

# Tank Sight Glasses

Complete range for reliable process observation, from standard to high-pressure designs, suitable for every industry and application.



 made  
 in  
 Germany



## Tank sight glasses – clear view for safe processes

Tank sight glasses are indispensable components in industrial process monitoring. They enable direct visual control of fill levels, flow conditions and media states, reliably, safely and immediately.

ACI supplies the full range of tank sight glasses, from non pressurised models for straightforward visual checks to rugged designs for high pressure, high temperature and aggressive media. Every design, round or longitudinal, is manufactured with maximum precision and verified to the strictest quality standards.

- Maximum safety through tested, standards-compliant designs
- Wide range of designs, sizes and materials
- Available from stock for quick dispatch
- Custom-engineered solutions for specific requirements



## Round tank sight glasses

Ideal for localised process observation. From non-pressurised versions to high-pressure and high-temperature models, round tank sight glasses provide a clear view of the process through a central inspection opening.

### Typical applications:

- Tank and vessel inspection
- Monitoring aggressive media
- Control under high pressures and temperatures
- Use in combustion systems such as power stations, industrial furnaces or crematoria

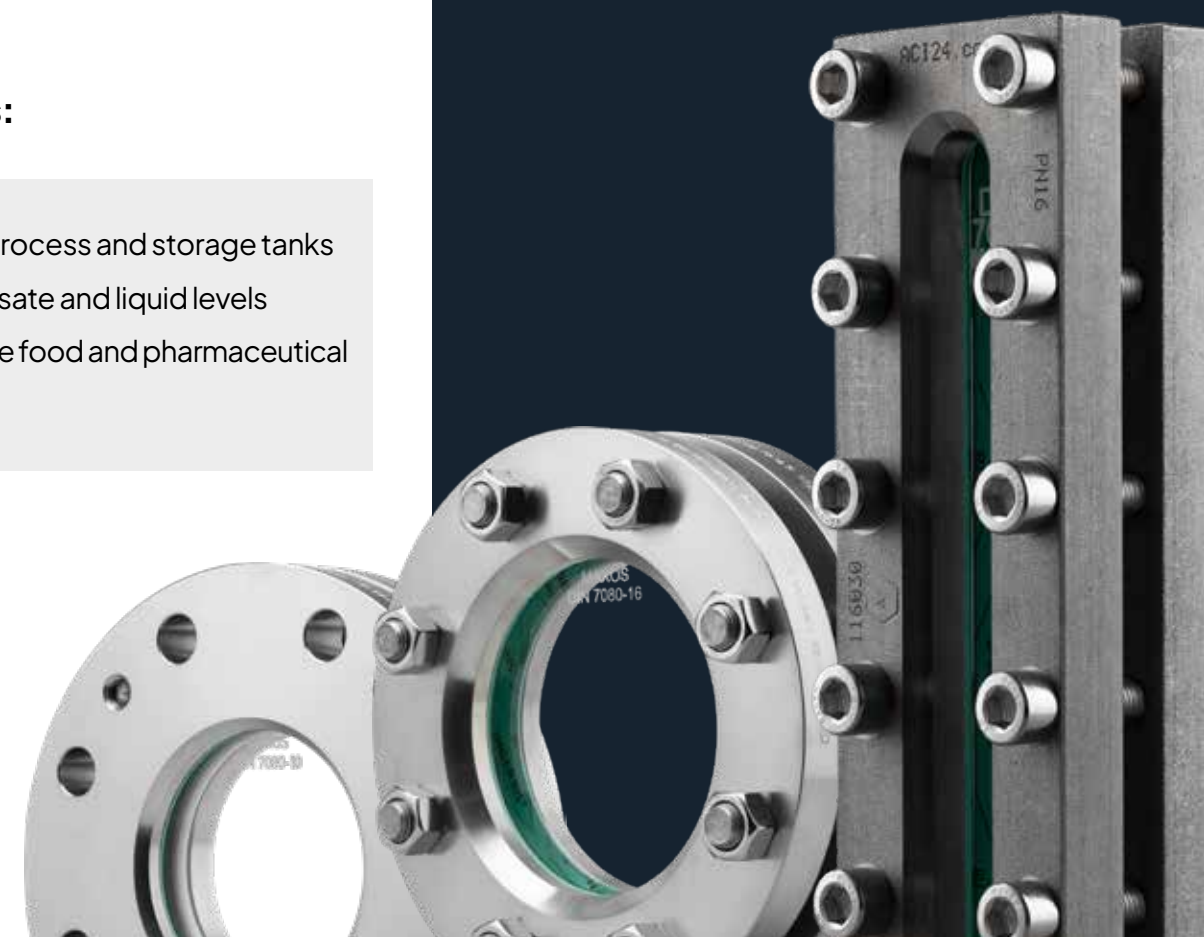
## Longitudinal sight glasses / level gauges

For continuous level monitoring over an extended viewing length. Available in standard or high-pressure designs and adaptable to almost any tank geometry.

