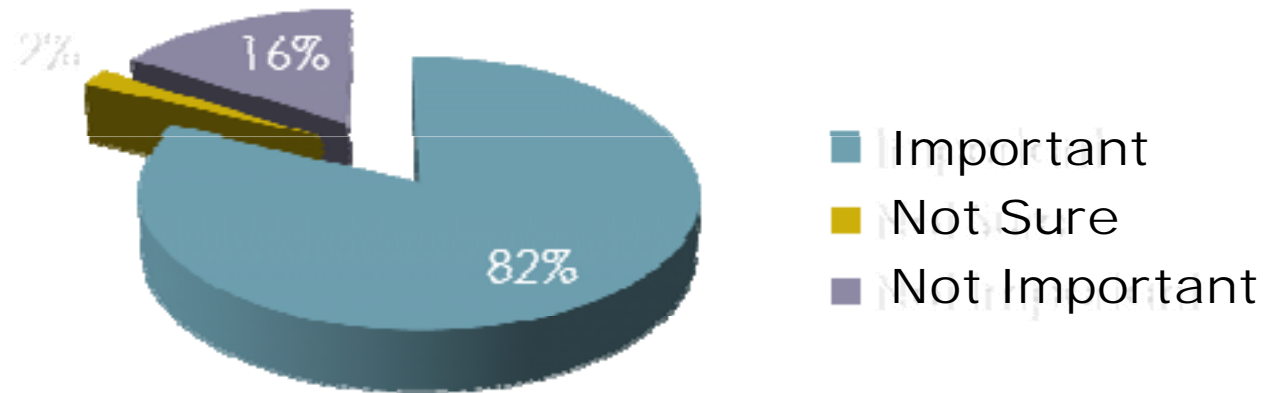
Reducing Key Duplications



IMPLICATIONS: Key duplications can cause incorrect and unauthorised removal of safety padlocks, reducing workplace safety. The more key codes available, the less chance of key duplications.

Using the 'EDGE' system, Master Lock Safety Series can provide over 1million key codes on the one keyway.

Non-Conductive Safety Padlock

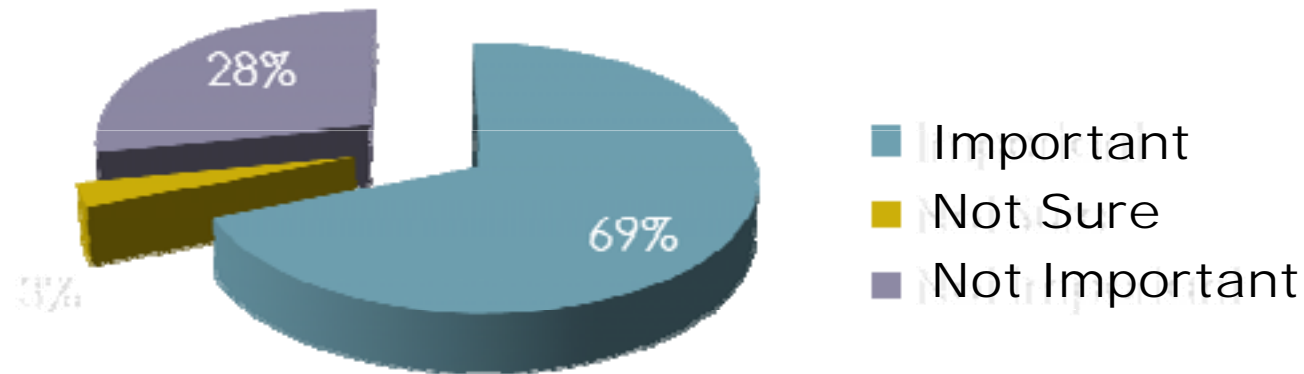


IMPLICATIONS: A safety padlock that is conductive can pose a threat when working with electricity and/or around any live spark, increasing the risk of injury.

Master Lock Safety Series' 406 safety padlock features a nylon shackle meaning it's non-conductive, as well as non-magnetic and non-corrosive.



A Unique Keyway dedicated to Safety

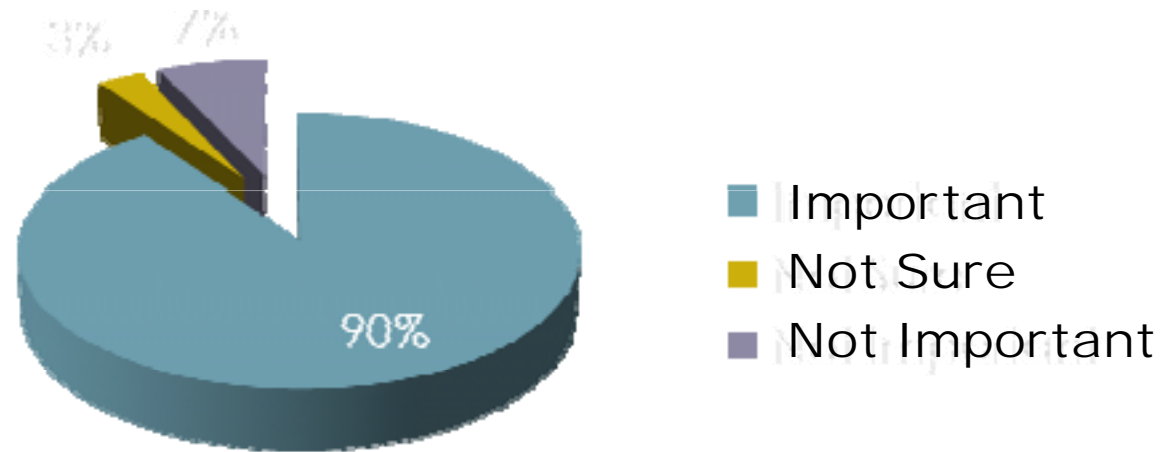


IMPLICATIONS: Unauthorised key duplication can cause incorrect removal of safety padlocks, reducing workplace safety.

