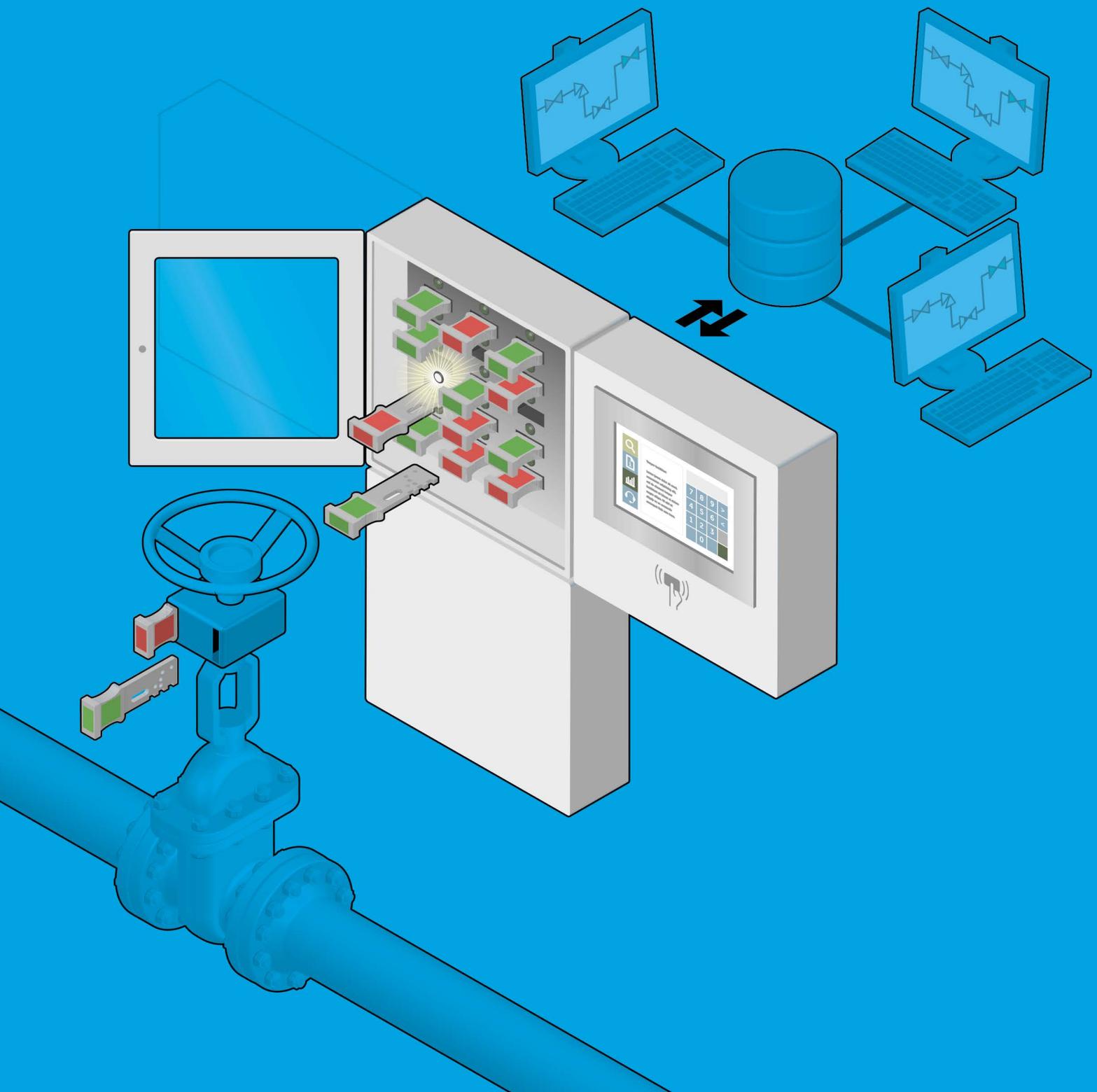




# Key management systems



# Integrating manual valves into your control systems

Valve interlocks improve process safety, but challenges may arise through poor use of interlocks and limited operational knowledge. Time taken searching for missing keys or taking the wrong one in to the field, can cause considerable delays. Additionally, in using mechanical interlocks alone, you cannot make use of all the data driven insights, with plants becoming more technologically driven.