### Typical applications:

- Level indication in process and storage tanks
- Monitoring condensate and liquid levels
- Precise control in the food and pharmaceutical industries

**ACI**  
**Your partner for  
a clear view and  
maximum  
operational  
safety**



**ACI places the highest emphasis on quality and safety. Each of our tank sight glasses is manufactured with the utmost precision, stringently tested and engineered for the most demanding applications. Whether a standard design or a custom solution, we ensure maximum operational safety and reliability, even under extreme conditions.**

**Because special requirements need strong partners®.**

## Our complete range at a glance

The ACI portfolio of tank sight glasses covers all industrial requirements, from non-pressurised sight glasses to rugged special designs for extreme operating conditions. We manufacture in two configurations: round for localised inspection with optional illumination and longitudinal for continuous level monitoring.

### Longitudinal sight glasses / level gauges



- **Standard level gauges**

Type 330, 334, 335, 336, 337, 338

Our longitudinal sight glasses and level gauges provide reliable, long-life level monitoring in tanks and containers.

They combine robust construction, easy maintenance and a clear view of the process. With multiple designs available, they suit standard applications as well as processes with high demands on safety and viewing quality.

### Round tank sight glasses



- **Non-pressurised and lightweight**

Type 317, 318, 318V

For simple visual checks at low pressures or under vacuum.

- **Standard designs**

Type 320, 321, 321A

Standards-compliant sight glasses rated up to 25 bar, versatile for process and tank applications.

- **High pressure and high temperature**

Type 322, 323

For extreme conditions up to 250 bar or non-pressurised up to +1000 °C.

- **Weld-end versions**

Type 327, 390, 391

For direct welding into tanks. Robust, leak-tight and space-saving. Ideal where flange connections are not possible or not desired.

### Screw-in sight glass

- **Standard screw-in sight glasses**

Type 392, 394

Compact design for direct threaded installation. Space-saving, easy to install and robust. Suitable for operating pressures from 0 to 160 bar.





# ROUND TANK SIGHT GLASSES

TECHNICAL DATA

## 317/318/318V



### Clear view from non pressurised to low pressure

Our non pressurised and lightweight tank sight glasses of types 317, 318 and 318V are the ideal choice for simple visual checks at low pressures or under vacuum<sup>318V</sup>. They can be welded directly onto or into tanks and provide a cost effective solution for numerous applications.

Manufactured from high quality stainless steels and fitted with borosilicate glass (DIN 7080), these sight glasses guarantee a clear and undistorted view of the process.

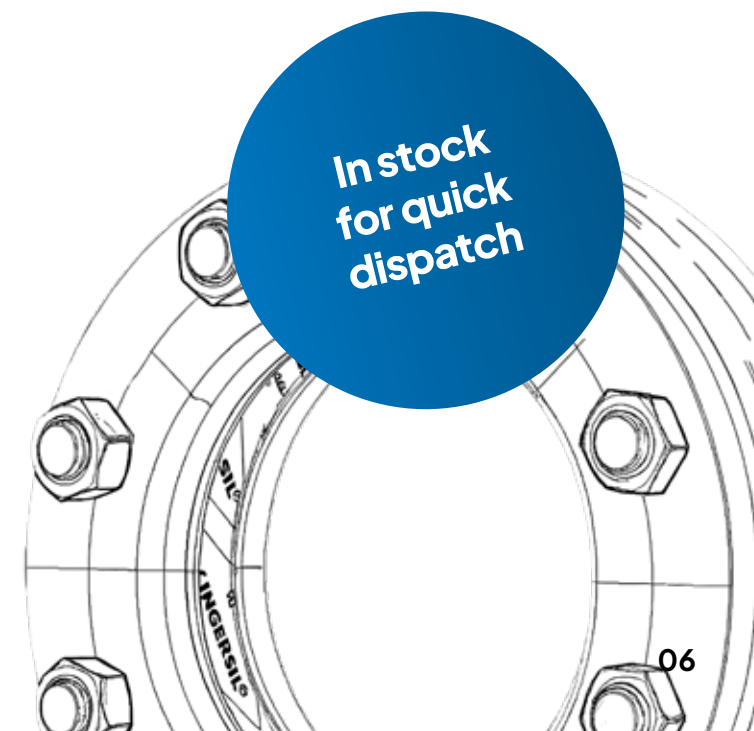
#### Typical applications:

