







GLOAZURE CO., LTD www.gloazure.com



GLOAZURE.CO.,LTD

A manufacturer and specialist for Safety Interlocking Device

#### What is MECHANICAL VALVE INTERLOCKS?

It is MECHANICAL VALVE INTERLOCKS in order to avoid any human error in OIL & GAS and other industries fields.

When sequence operations are required, if our key interlocks are used, operators are forced to operate all valves and/or other equipments correctly within the interlock sequence in accordance with that given operation sequence.

Human error has caused majority accidents and disasters at site and it can be happened at any time. Our SAFERLOK, MECHANICAL VALVE INTERLOCKS stop your big concern about human error at site and secure your properties and lives as well.

#### Where are MECHANICAL VALVE INTERLOCKS applied?

It will be applied to almost all sequence required operating system such as;
Valve operating system
PSV system
Pigging system
Deluge system
Safe machine guard system
and all sequence required operation system

## How to secure safety?

We have MT (Multi-turn model) / QT (Quarter-turn model) and they have Double key and single key system which can be applied to all valves and other equipments.

Also we have other special Locking devices for special applications. Our safety design engineer can provide a suitable the best combination of our products.

Our interlocking devices has internal counting mechanism which can provide adjustable valve or other equipment position.

# How to mount MECHANICAL VALVE INTERLOCKS to valves and other equipments?

We have specially designed compact & universal type mounting adaptors and kits which provide very easy mounting work to valves and other equipments at site or shop. No valve modifications, welding and pipeline shut-down are required.

We can supply our supervisor or technician in order to support of mounting work to job site or shop if required.

For detail information, please consult it with our engineer.



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#### The kinds of Interlocking devices

## A.Type QT(Quarter-Trun)

 for quarter turn operated valve like Ball/Butterfly/Plug valve etc and other quarter turn operated equipments





## B.Type MT (Multi-turn)

 for multi turn operated valve like Gate/Globe/Diaphragm valve and Gear Box and other multi turn operated equipments





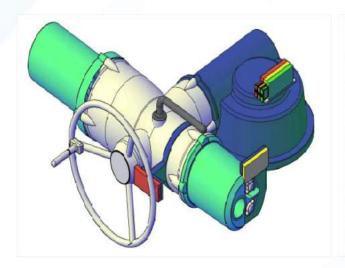




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Electrical Motor Actuated Valve Locks (MAL)
Pneumatic Actuated Valve Locks(PAL)
Gas Operated Valve Locks(GAL)







3-Way Pneumatic Direction Valve



Key Exhange Box

#### Features:

- All construction in 316 Stainless Steel
- No Bolting and welding are required for mounting while other manufacturers require Bolting and welding.
- · Compact and Simple design and maintenance free
- · Reliable and robust construction for harsh environments
- Tamperproof design
- Other optional requirements can be adaptable



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## **Normal Operation Sequence**



#### Normal operation:

- Insert the Key into the GKE-I and exchange the key
- · Insert the key into the GSL
- · Switch the lever to REMOTE of the GSL

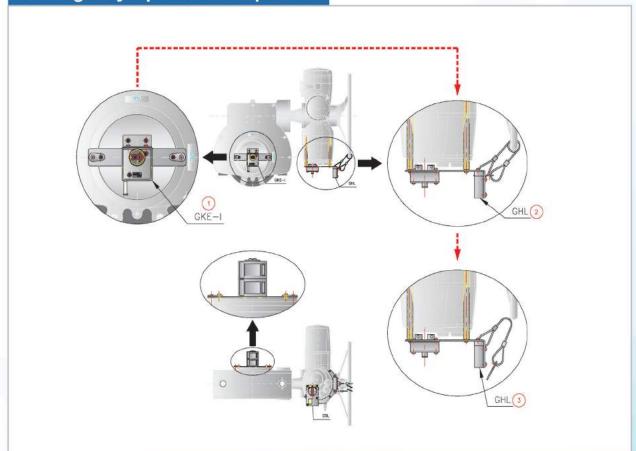


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## **Emergency Operation Sequence**



## **Emergency operation:**

- · Insert the Key to the GKE-I and exchange the key
- · Insert the key into the GHL
- · Release the wire fastened to the Hand wheel
- · Operate manual override handwheel



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GKE (Key Exchange Box)



GKE-I (Key Exchange Box with Indicator)



GSL (Local Switch Lock)



GHL (Lock for Emergency Hand wheel Override etc)



GSVL (Interlock with Solenoid Valve)

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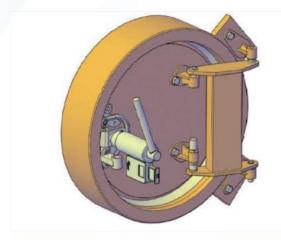


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Closure Locks (GCL)

The GLOAZURE Closure Locks ensures safety of opening of vessel closure such as Gas Filter, Pig Launcher & Receiver System etc.











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## **Key Cabinet**

We can provide KEY CABINET in stainless steel and other mate rials are available as per client's requirements



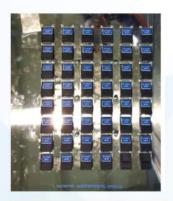




Standard Key Cabinet and key holder



Front tempered glass and lockable type



Unique key holder type



Master key cabinet



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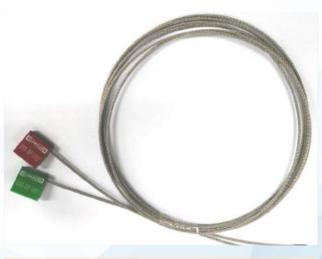
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Lock out with Padlock (TYPE 1)



Lock out with Padlock (TYPE 2)



Car seal (TYPE 1)



Car seal (TYPE 2)



# **ORDERING INFORMATION**

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## Example

G	1	600	s	1	QT
GLOAZURE	BALL VALVE	600 #	1"	Lever Operating	QT TYPE

Manufacture	Valve type	Valve rating	Valve size	Valve Operating type	GLOAZURE LOCKING DEVICE TYPE
G: GLOAZURE	1 : Ball valve Plug valve Butterfly valve 2 : Gate valve Glove valve 3 : Electrical Motor Actuated Valve 4 : Pneumatic Actuated Valve 5 : Gas Operated Valve 6 : Quick Opening Closure 7 : Others	150 # 300 # 600 # 900 # 1200 # 1500 # 2500 #	S: 4" and blow M: 6" ~ 10" L: 12" and above	1 : Lever 2 : Hand wheel Gearbox 3 : Others	QT : Quarter Turn operated type MT : Multi Turn operated type MAL : Electrical Motor Actuated type PAL : Pneumatic Actuated type GAL : Gas Operated type GCL : Quick Opening Closure type GSV : Solenoid Valve Lock CS1 : Car Seal Type-1 CS2 : Car Seal Type-2 LO : Lock Out UL : U-shape Lock



#### Client



#### **GLOAZURE CO., LTD**

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