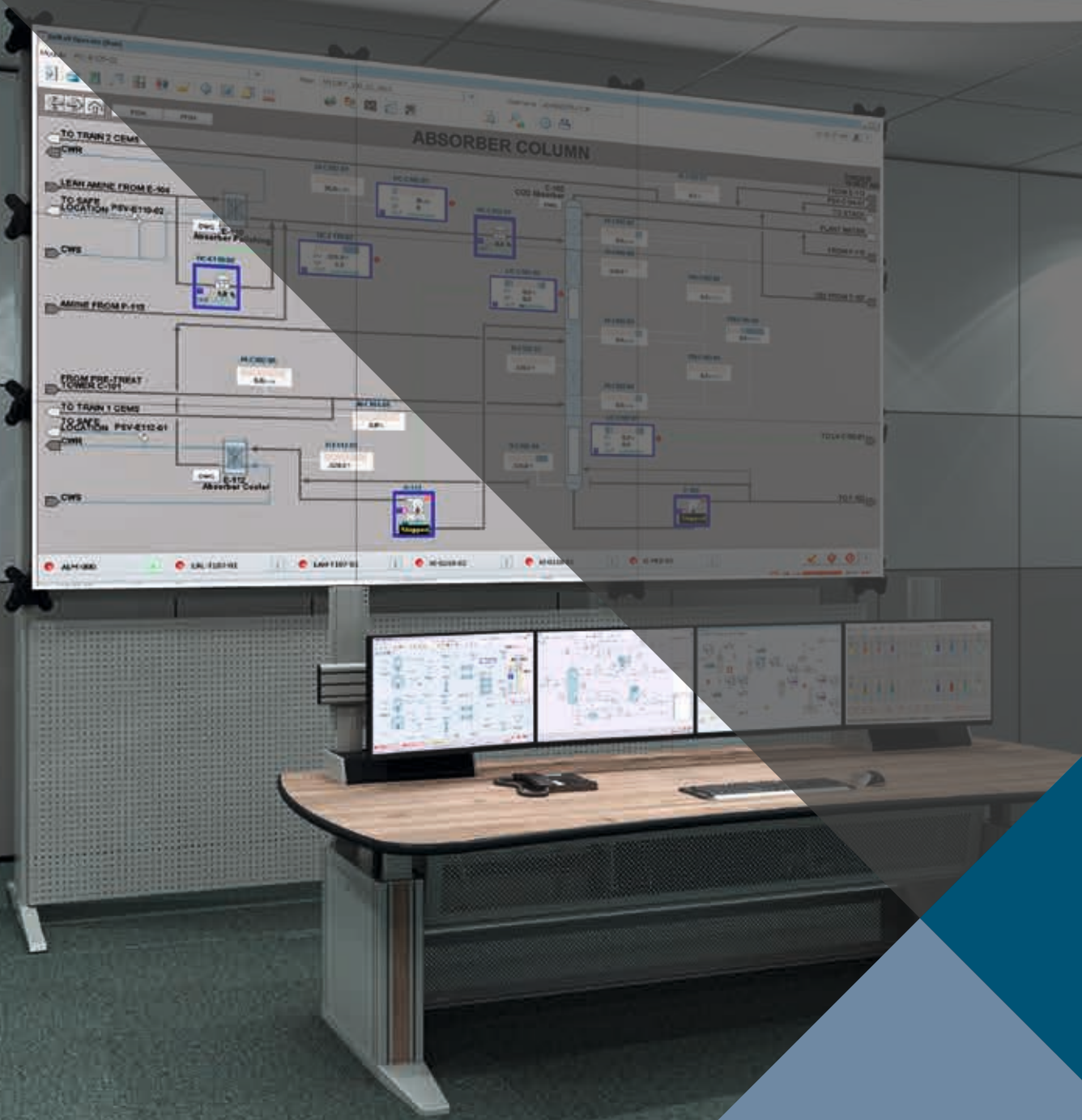# KNÜRR®
CONSOLES

Knürr® KVM operator stations

2024

KNÜRR® KVM OPERATOR STATIONS

The right customised solution for every application!

In modern control rooms, the technology is set apart from the operators. Here, the PCs (sources) are installed collectively in a controlled and safe environment, the computer or server room. Here, it is ensured that all computers are supplied with both a suitable energy supply and appropriately cool air.

However, this does not mean that no technology remains at the workstation itself, because the respective signal for keyboard, video (image) and mouse is extended to the operator at the workstation by means of so-called KVM

technology using extenders. For this, appropriate transmitter units are needed in the server room and receiver units at the workstations. For flexible switching of the sources to any screen, the system is supplemented with a suitable KVM matrix.

In many cases, a large screen wall in the control room provides additional information, which is also integrated into the system for the comprehensive display of images and videos.

For even more flexibility in the arrangement and connection of the sources on

the workstation displays, the new Knürr® Virtual KVM System leaves nothing to be desired! Here, for example, several sources can be displayed and operated simultaneously on one screen. This new and revolutionary way of working with absolute flexibility creates a display space of up to 12K. From there, you are able to control all applications, programmes, displays, web services or IP videos.

Knürr® Consoles offers you the right customised solution for this with the modular and fully equipped workstation solutions, as well as the flexibly expandable systems for every application!

1. Operator stations

Knürr® KVM operator station. Choose your fully equipped KVM operator stations, e.g. from the Classic, Advanced or Exclusive series*.

2. Matrix / KVM Manager

The central control unit of the KVM system. Whether classic (proprietary) KVM, IP KVM or Virtual KVM, the KVM Manager always forms the control centre of the system. For maximum reliability, even with redundant systems (partial or full redundancy).

3. Video wall

Knürr® Large Screen Wall Systems. The Classic, Advanced and Exclusive line of projection screen systems leave nothing to be desired. Choose from single-image display and predefined layouts to a completely freely scalable and frameless display solution.

* The operating stations presented here are only an excerpt from a multitude of possibilities. We would be happy to work with you to develop individual solutions for your project. Please contact us!

KNÜRR® KVM OPERATOR STATIONS

The solution for all functional areas!

