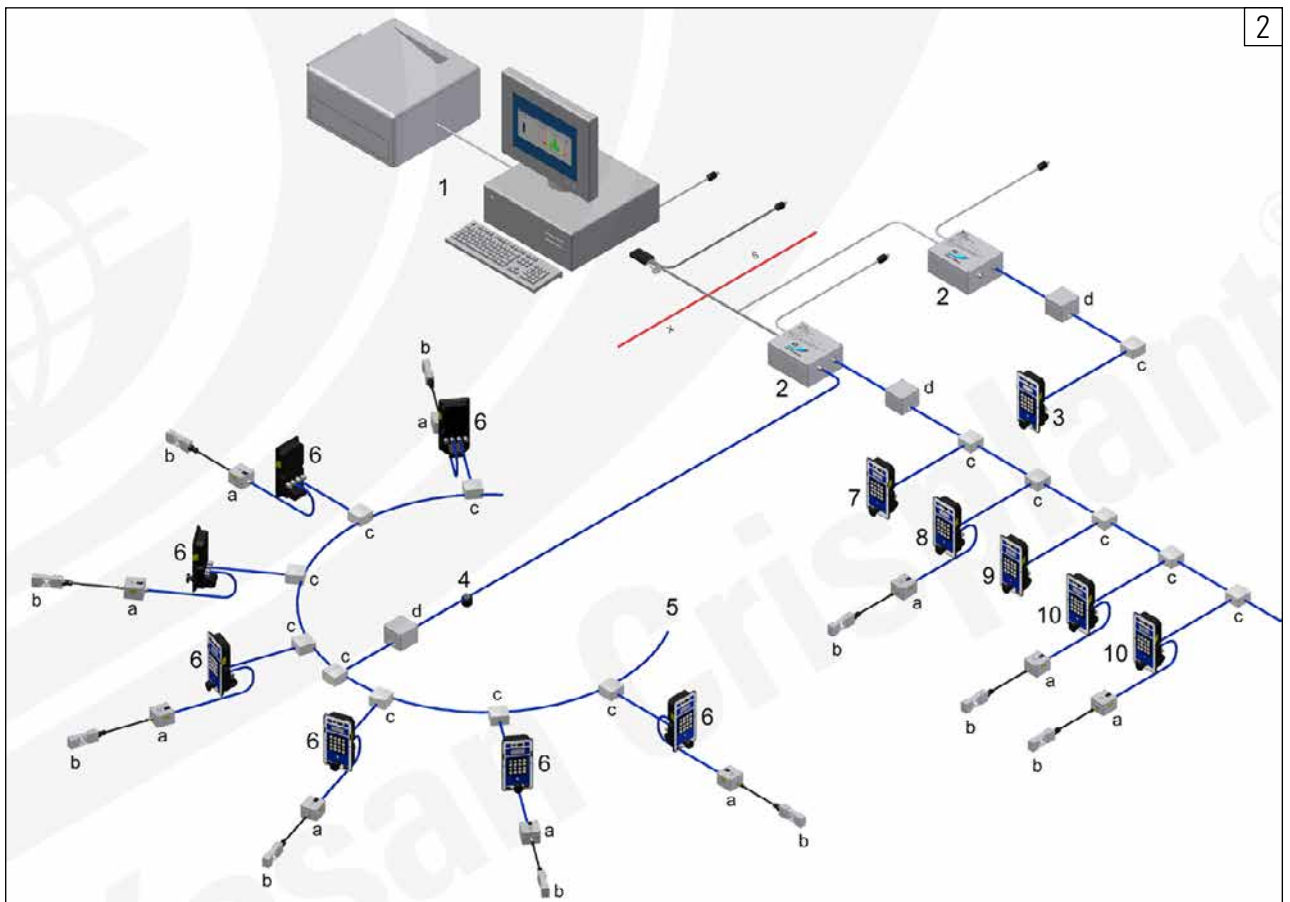# CUC POWER AND DATA NETWORK

Kosan Crisplant's CUC power and data network is designed for intrinsically safe power supply to CUC controlled machines and for data communication between CUC controlled machines.

- 100% intrinsically safe network approved for hazardous area

- Network communication between machines without PC intervention

- Total protection and isolation of intrinsically safe network via CPI-Ex power supply

- High safety thanks to intrinsically safe network, all cables can be broken without any risk

Example of CUC configuration

1	PC system (hardware and software)	7	HMI/CUC controller for introduction at filling carrousel
2	Ex-proof CPI-Ex power supply	8	HMI/CUC controller for ejection at filling carrousel and for ECS check scale
3	HMI/CUC controller for palletizer		
4	Slip ring		
5	Carrousel filling system	9	HMI/CUC controller for leak detector
6	HMI/CUC controller for UFM filling machine installed on filling carrousel		

10 HMI/CUC controller for stationary UFM filling machine
a   Load cell module
b   Load cell
c   T-connector
d   Connection box
S   Non-hazardous area
X   Hazardous area

Kosan Crisplant's HMI/CUC controller

Your possibilities

- CPI-Ex power supply approved for installation in hazardous area

- Parallel use of several CPI-Ex power supplies

- HMI/CUC controllers available with different I/O configurations, up to 16 outputs and 32 inputs

- UPS (Uninterruptible Power Supply) to the PC and the CPI-Ex power supply in order to ensure correct close-down of PC and to secure data of ongoing filling

- Installation of PC in non-hazardous area up to 500 meters from filling hall

- One PC can collect and handle data from up to 10 carrousel systems simultaneously

Your benefits

- Low installations costs

- Simple cables and connections

- Easy cabling - power and data in the same cable

- Every HMI/CUC controller can control any machine in the network

- Software for different machine functions is already installed on HMI/CUC controllers

- Few components to be kept in stock thanks to uniform components

- Built-in transient protection in CPI-Ex power supply with protection against excess voltage

- Variation in input signal to CPI-Ex power supply between 85 and 264 VAC/ 47 and 63 Hz

- Easy expansion of and communication between parallel network

Your safety

- Ex marking according to the ATEX Directive and applicable EN standards: CE ⟨Ex⟩ II 2G Ex h IIB T3 Gb

- All equipment and machines in the network are intended for operation in hazardous areas classified as Zone 1 or Zone 2 according to EN/IEC 60079-10-1

- All equipment and machines in the network are designed and validated in accordance with a certified ISO:9001 quality management system; furthermore, they are designed according to all relevant requirements set out in applicable EU Directives

Kosan Crisplant's CPI-Ex for supply of power and data to intrinsically safe network

Complete PC system including standard software and Kosan Crisplant software for collection and handling of data