Master Lock Safety Series have a strict key duplication policy where an official letter from the OH&S officer on site must be received to approve the cutting of any replacement keys.



Key Retaining Feature

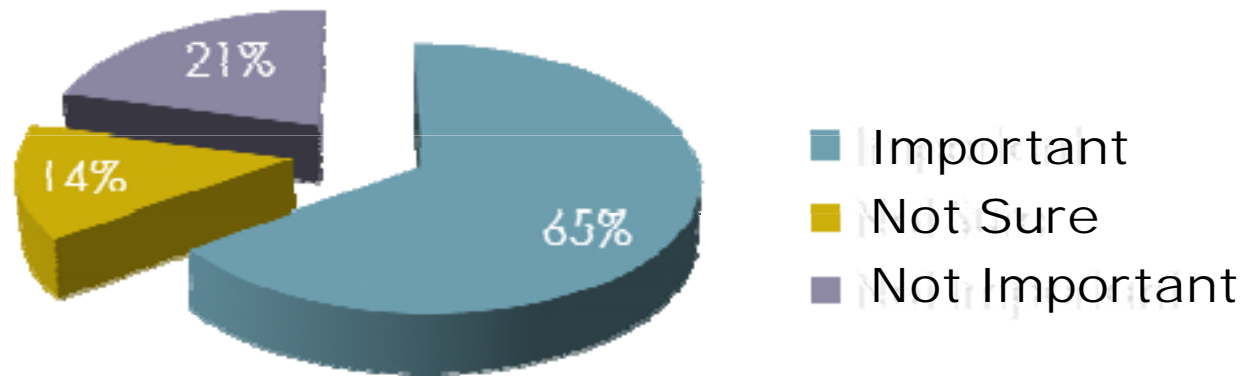


IMPLICATIONS: Safety padlocks left unlocked fail to lockout and isolate the power source properly, reducing workplace safety.

All Master Lock Xenoy safety locks have the key retaining feature, ensuring all safety padlocks are left locked, locking out the power source, when the key is removed.



Locks to Withstand Harsh Environments

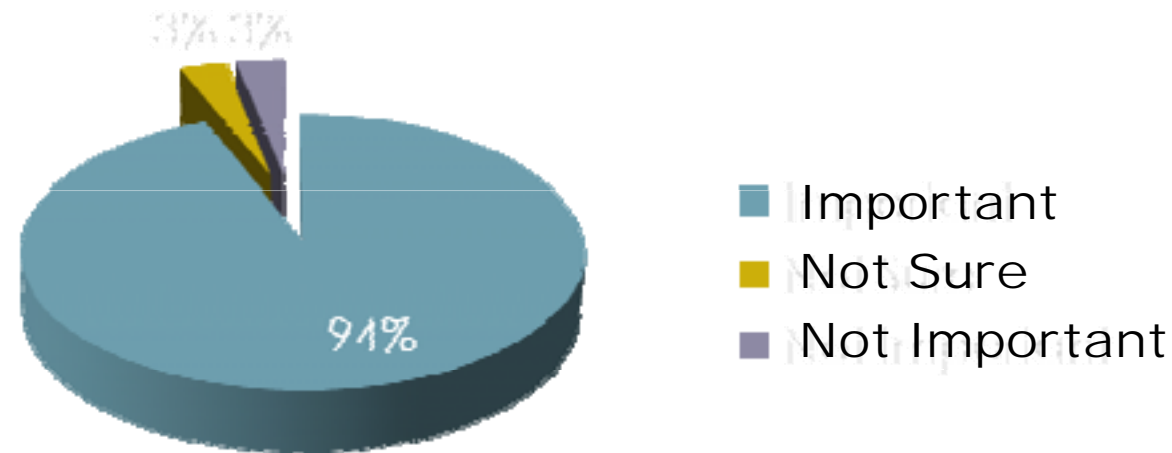


IMPLICATIONS: Some safety padlocks may fail to operate effectively in extreme environments, rendering the lockout void.

Master Lock Xenoy safety padlocks are temperature tested from -55°C to +175°C, have excellent corrosion resistance and are UV stable.



Safety Lock Identification

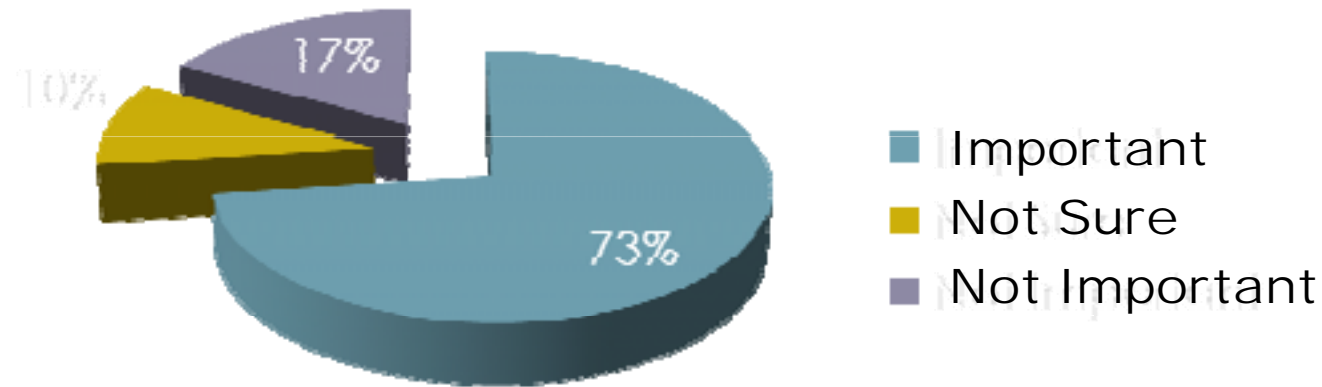


IMPLICATIONS: Failure to use correctly labeled or identified safety locks can cause delays on site, creating loss in productivity and frustration. These factors can lead to users not isolating power sources, reducing safety on site.