Supervisor Workspace

connected with all functional areas for monitoring of the alarm conditions. .

Server room

- KVM system (transmitter)
- Screen Controller
- KVM matrix
- Server for vitrual KVM system
- remote systems

Crisis team room

- Knürr® Screen Structure
- Large screen monitors
- integrated into the visualisation system

Networking the systems

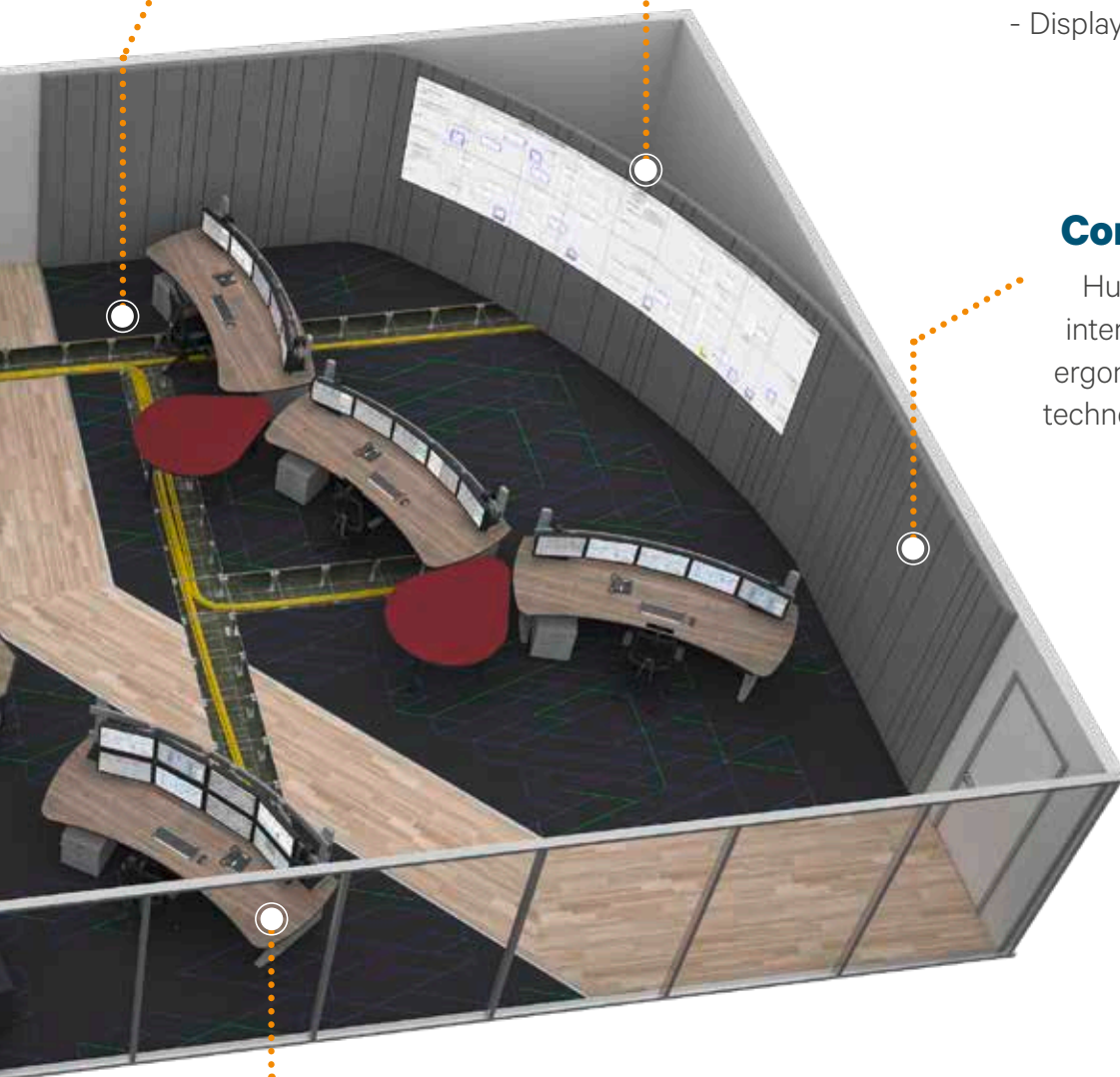Communication paths via the structural wiring of the control centre

VideoWall

- Knürr® Screen Structure
- Large screen monitors
- integrated into the visualisation system
- Display area freely scalable

Control room

Human/machine interface. Optimum ergonomics and safe technology integration

Knürr® KVM operator station

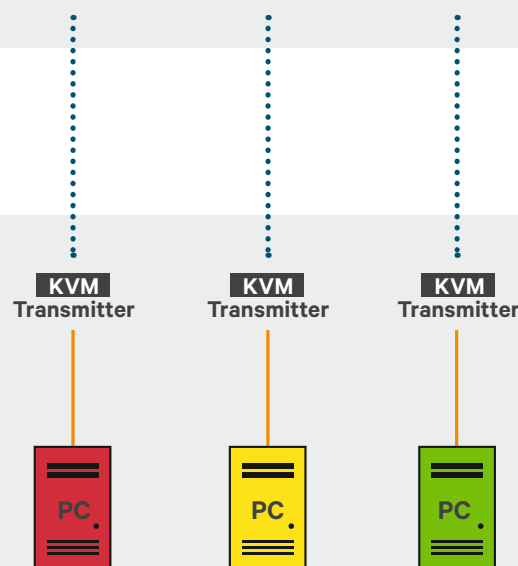24/7 control console (Classic, Advanced, Exclusive)
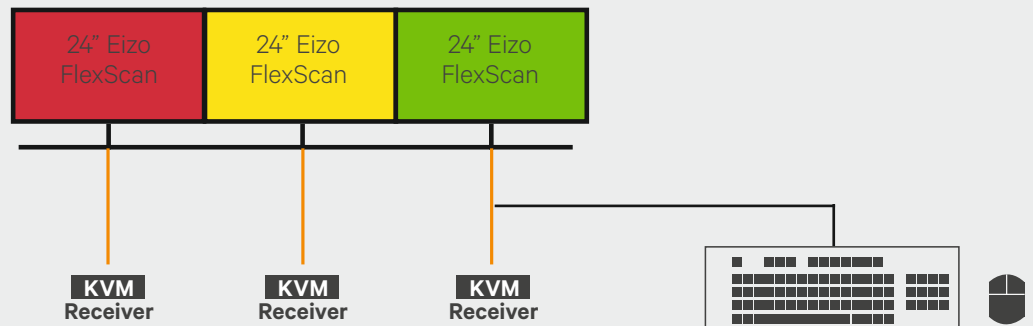KVM system (receiver)