Through key management, you can integrate digital information from across your plant. This will in turn, transform the way you operate – increasing productivity, providing safer operations and resulting in significant cost savings.

*Giving you greater information and insight from your interlock keys*



A key management system simplifies the way you work with interlocks. With electronic monitoring and management of key usage, you gain the full benefits from your interlock installations. You will realise hidden productivity gains, improve the usability of data and identify new areas of value creation, simply by using a key management system.

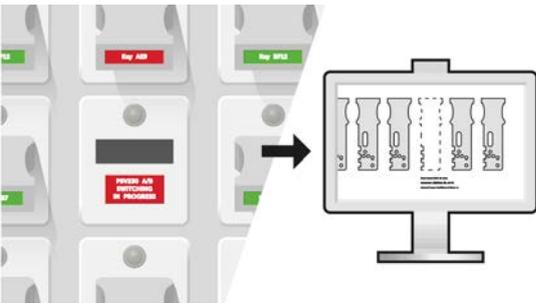
Our key management systems enable your operators to work more efficiently with valve interlocks. They are sure to find the right key with ease. Any missing key is easily identifiable and returned. This ensures it is always available at a time when your operators need it.

Our key management systems can be set to offer further information and support. The task of operating interlocks becomes so simple.

Through monitoring and logging of key movements, our key management systems provide data and intelligence about manual valve processes. You can use this to improve your plant performance. You'll get new information about the status of your manual valve systems. You'll obtain new insights from your assets, based on manual valve change-over data. You can even set your control system to determine manual valve operations, ensuring full consideration of other activities across a plant.

# Improving operator efficiency

## Tracking interlock key movements

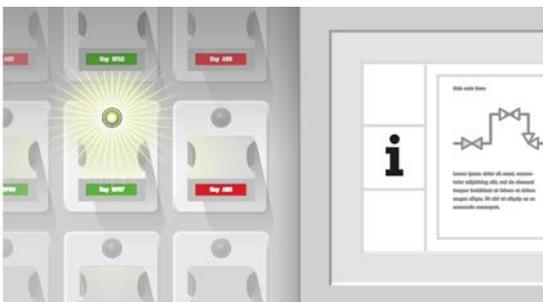


Missing interlock keys can create problems and slow down your operational processes. During an operation, an interlock key may be misplaced or lost, which will hinder future operations.

Key management systems detect and record insertion and removal of interlock keys in one central database. If a key is missing for longer than expected, an email can be triggered to inform you. The key is traceable down to an individual, operator level so you can promptly act upon this insight. This prevents future delays and downtime.

→ Our key management systems enable quick identification and responsiveness when a key is missing for longer than expected

## Guiding operators to 'right first time'



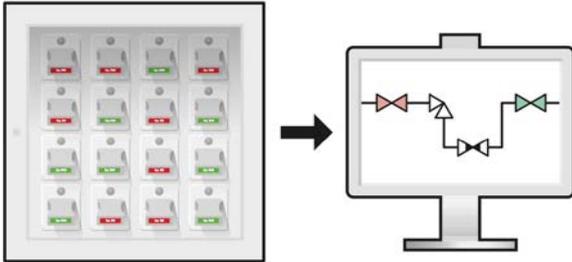
You can't always assume that your operators will know every little detail when it comes to operating interlocks.

Our key management systems simplify operator tasks by providing information to guide your operators step-by-step. Controlled key release and LED lights at the cabinet direct the operator to the correct interlock key. Each key is tagged allowing quick identification of the valve to be operated. Our most advanced model includes an interactive touch screen with technical information to help your operators complete a task with ease. A trouble-shooting remote assistance facility is also available.