- Monitoring of processes in storage and process tanks
- Types 317 and 318 in sizes DN 300 to DN 400, recommended for biogas applications
- Vacuum or low pressure applications in chemical and water treatment

Types	317, 318, 318V
Nominal sizes	DN 50 to DN 400 DN 300 to DN 400 (Type 317 & 318)
Pressure ratings	Type 317 PN 0 Type 318 up to 2.5 bar Type 318V vacuum to plus 2.5 bar
Materials	Stainless steel 1.4571 (316Ti), Stainless steel 1.4404 (316L) and others
Glass and protection options	Mica shields, PFA/FEP- or Halar®-coating
Connection	For welding in or welding on
Temperature range	-196 °C to 400 °C depending on material combination
Standards	Based on DIN 28120

#### Optional accessories:

- PFA/FEP- or Halar®-coating for increased chemical resistance
- Mica shields for high temperature steam or abrasive media
- Illumination units for use inside the tank
- Wiper unit SGW and spray device SVIII for clear visibility in the presence of condensate or deposits





# ROUND TANK SIGHT GLASSES

TECHNICAL DATA

## 320/321/321A



### Standards compliant visibility, robust and versatile

Our standard sight glasses for pressure vessels of types 321 and 321A meet the highest demands for safety, durability and process clarity. Manufactured to DIN and rated for operating pressures up to 25 bar, they are suitable for universal use in industrial plants.

The combination of high quality stainless steel construction and approved glass types such as borosilicate glass or soda lime glass ensures a clear view of the process even under changing operating conditions. Optional protective discs and coatings increase resistance when handling aggressive media or at high temperatures.

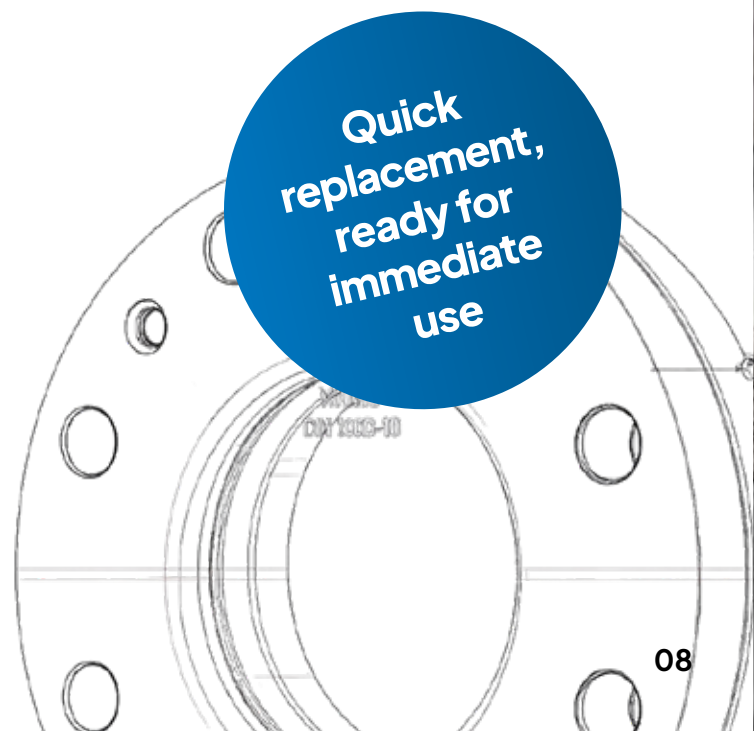
#### Typical applications:

- Process monitoring in pressure vessels
- Supervision of chemical processes
- General plant and mechanical engineering
- Illuminating tanks

Types	320, 321, 321A
Nominal sizes	DN 50 to DN 200 NPS 2" to 8"
Pressure ratings	Up to 25 bar
Materials	Stainless steel 1.4571 (316Ti), Stainless steel 1.4404 (316L)
Glass types	Borosilicate glass (DIN 7080), Soda-lime glass (DIN 8902)
Connection type	For bolt on installation
Bolt pattern	To DIN EN 1092-1 or ASME B16.5
Temperature range	-10 °C to +200 °C depending on gasket
Standards	DIN 28121 or based on it