OPERATOR STATIONS

A. KVM Classic control panel

- **Knürr Elicon® VC-E Console**
  electromotive height adjustment, 650 - 1250mm
  3x3U 19" KVM technology module

- **3x KVM receiver,** factory-fitted in the console
  pre-assembled and configured

- **Extended cable set**

- **3x 24" EIZO display** (Full-HD IPS Display;
  1,920 x 1,080 pixels) with suitable monitor mounts

- **Power distribution 7-fold Schuko**

- **3x KVM transmitter** for installation in the
  computer room

CONTROL ROOM

TECHNICAL ROOM

The modular design of the console enables a wide range of configurations and guarantees maximum flexibility. Table combinations can also be added to or changed at a later date at any time and without great effort.

High-quality materials in the form of extruded aluminium profiles in combination with die-cast aluminium outriggers guarantee maximum stability and sturdiness.

Ergonomic details facilitate daily work and reduce health risks. A comprehensive range of accessories complements the Knürr-Elicon workstation systems: Flat screen holders, PC and 19" containers, workplace lighting, practical storage levels, cable management elements, and other accessories.
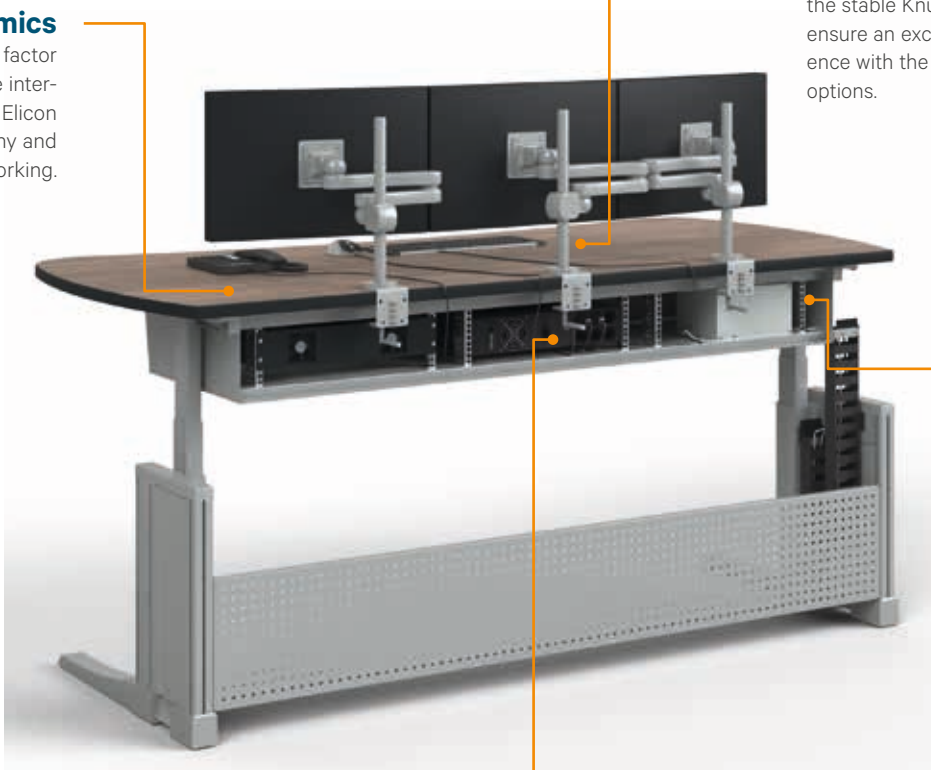
Ergonomics

is the most important factor at the man/machine interface. The Knürr Elicon console ensures healthy and fatigue-free working.