Master Lock Xenoy safety padlocks offer factory engraving for up to 5 areas, traffolite labeling and photo identification (411 only).



Locks to be Lightweight

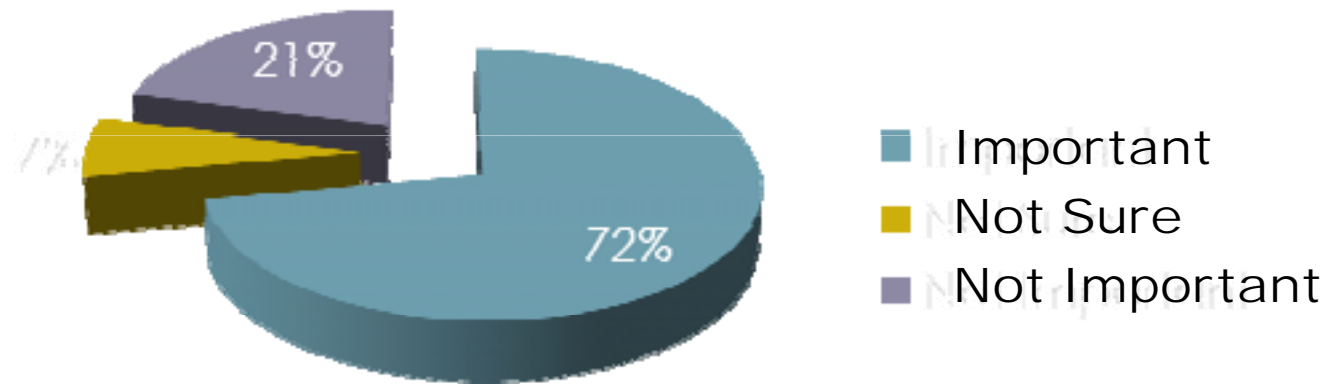


IMPLICATIONS: Extra weight carried by employees/contractors can be a burden, leading to frustration for the end user potentially resulting in equipment not being locked out.

Master Lock Xenoy 410 safety padlocks weigh 88 grams and the 406 only 53 grams.



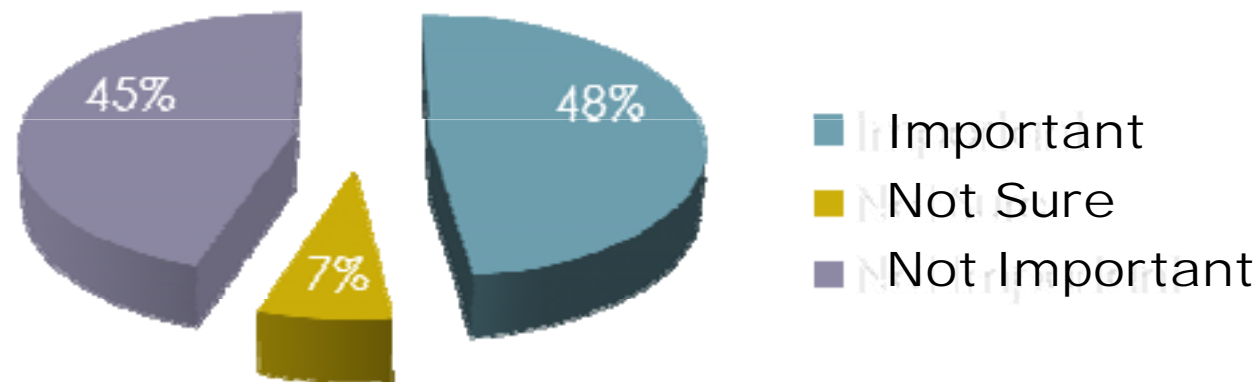
Availability of Colours



IMPLICATIONS: Different colours mean fast visual identification. Failure to correctly identify locks can delay work productivity and frustrate employees/contractors.

Master Lock Xenoy safety padlocks are available in 8 bright, UV stable colours.

Risk of Pilferage






































IMPLICATIONS: The main causes of pilferage and shrinkage is theft by employees and contractors for personal use, these lost locks must be replaced and translates to extra costs to the business.

Master Lock Xenoy safety padlocks with their plastic compound bodies are clearly a 'safety' padlock and could not be used in a security application.



Summary by Brand

Feature	Importance	Master Lock Xenoy 410	Master Lock Xenoy 406	XX	XX	XX
Lock Identification	94%	4 Areas	4 Areas	2 Areas	2 Areas	1 Area
Key Retaining	90%					
Non-Conductive	82%					
One Padlock/One Key	80%					
Lightweight	73%	88g	53g	90g	67g	98g
Available Colours	72%	8	8	8	7	Coloured covers
1 Million Key Codes	69%					
Dedicated Safety Keyway	69%					
Withstand Harsh Environment	65%					
Low Risk of Pilferage	48%					



Safety Padlocks



Lockout Devices, Kits & Stations



Lockout Tags, Signs, & Labels



The most complete LOTO offering in the industry!

**Master
Safety Series Lock**



LAFARGE

The Most Comprehensive Offering to Handle Any Application.



Xenoy
Thermoplastic

- Exclusively designed for lockout/tagout
- Lightweight, durable
- Comes with identification labels (in 3 languages)



Powder
Coated
Aluminum

- Vibrant colors offers high visibility
- Durable aluminum
- Master Lock brand



Anodized
Aluminum

- Durable anodized finish for tough environments
- Available in 9 colors
- American Lock brand



Laminated
Steel

- Strong reinforced laminated steel
- Economical
- 6 bumper colors available



A unique Safety Lockout padlock

A Unique Padlock Range dedicated to Lockout Application.



