



## Process interlocking

Mechanical interlocking prevents human error by guiding the operator through a predefined operating sequence. Interlocks are based on the principle of the exchange of unique keys, which only allow the right valves to be operated in the correct, predefined order.

### Closure Lock (CL)

The Netherlocks Closure Lock is custom designed to interlock the closure door of a pigging vessel. The Closure Lock (CL) prevents the bleedbolt from being removed and thus the closure door from being opened. Only the insertion of a dedicated key frees access to the bleedbolt, so it can be removed. This key is only released after the door is closed and the bleed bolt is back in place. The Closure Lock is suitable for every type and size of closure door.

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[www.netherlocks.com](http://www.netherlocks.com)



During pig launching and receiving, operating procedures must be followed carefully. When the vessel is not drained and vented or when the isolation valves are not fully closed before opening the closure door, very dangerous situations can occur. The Netherlocks Closure Lock (CL), as part of an interlocking sequence, prevents these situations by guaranteeing that the isolation valves are closed and the vessel is vented and drained before the closure door can be unlocked and opened.

## Features

- > **Traps the bleedbolt on the door until the release key is entered**
- > No grease or other lubrication required
- > Ingress protection of key slots by self sealing weather strips
- > Locks the closure door as an integral part of an operating sequence
- > Suitable for every type and size of closure door

## Options

- > Electronic locking until H2S and pressure levels are within acceptable range
- > Detecting open position of the closure door with a sensor

## Custom design

Each Closure Lock design is different for each type and size of closure. For GD Engineering closure doors, standard designs are available.

## Mounting

- > The brackets are commonly mounted on the flange of the closure door
- > For mounting of the brackets, drilling is required
- > Mounting can be done during operation since the door does not have to be operated
- > Only tamper proof bolts are used
- > Brackets are designed to the specific closure door dimensions, detailed dimensions of the door are required to start design





## Keys

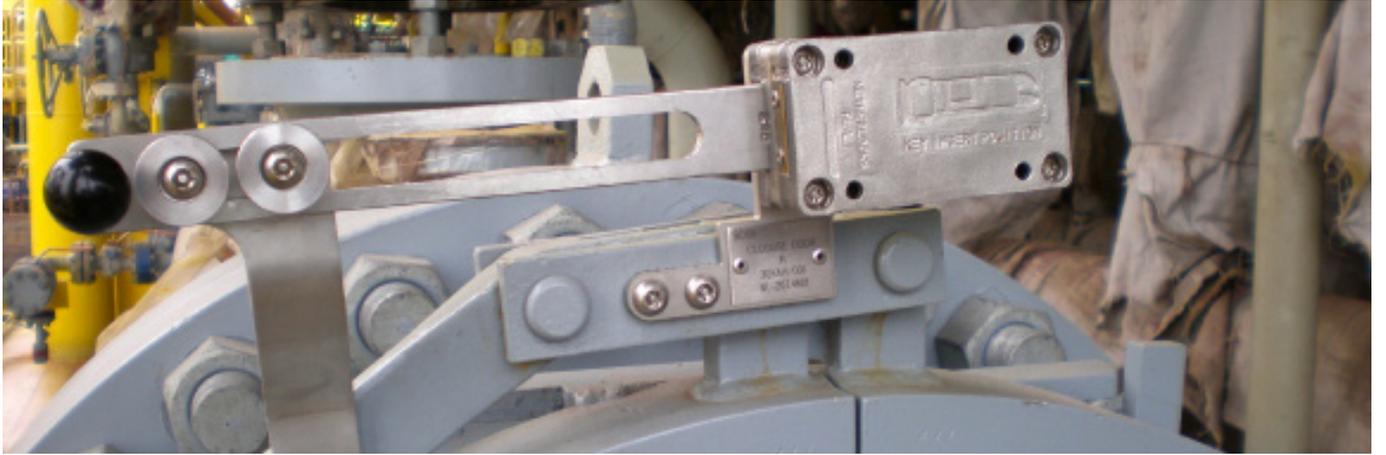
- > Linear keys
- > Uniquely coded
- > Key codes are registered, for easy replacement and to avoid use of duplicate keys
- > Spare keys available
- > Master keys available
- > Coloured tagplates

## Total linear concept

Netherlocks has eliminated nearly all rotating movements from the lock designs. Keys are inserted linearly and the internal locking mechanism consists only of linear moving components. This reduces internal wear and tear and makes the mechanism less vulnerable for dirt and sand. Lubrication with grease is not required.

- > No wear and tear
- > No grease
- > Less vulnerable to sand and dirt





## Closure Lock Data Sheet

### MATERIALS

		Material
Body		AISI 316
Bracket		AISI 316
Operating key		AISI 316
Tagplate lock		AISI 316
Tagplate key	Polymethyl methacrylate	
Key type		Linear

### CERTIFICATES

		Certificate
Material certificate*		2.1
TUV	TUV SUD Product Service GmbH	
ATEX	CE Ex II 2 GD EEx IIC T6	

\* Other certificates available on request.