Workplace monitors

The professional 24" IPS displays are attached to the operating station with the stable Knürr monitor mounts and ensure an excellent operating experience with the flexible adjustment options.
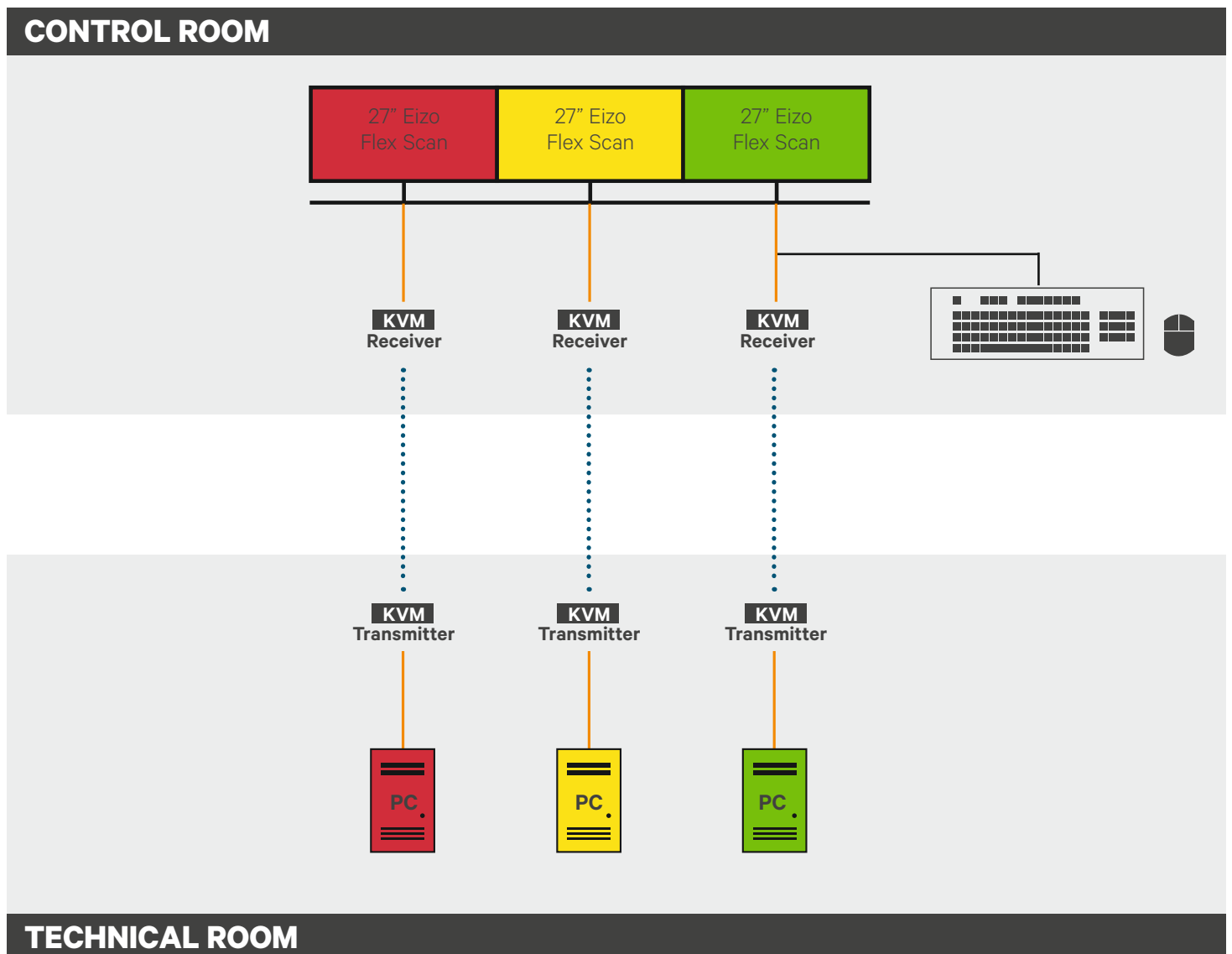
KVM Receiver

The KVM receivers are already pre-assembled in the KVM technology module at the factory and are configured accordingly.

KVM technology module

Very generous 19" installation space (3x3 U) for perfect integration of KVM technology and other accessories.

B. Operating station KVM Advanced

- **Knürr Ergocon® Console**,
  height adjustable by electric motor, 650 - 1250mm
  Electromotive height-adjustable monitor level,
  0 - 150mm, 2x6U 19" KVM technology module

- **3x KVM receiver**, factory-fitted in the console
  pre-assembled and configured

- **Extended cable set**

- **3x 27" EIZO display** (WQHD IPS Display;
  2,560 x 1,440 pixels) with suitable monitor mounts

- **Power distribution 7-fold Schuko**

- **3x KVM transmitter** for installation in
  computer room

CONTROL ROOM

27" Eizo Flex Scan | 27" Eizo Flex Scan | 27" Eizo Flex Scan

KVM Receiver | KVM Receiver | KVM Receiver

KVM Transmitter | KVM Transmitter | KVM Transmitter

PC | PC | PC

TECHNICAL ROOM

The Knürr-Ergocon® console sets standards for the most demanding 24-hour use in control rooms, control rooms and control centres:

- Best possible ergonomics through multidimensional adjustment options.

- The horizontal functional rail with integrated cable guide ensures secure and stable monitor mounting. The table surface below the monitors remains freely accessible at all times.

- Large-volume energy chains enable protected and orderly cable routing.

- The patented functional unit forms the stable basic framework of each monitor level. It combines functions such as concealed cable routing, fastening of the vertical columns and optionally also the accommodation of personal docking units (Knürr-DICON).

- The monitor level offers infinitely variable, electrical height adjustment of the monitors. The integrated collision protection with piezo sensors guarantees safe operation at all times.
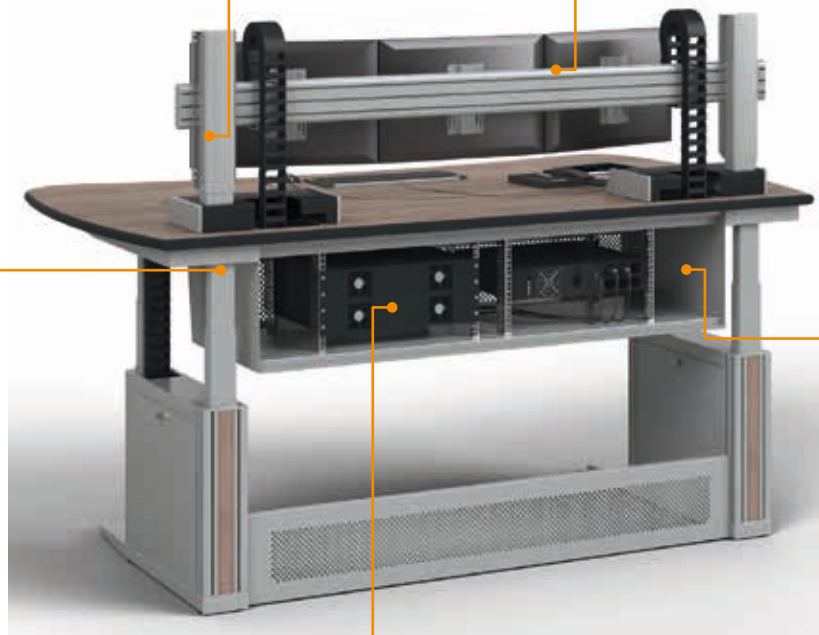

Workplace monitors
The professional 27″ IPS displays are attached to the operating station with the stable Knürr monitor mounts and ensure an excellent operating experience with the flexible adjustment options.

HV monitor level

Ergonomics
is the most important factor at the man/machine interface. The Knürr Ergocon console ensures healthy and fatigue-free working.