#### Optional accessories:

- Mica shields
- PFA/FEP- or Halar®-coating
- Illumination units
- Wiper unit SGW
- Spray device SV2





# ROUND TANK SIGHT GLASSES

TECHNICAL DATA

## 322/322A/323



### Maximum robustness for extreme conditions

Our high pressure and high temperature tank sight glasses of types 322, 322A and 323 are specifically engineered for duties where standard designs reach their limits. They withstand high pressures, extreme temperatures and aggressive media while consistently ensuring a clear and safe view of the process.

Manufactured from high grade stainless steels and fitted with borosilicate or quartz glass, these sight glasses provide maximum safety and long service life. Special gasket options further increase resistance under extreme process conditions.

#### Typical applications:

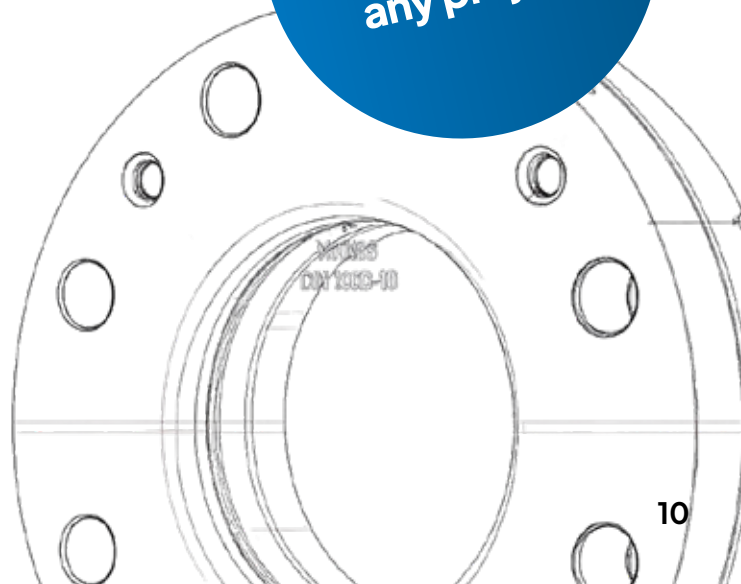
- Chemical and petrochemical processes with high pressures
- Power generation and energy plants
- High temperature applications up to 1000 °C
- Combustion and flame observation

Types	322, 322A, 323
Nominal sizes	DN 50 to DN 200 NPS 2" to 8"
Pressure ratings	0 to 250 bar depending on material combination
Materials	Stainless steel 1.4571 (316Ti) or high temperature alloy
Glass types	Borosilicate glass (DIN 7080), quartz glass
Connection type	For bolt on installation
Bolt pattern	To DIN EN 1092-1 or ASME B16.5
Temperature range	max. 1000 °C depending on material combination

#### Optional accessories:

- Mica shields
- Illumination units
- Special high temperature gaskets

Custom  
builds for  
any project



# LONGITUDINAL SIGHT GLASSES

TECHNICAL DATA

## 330/334



### Reliable monitoring for a wide range of applications

Our rectangular longitudinal sight glasses of types 330 and 334 are robust standard designs for continuous level monitoring in tanks and vessels. They offer universal applicability, short lead times and attractive pricing. Manufactured in stainless steel and fitted with borosilicate glass (DIN 7081), they provide a durable solution for a wide range of industrial applications.