S30 / 410 / 411 / 406 Xenoy Padlock Range

- Exclusively designed for lockout / tagout
- Lightweight, durable
- Composite plastic resists from -47°C to 177°C
- Comes with identification labels
- Possibility to engrave the padlock

406 100% Xenoy Thermoplastic



- Exclusive
- Lightweight, durable
- Non-conductive padlock : Shackle and Body with Xenoy
- Ideal for electrical lockout, confined spaces, medical, military and mining
- Non Sparking padlock

New Padlock S30 range available in June 2010 with a 4.7mm shackle diameter 100% stainless Steel

**Master
SAFETY SERIES Lock**



LAFARGE

Unlimited Identification Options for Your Application.

Photo Identification



Laser Engraving

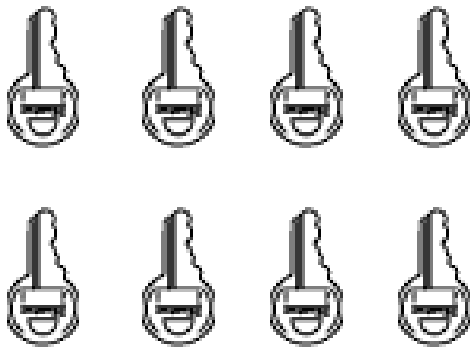


Hard Stamping

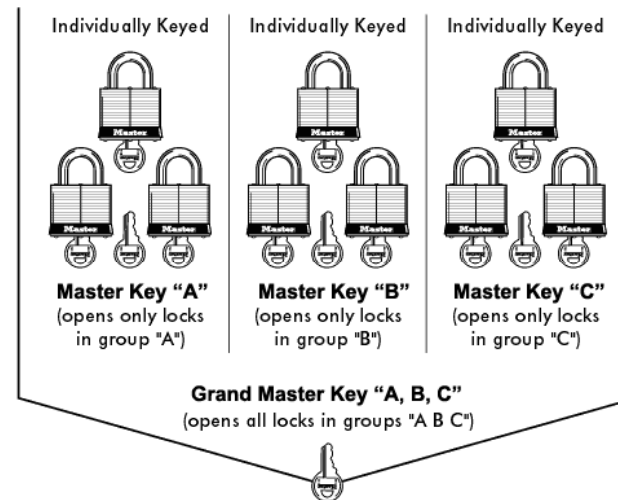


Unmatched Keying Capability to Maintain OSHA's One Key – One Lock – One Employee.

10's of Thousands of Unique Key Changes

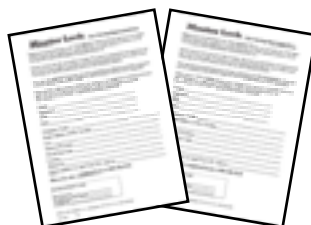


Ability to Master Key if Required



Custom Services You Can Rely On.

FREE



Free keying system ID charting and records management, supporting OSHA registration.



Custom-built padlocks to fit any application.



Padlock Summary

Padlock Options



Xenoy Thermoplastic



Powder-Coated Aluminum



Anodized Aluminum



Laminated Steel

Identification



Photo I.D. Labels



Laser Engraving



Hard Stamping

Keying Options

Keyed
Different,
Keyed-Alike,
Master-
Keyed

Thousands
of Key
Changes

Custom Services



Custom-Built Padlocks

Key
Charting &
Records
Management

**Total
Solution**

**Master
Safety Series Lock**



LAFARGE

- ◆ Hasps
- ◆ Valve Lockouts
- ◆ Electrical Lockouts
- ◆ Pneumatic Lockouts
- ◆ Steering Wheel Covers
- ◆ Cable Lockouts
- ◆ Lock Boxes
- ◆ Compliance Centers
- ◆ Lockout Kits
- ◆ Padlock Stations
- ◆ Lockout Stations
- ◆ Compact Lockout Stations
- ◆ Tag Stations
- ◆ Padlock Lanyards



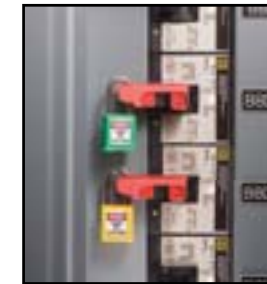
Ball Valve Lockout



Gate Valve Lockout



Snap-On Hasp/Tag Combo



Circuit Breaker Lockouts



Lockout Station



Compact Lockout Station



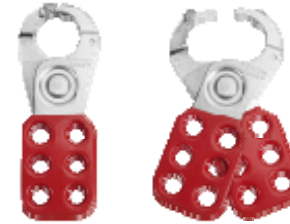
Lockout Hasps



420 - 1" dia. jaw
steel



418 with 410
Xenoy
padlocks



ALO80 - 1" dia.
steel jaw with
locking tabs



421 - 1.5" dia. jaw
steel



428 with 410
Xenoy
padlocks



ALO802 - 1.5" dia.
steel jaw with
locking tabs

Lockout Hasps



429 - dual jaw
aluminum



416 - 1" dia. jaw
aluminum



417 - 1.5" dia. jaw
aluminum



418 with 410
Xenoy
padlocks



428 with 410
Xenoy
padlocks



418 - 4 lock HD
steel



419 - 8 lock HD
steel



428 - dielectric
plastic

◆ S430 & S431

- 4 mm diameter shackle
- S431 100% stainlesssteel
- S431 for 8 padlopcks
- S430 for 2 padlocks



S430

S431



- ◆ Hasp/tag combo
- ◆ Durable and lightweight
- ◆ Aluminum body to reduce sparking in confined areas
- ◆ Re-usable labels supplied in English, Spanish, & French
- ◆ Available in 9 different colors or assortment pack



427



427AST

Gate Valve Sizes

- ◆ 480 Fits 1-3" valve handles
- ◆ 481 Fits 2-5" valve handles
- ◆ 482 Fits 4-6.5" valve handles
- ◆ 483 Fits 6-10" valve handles
- ◆ 484 Fits 8-13" valve handles
- ◆ 485 Set of all sizes (nested)



485



- ◆ Locks out 3/8" to 4" ball valves
- ◆ Requires removal of the ball valve handle to eliminate risk for accidental activation
- ◆ Works in virtually all ball valve applications
 - ◆ Metal & PVC valves
 - ◆ Insulated pipes
 - ◆ Pipes in tight areas