KVM Receiver
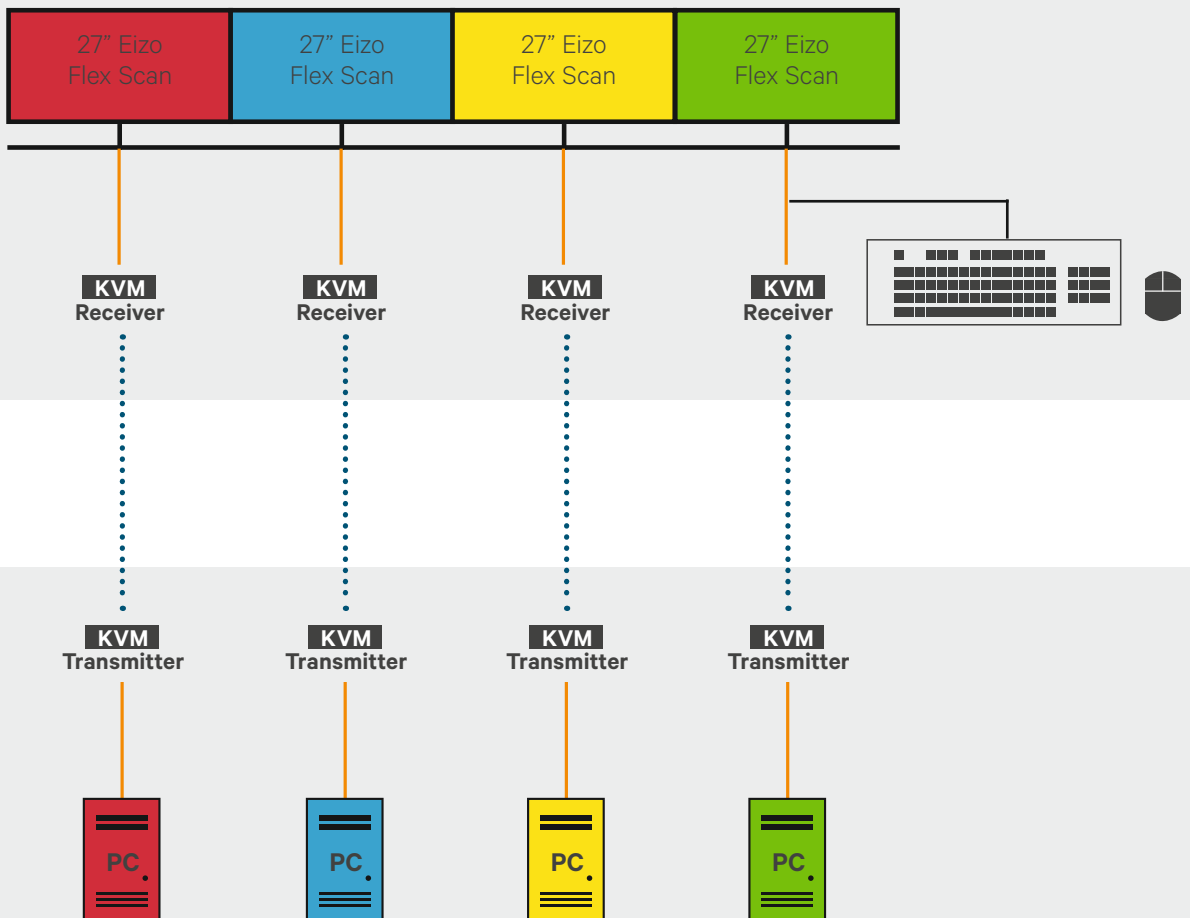The KVM receivers are already pre-assembled in the KVM technology module at the factory and are configured accordingly.

KVM technology module
Very generous 19″ installation space (2x6 U) for perfect integration of KVM technology and other accessories.

C. KVM Exclusive control panel

- **Knürr Ergocon® Console**,
  height adjustable by electric motor, 650 - 1250mm
  Electromotive height-adjustable monitor level,
  0 - 150mm, electromotive viewing distance control,
  0 - 170mm, 3x6U 19" KVM technology module

- **4x KVM receivers,** factory-fitted in the console
  pre-assembled and configured

- **Extended cable set**

- **4x 27" EIZO display** (WQHD IPS Display;
  2,560 x 1,440 pixels) with suitable monitor mounts

- **2x power distribution 7-fold Schuko**

- **4x KVM transmitter** for installation in the
  computer room

CONTROL ROOM

| 27" Eizo Flex Scan | 27" Eizo Flex Scan | 27" Eizo Flex Scan | 27" Eizo Flex Scan |

KVM Receiver   **KVM Receiver**   **KVM Receiver**   **KVM Receiver**

KVM Transmitter   **KVM Transmitter**   **KVM Transmitter**   **KVM Transmitter**

PC   PC   PC   PC

TECHNICAL ROOM

The Knürr-Ergocon® console sets standards for the most demanding 24-hour use in control rooms, control rooms and control centres:
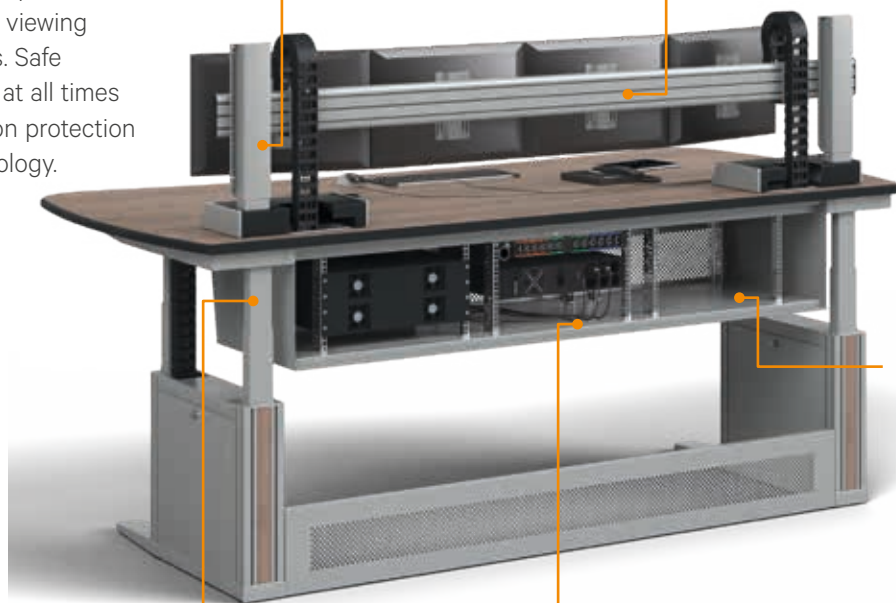
- Best possible ergonomics through multidimensional adjustment options.