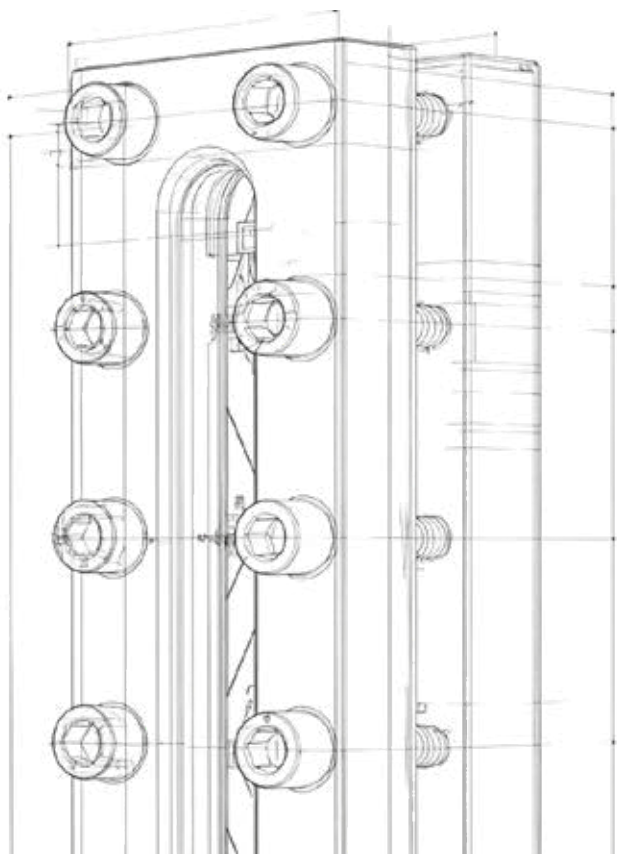
#### Typical applications:

- Level monitoring in process and storage tanks
- Water and wastewater treatment
- Biogas plants and power generation
- General plant and mechanical engineering

Types	330, 334
Overall length	Depending on design and viewing length
Pressure ratings	PN 3, PN 16, PN 40
Materials	Stainless steel 1.4571 (316Ti), stainless steel 1.4404 (316L)
Glass types	Borosilicate glass (DIN 7081), reflex or transparent design
Connection	For welding in or welding on
Temperature range	–196 °C to +400 °C depending on material combination

#### Optional accessories:

- Mica shields
- PFA/FEP- or Halar®-coating





# LONGITUDINAL SIGHT GLASSES

TECHNICAL DATA

## 335/336/337/338



### Stable, pressure resistant and long lasting

Our oval longitudinal sight glasses are designed for higher pressure and temperature ranges. The oval shape promotes more uniform pressure distribution and enables use under high loads. This delivers a durable and safe solution for demanding processes where reliability and robustness are critical.

Equipped with high grade stainless steel frames and glass types such as borosilicate in transparent or reflex designs, they provide a long lasting solution for challenging applications.

#### Typical applications:

- Level monitoring and process observation
- Use under extreme temperature conditions
- Process monitoring under extreme operating conditions

Types	335, 336, 337, 338
Overall length	Depending on design and viewing length
Pressure ratings	3 to 25 bar depending on type
Materials	Stainless steel 1.4571 (316Ti), stainless steel 1.4404 (316L), special materials on request
Glass types	Borosilicate glass (DIN 7081), reflex or transparent design
Connection	For welding in or welding on
Temperature range	–196 °C to +400 °C depending on material combination

#### Optional accessories:

- Mica shields
- PFA/FEP- or Halar®-coating



Explore our full range at [aci24.com](http://aci24.com)



Watch video







## More functionality. More safety. More comfort.

With our extensive accessory programme you can tailor your tank sight glasses precisely to each application. Whether additional safety, improved visibility or increased resistance, we provide matched solutions that maximise the performance and service life of your assemblies.

### Your benefits:

- Higher operational safety
- Longer service life of the sight glasses
- Adaptation to specific process requirements
- Easy retrofitting
- More than 50 gasket grades