468L



- ◆ Locks out ¼" to 4" ball valves
- ◆ Metal device clamps tight on handle stop
- ◆ Withstands temperatures up to 1,000°F
- ◆ Compact and lightweight for easy carrying, storage, and use in tight spaces
- ◆ No need to remove handle



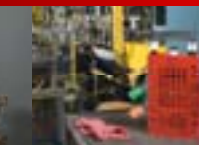
S3068



- ◆ Provides physical and visible barrier to unintentional “activation”
- ◆ Fits all pressurized gas valves up to 3” diameter
- ◆ Fits valves with and without guarding



S3910



- ◆ 493B fits standard single and double toggles
- ◆ 491B fits tall and wide toggles
- ◆ Both lockouts combined cover 90% of circuit breakers



493B



491B



Circuit Breaker Lockout

- ◆ Electrical lockout for most ISO-DIN miniature circuit breakers found throughout the world
- ◆ S2390 is for breakers with a toggle opening that is 11mm or less black handle
- ◆ S2391 is for breakers with a toggle opening that is over 11mm – red handle
- ◆ S2392 is for breakers with outside pins
- ◆ S2393 is for breakers with without pins
- ◆ Works with all Master Lock and American Lock safety padlocks and lockout hasps



S2390



S2391



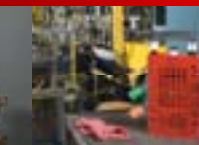
S2392



S2391



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LAFARGE

- ◆ 487 (small) - 2 ¼ dia. x 3 ¼"
 - ◆ Fits 120 and most 240 volt
- ◆ 488 (large) - 3" dia. x 6"
 - ◆ Fits 120, 240, and 550 volt
- ◆ S2005 works with 2 and 3 prong 120 volt plugs
- ◆ Complete with English, Spanish, and French write-on/re-usable safety identification labels



487

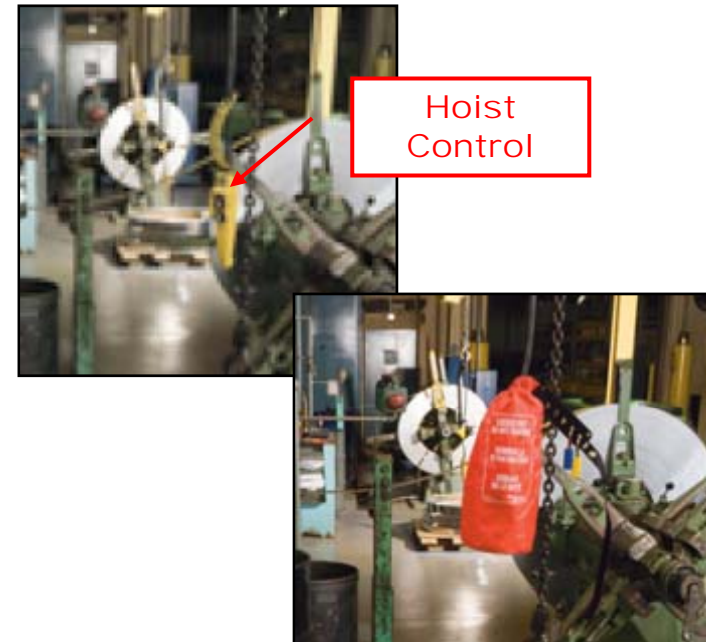


488



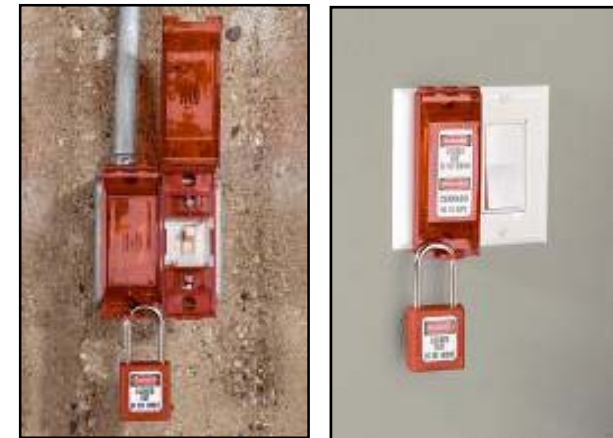
S2005

- ◆ Covers large and odd-sized electrical plugs and controls
- ◆ Holds up to 6 padlocks or hasps
- ◆ Available in three sizes for various situations
 - ◆ 453L 7" dia. X 17" tall
 - ◆ 453XL 10" dia. X 26" tall
 - ◆ 453XXL 14" dia. X 36" tall



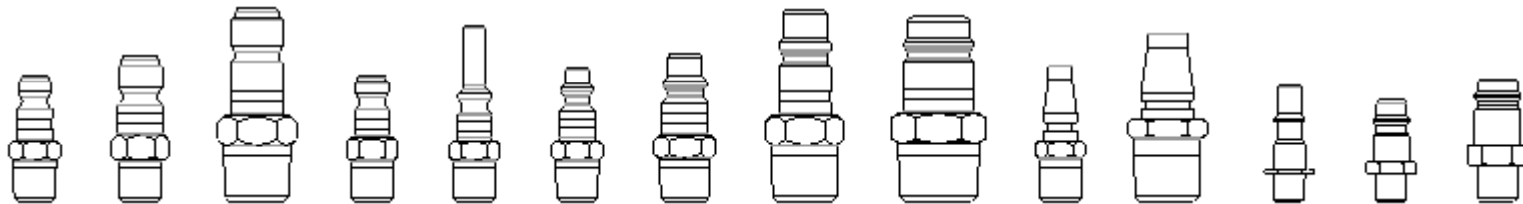
453L

- ◆ Universal lockout fits virtually all types of wall switches to prevent accidental activation
- ◆ Works with toggle and Decora™ paddle switches
- ◆ Includes lockout labels in English/Spanish and English/French