- The horizontal functional rail with integrated cable routing ensures secure and stable monitor mounting. The table surface below the monitors remains freely accessible at all times.

- Large-volume energy chains enable protected and orderly cable routing.

- The patented functional unit forms the stable basic framework of each monitor level. It combines functions such as concealed cable routing, fastening of the vertical columns and optionally also the accommodation of Personal Docking Units (Knürr-DICON).

- The monitor level offers infinitely variable, electrical height adjustment of the monitors. In addition, it is equipped with a completely concealed, electrical depth adjustment (viewing distance adjustment). This allows the user to adjust all levels individually for best ergonomics and optimal viewing distance to the monitors. Safe operation is guaranteed at all times by the integrated collision protection with piezo sensor technology.

Height and depth adjustable Monitor level

Workplace monitors
The professional 27" IPS displays are attached to the operating station with the stable Knürr monitor mounts and ensure an excellent operating experience with the flexible adjustment options.

KVM Receiver
The KVM receivers are already pre-assembled in the KVM technology module at the factory and are configured accordingly.

Ergonomics
is the most important factor at the man/machine interface. The Knürr Ergocon console ensures healthy and fatigue-free working.

KVM technology module
Very generous 19" installation space (3x6 U) for perfect integration of KVM technology and other accessories.

2. MATRIX / KVM-MANAGER

The KVM-Manager combines the functionality of the KVM switch and extender, with the added ability to manage user access rights and share control.
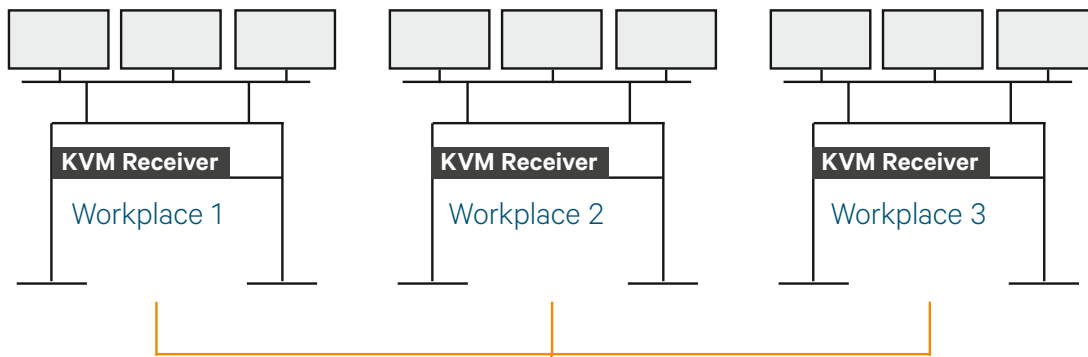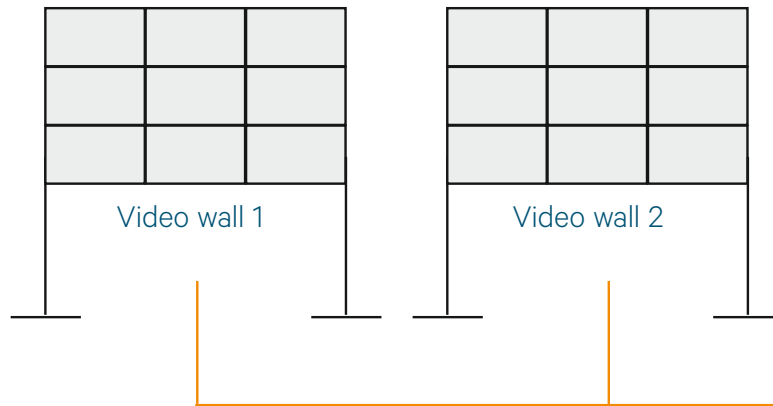
This means that even a large number of computers can be operated easily and efficiently over a larger number of work-stations. Two main types of system are used here:

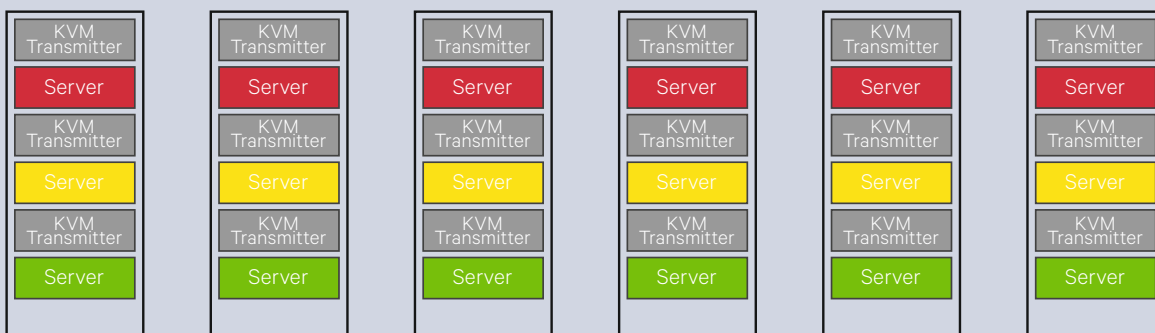**1. Direct Connect**
2. IP-based

With the combination of transmitters, receivers and a flexible switching archi-tecture (matrix), matrix systems can be built for almost all user requirements.