→ Our key management systems provide a clear guide for operators, reducing the scope for error

# Improving your plant performance

## Confirming valve position and system status information

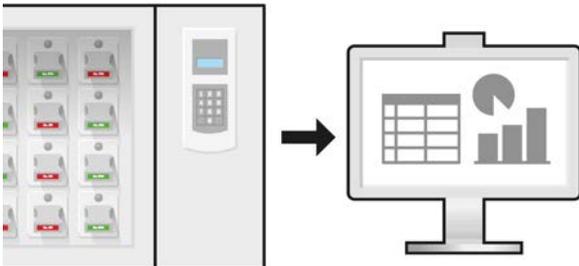


The positions and status of your manual valves and valve systems are often unknown conditions.

The valve position is confirmed when the valve interlock key is inserted into the key management system. This intelligence is fed in to your plant operating systems and used to help inform decision making.

→ Our key management systems allow you to integrate intelligence from your manual valve operations with your plant control system

## Providing insight into plant processes

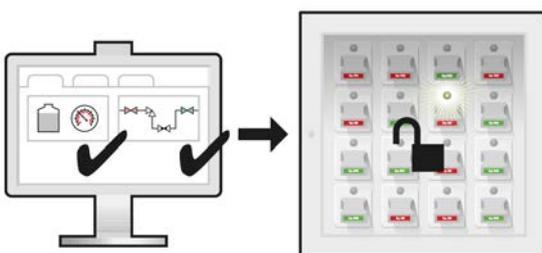


To enhance plant processes you are often reliant on accurate, granular data and status from all your assets, including your manual valve systems.

A full log of events is available, enabling you to analyse and improve the usage and longevity of your assets. For example how frequently valves are operated for maintenance purposes.

→ Our key management systems provide new insights in to the usage and status of manual valve systems

## Integrating control system inputs for maximum safety



Mechanical valve interlocks traditionally operate independently of your plant control systems. The status of other plant processes is often unknown.

Data integration offers a distinct advantage for process safety by controlling interlock key release. This control allows the status of adjacent systems and process variables to be featured into key release protocols. By integrating information and insight from systems and processes across your plant, manual valve operation takes place in the safest conditions.

→ Our key management systems offer integration of any data input to determine conditions for key release

# 3 intelligent key management systems for every requirement

We offer three key management systems designed with you and your operators in mind – KM Detect, KM Collect and KM Interact. Boasting a modular and scalable design, you can add to each system as and when your needs change.

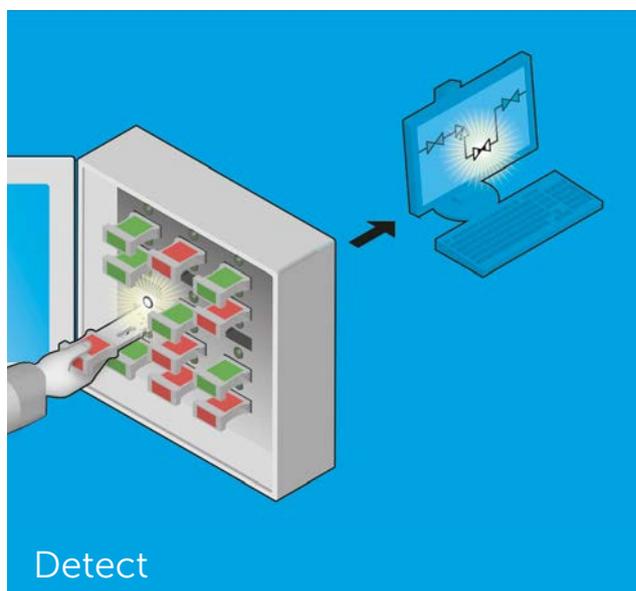


*Help guide your operators to the correct interlock key for use for valve operations*

## KM Detect

With KM Detect, you electronically authorise and control key usage. You also get a snap shot overview of the status of your valve systems.