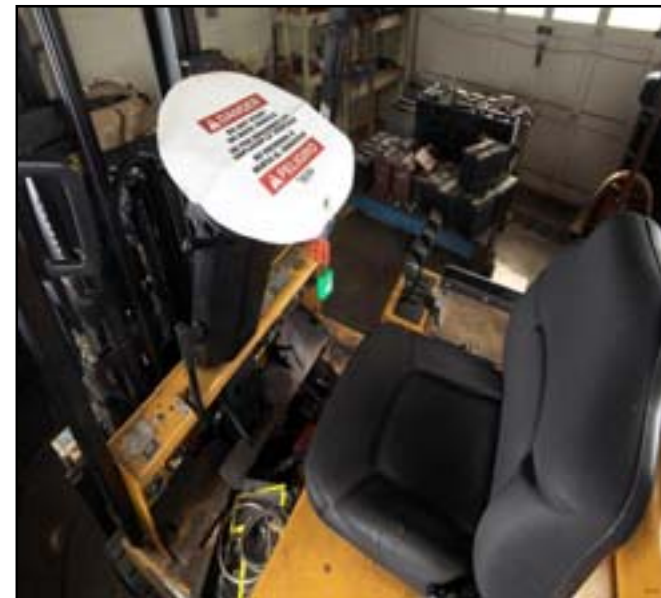


496B

- ◆ Applied to a pneumatic fitting, it prevents the fitting from being reconnected to the pressurized air source
- ◆ Stainless steel construction
- ◆ Compact design for easy carrying and storage
- ◆ Fits virtually all pneumatic fittings used in manufacturing facilities (14 – see below)



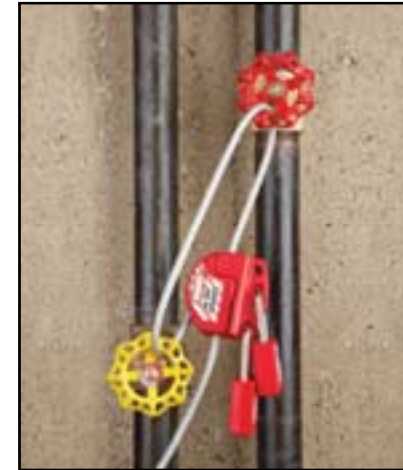
- ◆ Apply to steering wheel to deter operation during maintenance
- ◆ Can be used on semi tractors, buses, forklifts, cars, and other motor vehicles
- ◆ Available in three sizes for various situations
 - ◆ 4716 16" diameter
 - ◆ 4720 20" diameter
 - ◆ 4724 24" diameter



4716 Covering a Forklift Steering Wheel

Adjustable Cable Lockout

- ◆ Tough, flexible multi-stranded 1/4" diameter steel cable is insulated with a clear vinyl coating
- ◆ Patented pull-tight cable adjusts for a secure fit every time
- ◆ Integrated safety hasp and cable is ideal for multiple circuit breaker panel and side-by-side gate valve lockouts



8611



Master
SAFETY SERIES Lock



LAFARGE

- ◆ Latch Tight™ locking feature can only release when no padlocks are fastened to the lock box
- ◆ 503RED & 503YLW can be mounted to wall or carried from job to job
- ◆ 498A is a portable solution



503RED



498A



503YLW

- ◆ Ensures all lockout points are addressed
- ◆ Pop-out notches allow for exact number of padlocks needed
 - ◆ Number of padlocks should match number of lockout points
- ◆ Can be hung near lockout point to ensure availability
- ◆ Ergonomic handle and belt loops for easy carrying



S125



Worker Locking Out
Gate Valve Using
S125

- ◆ Zippered binder keeps important safety information in while keeping dirt and grime out
- ◆ Use for MSDS, Lockout Procedures, Right-To-Know, and many others
- ◆ Front window allows you to customize to your needs
- ◆ Also available without bracket for use with existing wire baskets or placement on bookshelf
- ◆ Includes wall bracket labels and binder face sheets in English, Spanish/English and French/English



S315



S317



Personal & Group Lockout Kits

- ◆ 1456 Personal Lockout Pouch
 - ◆ Available in standard or electrical lockout focus versions
- ◆ 1457 Personal Lockout Kit
 - ◆ Available in electrical, valve or both lockout focus versions
- ◆ 1458 Group Lockout Kit
 - ◆ Includes two modular storage compartments
 - ◆ Available in electrical, valve, or both lockout focus versions



1456E41
0



1457V410KA



1458VE410

Padlock Lockout Stations

- ◆ Extreme durability stations
- ◆ Available with Xenoy, Aluminum, or Steel padlocks
- ◆ Available with English/Spanish & English/French labels & tags
- ◆ One-piece molded construction to eliminate loose parts
- ◆ Available with 4, 10, & 20 padlocks
 - ◆ 1482 – 4 Padlock Station
 - ◆ 1483 – 10 Padlock Station
 - ◆ 1484 – 20 Padlock Station



1482BP3ES



1483BP1106



1484BP410

Master
SAFETY SERIES Lock



LAFARGE

Compact Lockout Stations

- ◆ Ideal for locating machine specific lockout devices, tags and padlocks near lockout point
- ◆ Available with Xenoy, Aluminum or Steel Padlocks
- ◆ Includes station face labels in English, Spanish/English, and French/English
- ◆ S1700 - Unfilled
- ◆ S1705 - Station with padlock, hasp & tags
- ◆ S1720 - Station with circuit breaker lockout focus
- ◆ S1745 - Station with electrical plug lockout focus



S1700



S1745E410



- ◆ Ideal for organizing lockout devices, tags and padlocks
- ◆ Extremely durable construction
- ◆ Cover can be locked with combination lock, keeping padlocks and devices secure and clean
- ◆ Lockout Stations available unfilled or filled with multiple component combinations
 - ◆ S1850 Lockout Station
 - ◆ S1800 Tag Station
 - ◆ S1900 Deluxe Station (consists of one S1850 and one S1800)



S1900VE410



S1850E410



S1800

Summary: Your One-Stop Source for Lockout Devices, Kits & Stations



Hasps



Valve Lockouts



Electrical
Lockouts



Pneumatic
Lockouts



Steering
Wheel
Covers



Cable
Lockouts



Group Lock
Box



Compliance
Centers



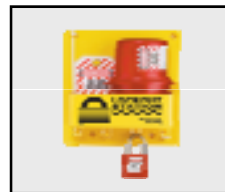
Lockout Kits



Padlock
Stations



Lockout
Stations



Compact
Lockout
Stations



Tag
Stations



Padlock
Lanyards

Master
SAFETY SERIES **Lock**



LAFARGE

A full line of innovative tags, signs, and labels to meet your identification requirements.