We at Knürr Consoles will be happy to advise you and work with you to develop the right customised solution for your needs!
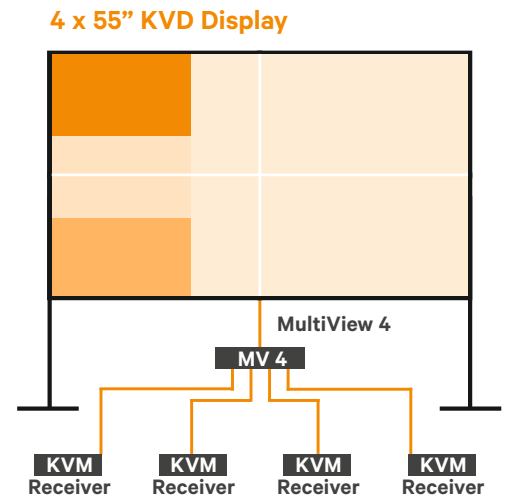
CONTROL ROOM

Video wall 1

Video wall 2

KVM Receiver

Workplace 1

KVM Receiver

Workplace 2

KVM Receiver

Workplace 3

SERVER ROOM

Matrix / KVM- Manager

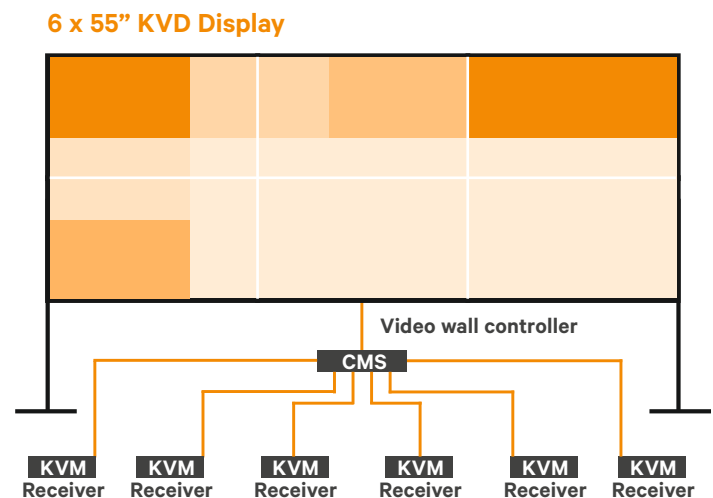| KVM Transmitter |
| Server |
| KVM Transmitter |
| Server |
| KVM Transmitter |
| Server |

3. VIDEO WALL

Video wall **Classic**

- 4x Barco KVD 55" display
- Knürr Elicon screen structure 2x2 incl. 4 push-out display mounts and integrated cabling system
- 1x 19" chassis
- 4x KVM receiver
- 1x MultiView 4 screen control

4 x 55" KVD Display

MultiView 4

MV 4

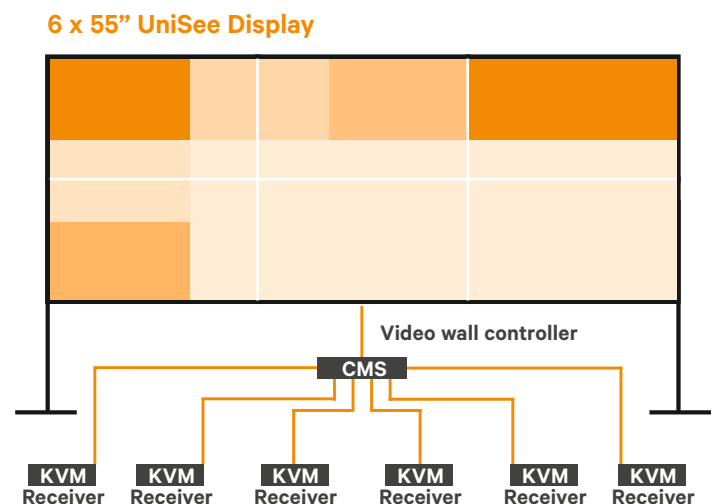KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver

Video wall **Advanced**

- 6x Barco KVD 55" display
- Knürr Elicon screen structure 3x2 incl. 6 push-out display mounts and integrated cabling system
- 1x 19" chassis
- 6x KVM receiver
- 1x screen controller with CMS system

6 x 55" KVD Display

Video wall controller

CMS

KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver

Video wall **Exclusive**

- 6x Barco UniSee 55" Display
- Knürr Elicon UniSee screen structure 3x2 with integrated cabling system
- 1x 19" chassis
- 6x KVM Receiver
- 1x screen controller with CMS system

6 x 55" UniSee Display

Video wall controller

CMS

KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver   KVM Receiver

Advantages of the displays

Barco OverView KVD

The Barco OverView KVD display is a high-performance and cost-optimised 55-inch LCD panel with a medium brightness level (500 cd/m² typical) that has been specially developed for use in modular video walls. With a 3.5mm bezel, excellent colour and contrast, and a wide viewing angle, the OverView KVD-5521C offers many advantages for entry-level and mid-range applications.

Cost savings with automatic colour and brightness calibration: The OverView KVD-5521C is part of the renowned and industry-leading Barco OverView LCD video wall portfolio - which complements the premium Barco UniSee platform. The innovative Sense X - Barco's automatic real-time colour and brightness calibration system - ensures that the entire wall produces a perfectly balanced image at all times - avoiding a ‚chequerboard‘ video wall.

Diagonal: 55"
Resolution: Full HD (1,920 x 1,080)
Luminance: 700 cd/m² (nits)
Contrast: 1100:1
Screen gloss haze: 28%
Viewing angle (H / V): 178° / 178°
Calibration: automatic colour and brightness calibration with Sense X
Cooling: Fanless
Total bezel width (two adjacent displays): 3.5mm

Barco UniSee

The Barco UniSee® platform takes a whole new strategy for truly seamless LCD video walls. By redesigning and optimising every single component, Barco UniSee sets new standards not only for image quality, but also for installation precision, ease of maintenance and reliability.