- You decide who has permission to remove an interlock key, so you raise control over manual valve operations.
- You ensure smooth operation of your interlock systems by reducing the number of lost or misplaced keys.
- Illuminated key slots make finding a key easy for an operator.
- You gain more efficient interlock operations: The right key at the right time, by the right operator, for the right valve system.
- Valve position and system status is confirmed by the availability of housed interlock keys. There is no need for wiring or a wireless infrastructure.



*Empowering you to make smarter business decisions by integrating information and insight from across the plant*

## KM Collect

KM Collect is a more advanced key management system that also gives you a granular record of interlock key activities.

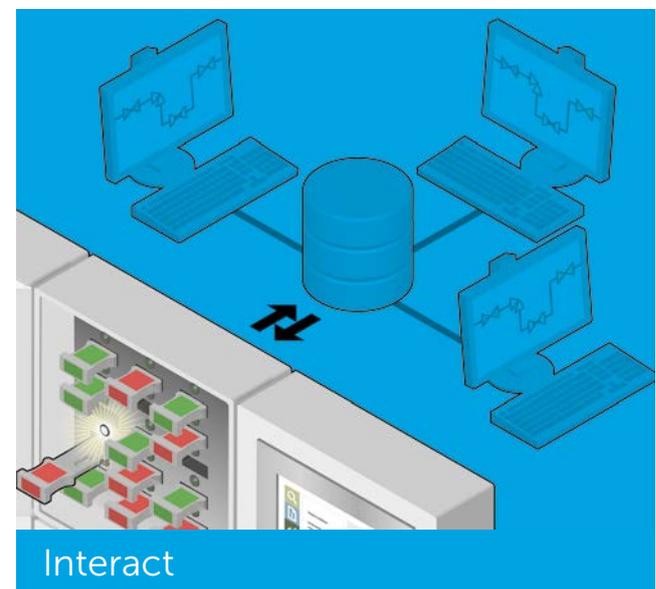
- You can choose from a number of authentication options, including a pin code or access card.
- You determine the key release conditions for your operators via a simple web interface.
- An easy-to-use key scroll and display panel, guides your operators through the key retrieval and removal process.
- You can capture, store and extract detailed key movement data for system monitoring and process improvement purposes.
- Offering convenient accessibility, you can log in and see activity through a network connection.



## KM Interact

The most advanced key management system, providing full operational guidance and can be set to exchange data with any plant operating system.

- Built for full interactivity with other business and control systems: Connect to any number of existing data inputs or outputs to fully integrate interlock valve operations with your plant processes.
- You can integrate all your system information, online or offline, into one central interlock & valve information hub.
- You can store all interlock documentation and support material in the key management system.
- Remote assistance support is available to your operators.

