



Process Interlocking

Q-card

NETHERLOCKS designed a Q-card to make the installation process go more smoothly and without interruption.

Interlocks guarantee a predetermined sequence in accordance to client's specification. This sequence could give "problems" during transport and hydrostatic pressure testing of piping systems.

After locks are installed on the valves they cannot always be operated freely due to the sequence. When the plant is not yet in operation or valves are not yet installed (transport), valves that are locked in position can become a limitation.

For example during pressure testing all valves need to be closed, however a PSV sequence allows only one valve to be closed at a time as a sequential safety requirement. In such an instance, the interlocks could only be installed after pressure testing, which could cause logistical problems.

To bypass the predetermined sequences during commissioning we designed the Q-card, a special type of key that can only be fitted in the lock in our factory during assembling. This special key allows the locks to be opened or closed regardless of the sequence.

For safety reasons the *Q-Card* cannot be re-used and after all pressure testing is done the *Q-card* will be pulled out and replaced by the properly coded key. This is normally done during commission.

There is no need for master keys or spares, since these could jeopardise the plant safety. A master key is re-usable, which means that it will fit any time any place and collecting all spare or master keys afterwards is very unlikely.

The *Q-card* saves time, money and prevents irritation, without reducing safety.