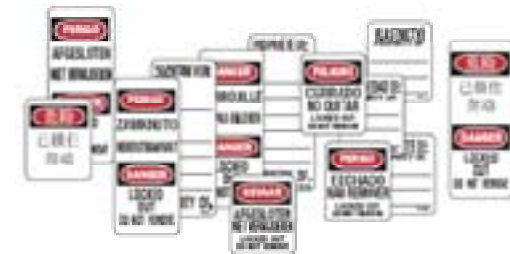
Lockout Tags

- Innovative, patent-pending technology
- Tested to equivalent of 10 years of abuse
- Customizable options



Lockout Signs

- Durable signs provide key lockout identification messages
- Available with adhesive, magnetic, or non-adhesive backing



Labels

- Multilingual padlock labels offered in 10 different languages
- Apply to 410, 406, & 411 Xenoy Thermoplastic Safety Padlocks

Master
SAFETY SERIES Lock



LAFARGE

- ◆ Innovative, patent-pending technology stands up to extreme environments such as:
 - ◆ Washdowns & humidity
 - ◆ UV
 - ◆ Chemicals
 - ◆ Extreme temperatures (-50°F to 220°F)
- ◆ Ideal for environments found in:
 - ◆ Food processing plants
 - ◆ Mines
 - ◆ Chemical Plants
 - ◆ Refineries
 - ◆ Paper Mills
 - ◆ Military and government facilities



**Guardian
Extreme.**

**Master
Safety Series Lock**



LAFARGE

Lockout Isolation ID Tags

- ◆ Identifies key lockout points to provide convenience
- ◆ Assortment of lockout energy source tags
 - ◆ Control Panel (CP)
 - ◆ Electrical (E)
 - ◆ Gas (G)
 - ◆ Pneumatic (P)
 - ◆ Steam (S)
 - ◆ Valve (V)
 - ◆ Water (W)
- ◆ Constructed of innovative Guardian Extreme technology



Gas Isolation I.D. Tag



Pneumatic Isolation I.D. Tag



Steam Isolation I.D. Tag



Valve Isolation I.D. Tag



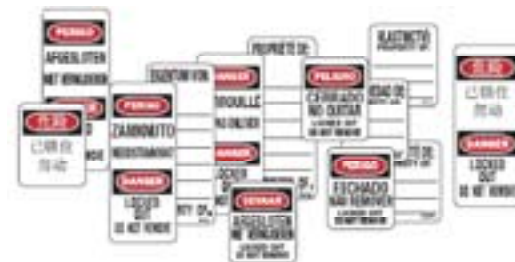
Water Isolation I.D. Tag



V-1 Tag Identifying Valve Lockout Point



Summary: Your One-Stop Source for Lockout Tags, Signs, & Labels



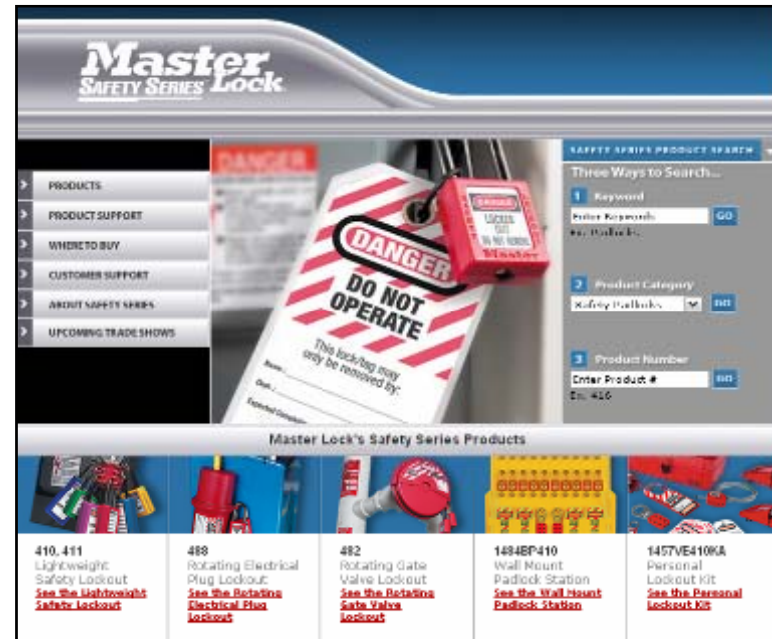
Master
SAFETY SERIES **Lock**



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www.safetyseries.eu

- ◆ Comprehensive website dedicated to safety lockout products
 - ◆ Product info
 - ◆ Links to OSHA, VPPPA
 - ◆ Technical Support
 - ◆ Download Images (web link)
 - ◆ Download Catalogs
 - ◆ Request Printed Literature



Exercise

Lockout

*The solution to isolate the energy &
prevent from the accidents*



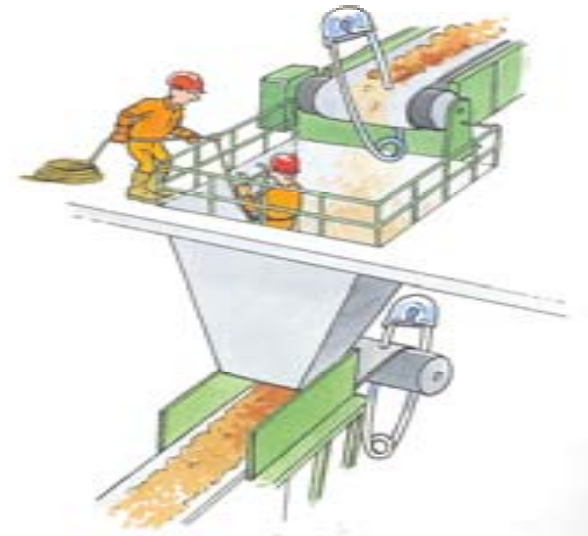
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Applying Lockout (electrical, mechanic, hydraulic....) is a very important process during maintenance & reparation.

