

# Process Lighting and Visual Control Systems



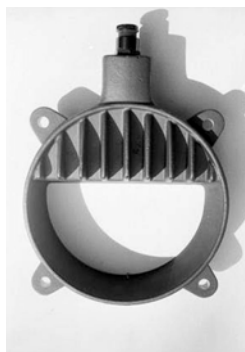
Unrestricted view and clear perspective





What Friedrich Horst Papenmeier began in the 1960s years, has developed into a globally successful company.

The Papenmeier story is characterised by visionary power, entrepreneurial courage and an unconditional will to succeed.



### Papenmeier – the company

Armin Papenmeier joined the family business in 1993 as the youngest son. Today he is the sole owner and managing director of the company in Schwerte an der Ruhr.

### Mr Papenmeier, how did it all begin?

My father, electrical engineer Friedrich Horst Papenmeier, founded the F.H. Papenmeier GmbH & Co. KG in Schwerte. His company built electrical controls for mixers in the plastics industry at the end of the 1950s. These mixers were equipped with sight glasses, through which the production process could be viewed. The container was usually fitted with a sight glass for viewing and another glass on which an electric lamp was placed on top of the glass to bring light into the closed container.

A double breakthrough was therefore required: one for the sight glass and one for the light glass. This solution was expensive. In addition, the process in pressure or vacuum containers had to be permanently monitored.

### Was there no better solution?

My father asked himself the same question, and so he developed a „half-moon luminaire“, which could be placed on the sight glass. This made it possible to illuminate with simultaneous viewing was possible. A second aperture on the tank became superfluous. The idea was patented in 1960 under the name „Electrically illuminated sight glass“. It quickly became established in practice and more and more companies in the chemical, pharmaceutical and food industry profited from it.

Today, Lumiglas luminaires are marketed under the name „Lumistar“ and use modern LED technology.



## Lumiglas at a glance

### Your system supplier for process monitoring and visual control systems

Use Lumiglas components for optimal illumination of boilers, tanks, agitators, separators, pipelines and other generally usually closed containers in explosion-hazardous areas and other industrial operating sites.



### Products

- Lumistar Sightglass Luminaires
- Lumistar Vehicle Luminaires
- VISULEX Camera Systems
- Intelligent Lighting Solutions
- Sight Glas Fitting
- Sight Glas Discs
- Accessories

### Certifications:

- DIN EN ISO 9001: 2015, TÜV NORD
- UL approval ZPVI2.E335495
- Dekra/Exam to ATEX 2014/34/EU



©Blue Planet Studio

**Lumistar**

- LED Sightglass Luminaires
- LED Vehicle Luminaires

**Unrestricted view and clear perspective**

Clear visibility and a clear view Solutions for use in potentially hazardous industrial areas and other industrial operating areas. Advanced LED technology guarantees low energy consumption, longer life and flexible light color.



**Lumistar luminaires for use in the world market**



**Lumistar luminaires for use in industrial and sterile operating sites**



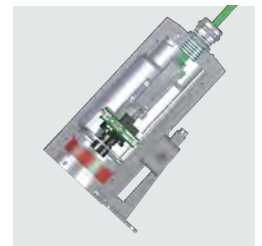
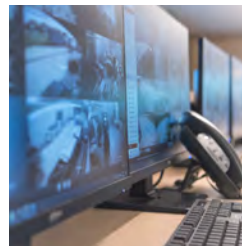
**Lumistar luminaires for use in hazardous areas**



## VISULEX Camera Systems

### Safety comes first

VISULEX HD camera systems for explosive and other industrial sites impress with their very high image quality and their compact size.



### Features:

- High-performance IP megapixel camera
- Certified according to ATEX
- High corrosion resistance guaranteed by stainless steel housing 1.4404
- Ambient temperatures: 0°C to +40°C
- Power-over-Ethernet
- Minimum wiring effort, since only one Ethernet cable is required
- ONVIF standard, Cross web browsing, Quad Streaming



### Application areas:

- Biogas generation
- Chemical and pharmaceutical industry
- Cosmetics production
- Petrochemical industry
- Food industry
- Breweries
- Energy producers
- Water suppliers
- Sewage treatment plants



**Lumiglas**  
• **Signalling Device**  
for hazardous areas  
• **Lumistrob**



**Intelligent Lighting Solutions**

Solutions with highest integration and maximum benefit. Easy and quick to install, low-maintenance, robust and durable in operation.

**Signalling Device for hazardous areas**

- Alarm when entering hazardous areas
- Switching lights on and off depending on brightness and/or motion
- Useful as a signal generator for acoustic and optical devices (e.g. horns, warning lamps)
- Potential-free contact means that the device can also be used to generate signals for other control units
- Protection class: IP 65 and IP 67
- For use in ambient temperatures: -20°C to +40°C

**Lumistrob**

- The flash unit for a snapshot
- The robust Lumistrob has been specially designed for use in the chemical and pharmaceutical industry, the cosmetics production or the food industry
- Protection class: IP 65
- Frame rate: 1 to 110 Hz
- Pulse width: 1 ms
- 24 V or 120-230 V
- External triggering: external voltage pulse from 12 to 24 V, maximum 1 KHz



**Lumiglas  
Sight Glass Fittings**

**Efficiency that is in the spotlight**

For the illumination of boilers, agitators, separators, pipelines and other closed vessels in industrial plants such as those in the chemical, pharmaceutical and food industry.



**Lumiglas  
Accessories**

**Usefully supplemented**

Individual equipment variants for Ex or also non-Ex areas such as wipers with motor drive, timers, timers, spraying devices, transformers etc.