Frameless viewing experience, innovative mounting system. Barco UniSee's frameless design, which virtually eliminates the gap between individual modules, allows content to be distributed across multiple modules without distracting black borders. The revolutionary UniSee Mount uses gravity to perfectly and automatically align the displays and keep them permanently in place. The UniSee Mount also simplifies maintenance by allowing individual panels to be quickly unclipped.

Sense X, automatic and continuous calibration for perfect uniformity
Sense X, the automatic, continuous, real-time calibration system for colour and brightness, ensures that the entire wall displays a perfectly balanced image. However, Barco has also redesigned the layout of the displays to counteract any possible deviations in brightness from the centre to the edges.

Setup and maintenance can be done even faster and easier with the enhanced UniSee Connect module. A wizard guides you through the entire installation process. The individual screens are automatically recognised by the software when used for the first time. The local dimming function ensures higher contrast, less radiant heat and lower power consumption. In addition, UniSee Connect enables hardware-enabled cloud connectivity for remote monitoring and diagnostics as standard.
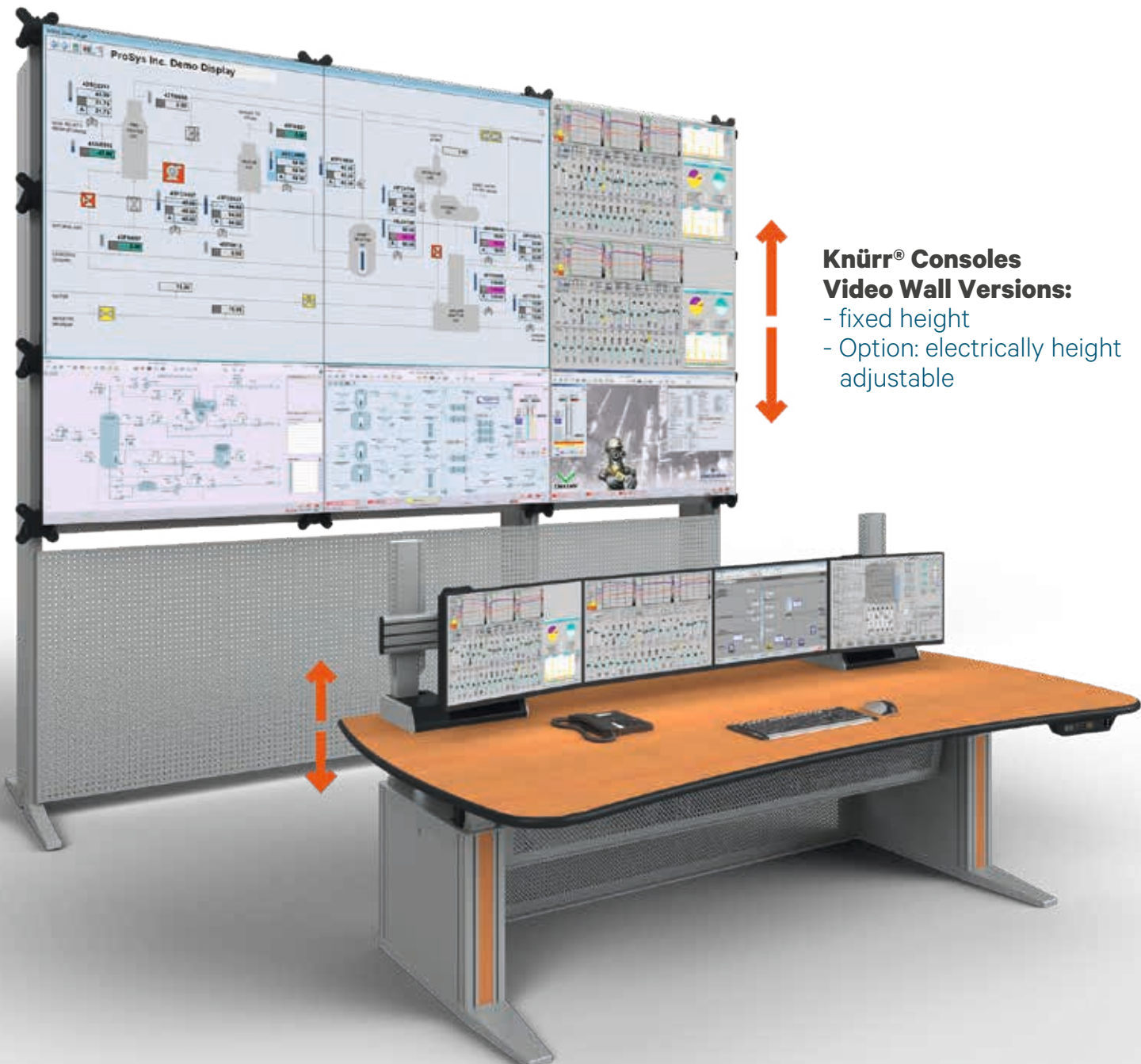
Full system integration
In addition, the Barco UniSee platform is supported by the specially designed and customised Knürr® screen structure, the optimal mounting solution for freestanding or curved installation configurations with additional cladding solution for elegant integration into the environment.

Diagonal: 55"
Resolution: Full HD (1,920 x 1,080)
Luminance: 500 cd/m² (nits)
Contrast: 1200:1
Screen gloss: 25%
Viewing angle (H/V): 178° / 178°
Calibration: Automatic colour and brightness calibration with Sense X
Cooling: Fanless
Bezel width: n.z. (bezel-less)

KNÜRR® CONSOLES – SOLUTIONS FOR BARCO UNISEE DISPLAYS

- **Modular and any time expandable Knürr video wall structure** for various configurations of Barco UniSee panels, e.g. 2x2, 3x2 and even up to 4x4 with a maximum height of 3.9 m.
- **Simple and quick installation** on site due to pre-assembled components.
- **Safe and maintenance-friendly installation** of the displays with intelligent and concealed cable routing within the vertical side elements.
- **Optionally available:** Electrically height-adjustable version for synchronous Movement together with a Knürr Ergocon® console.

Knürr® Consoles Video Wall Versions:
- fixed height
- Option: electrically height adjustable

knŭrr
World of control rooms