The workers have to work safely.



CONSIGNATION - 7 REGLES D'OR



① Coordination



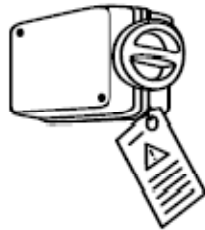
② Séparation



③ Condamnation



④ Vérification



⑤ Notification



⑥ Immobilisation



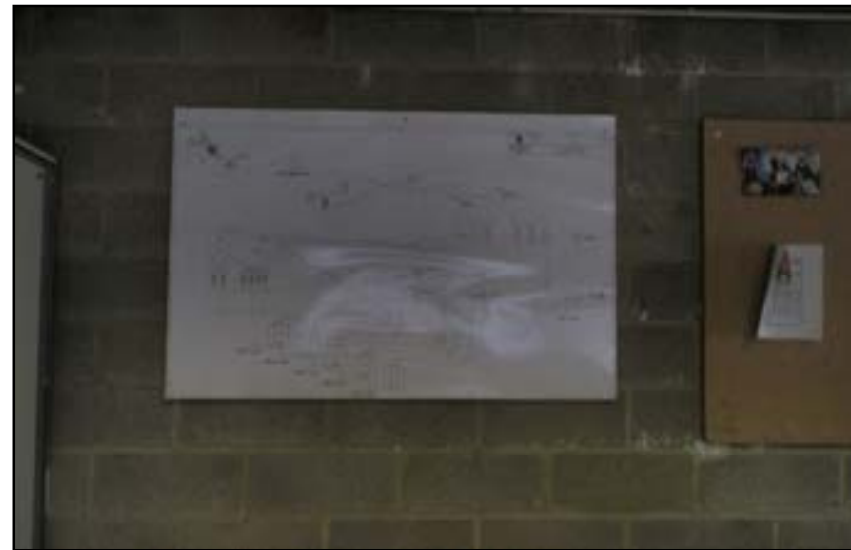
⑦ Signalisation





Machine & equipment have to be prepared :

- The workers of the different teams have to coordinate the maintenance





Putting off the energy, isolating the energy...



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Emergency or control panel are not good for
lockout.



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A dedicated room to store the lockout tools and to follow up the lockout





Lockout has to be done by a specific and dedicated material



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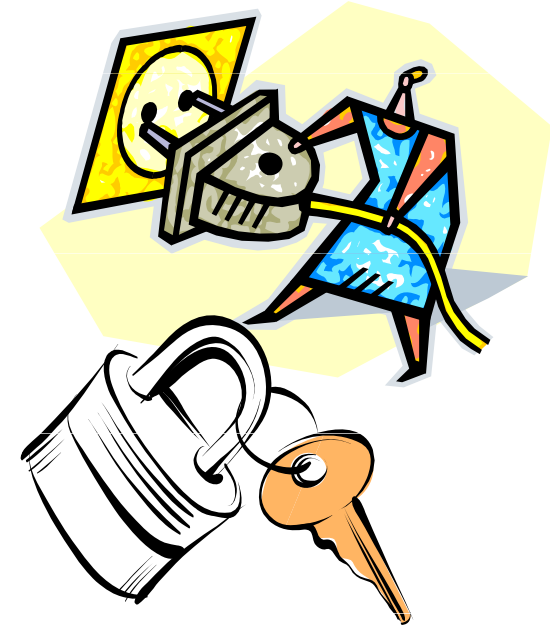
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Individual padlock for all workers

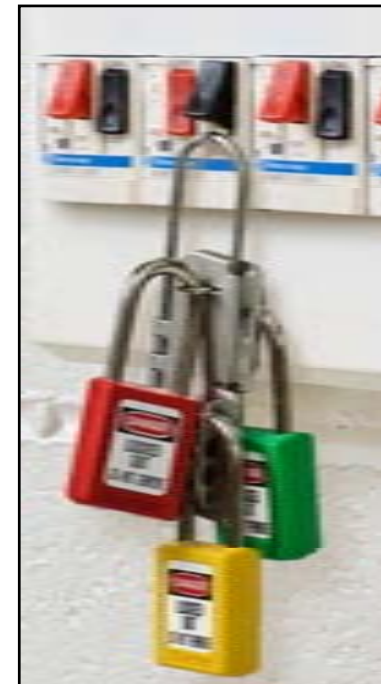
Different conditions:

- 3 padlocks by workers
- Only 1 key by padlock
- Identification of the workers on the padlock
- **Before working, always need to apply the padlock, even if there is already one**



Tools for teams

To be used for maintenance or reparation within a group of people: each worker must apply his padlock





To be done :

- Testing the equipment
- To check the non energy ...



Les 7 règles d'or: L'immobilisation



Les organes mobiles d'un équipement de travail doivent obligatoirement être immobilisés mécaniquement par verrouillage, brochage ou blocage (ex. broyeur, élévateur, etc..)

Broche



D'utiliser les moyens de blocage résistants aux efforts auxquels ils pourraient être soumis.

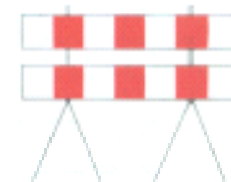
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Areas of maintenance or reparation must be identified



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SAFETY SERIES **Lock**



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