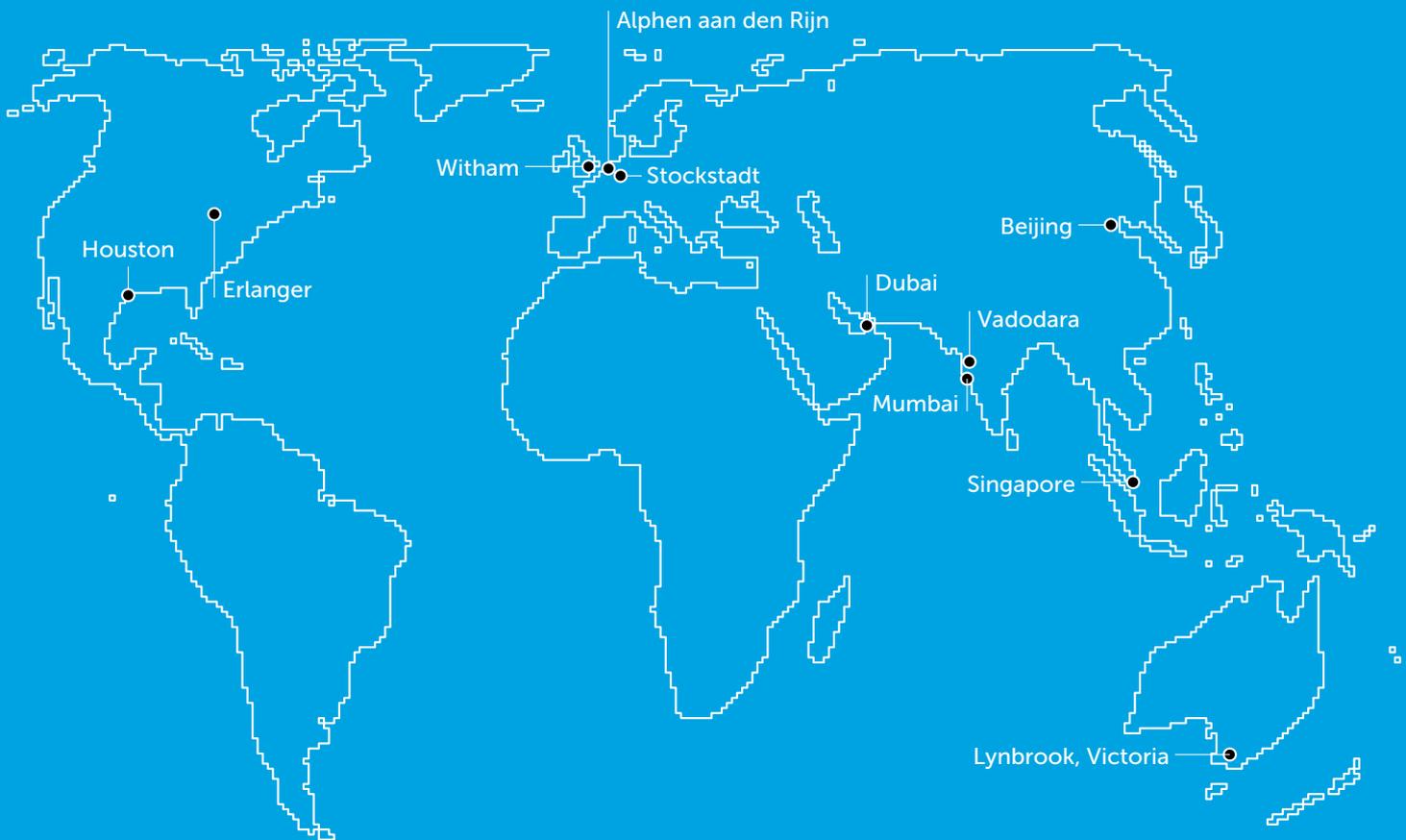


Sofis key management solutions are the most intelligent interlock key management systems available to the market. As the global market leaders in the valve interlock industry, we continue to set the standard and develop pioneering new products for our customers. Our key management systems form the basis of the new industry standard for interlock key management.



Smith Flow Control and Netherlocks Safety Systems have merged. We are Sofis, the leading valve operation specialists. With our combined expertise we offer smart integrated solutions to optimize valve operation. Our products help create a safer and more efficient working environment and are often regarded as the industry standard. We work closely with our customers and provide simple and reliable solutions.

We are smarter together.



#### Contact

For support:  
[support@sofisglobal.com](mailto:support@sofisglobal.com)  
For enquiries:  
[www.sofisglobal.com/contact](http://www.sofisglobal.com/contact)

#### Online

[www.sofisglobal.com](http://www.sofisglobal.com)  
YouTube: Sofis valve operation  
Facebook: @Sofisglobal  
Twitter: @Sofisglobal

#### Locations

Alphen aan den Rijn, Netherlands  
+31 172 471339  
Beijing, China  
+86 10 5879 7989  
Dubai, UAE  
+971 4359 1988  
Erlanger, USA  
+1 859 578 2395  
Houston, USA  
+1 281 547 7422  
Singapore  
+65 6395 8555

Stockstadt, Germany  
+49 6027 4051221  
Vadodara, India  
+91 265 234 1134  
Lynbrook, Victoria, Australia  
+61 3 9771 5370  
Witham, UK  
+44 1376 517901

Contact our nearest office for a distributor near you, or check [www.sofisglobal.com/contact](http://www.sofisglobal.com/contact).