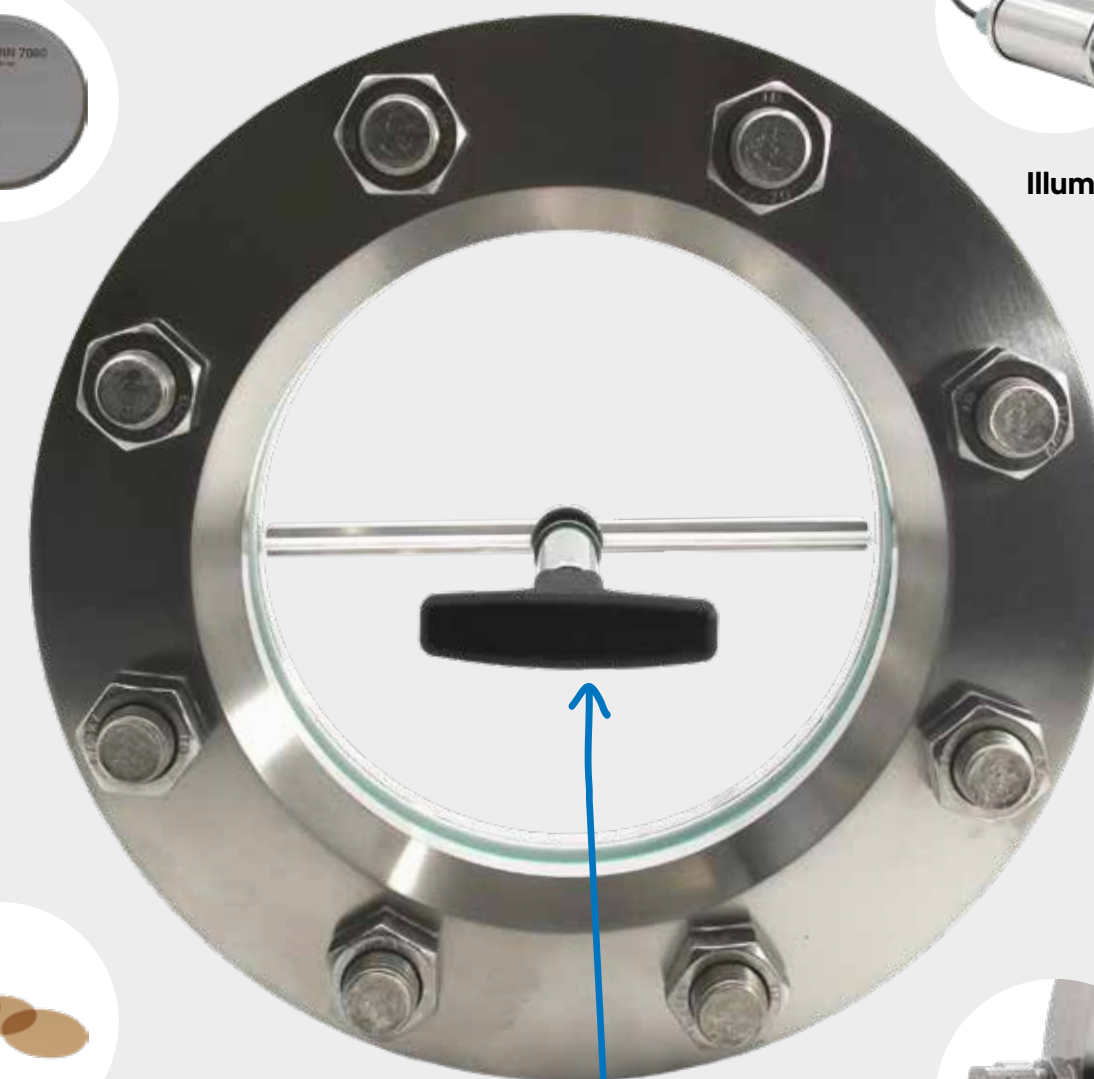
- **Halar® coating:** Provides additional protection against chemical attack.
- **PFA/FEP coating:** Protects against chemical attack, is non stick and electrically insulating.
- **Mica shields:** Protect the glass at high temperature and with aggressive media.
- **Illumination:** Enables a clear view of the process even in poor lighting conditions.
- **Wiper unit:** Ideal for applications with particulate deposits to maintain a clear view.
- **Spray device:** Cleans the glass surface with a directed liquid jet for long lasting clarity under contamination.
- **Double glazing:** Increases safety and improves thermal insulation at high or low temperatures.
- **Heating cartridge:** Prevents condensate or ice formation and ensures a clear view even under extreme temperature conditions.

The right  
gasket for  
every  
application

Halar® coating  
PFA/FEP coating



Illumination



Mica shields

Wiper unit



Spray device

**Engineering expertise,  
modern manufacturing  
and a dedicated team  
guide you from the initial  
consultation to successful  
commissioning. ACI, your  
partner for a clear view  
and maximum operational  
safety.**

**Because special requirements need strong  
partners®.**

## **Quality is our standard, safety is our commitment**

Since its founding, ACI Industriearmaturen has stood for uncompromising quality, precise manufacturing and absolute operational safety. Every product is made from certified materials, tested to the most stringent standards and engineered for reliable use in demanding applications.

### **Our certifications and testing:**

- Pressure Equipment Directive 2014/68/EU, Module H
- DIN EN ISO 9001:2015, certified quality management system





**YOUR CERTIFIED PARTNER FOR  
SAFE AND PRECISE PROCESS  
OBSERVATION. DEVELOPED  
TO THE HIGHEST STANDARDS  
SINCE 2008 – WHEN MAXIMUM  
QUALITY AND RELIABILITY  
MATTER MOST.**

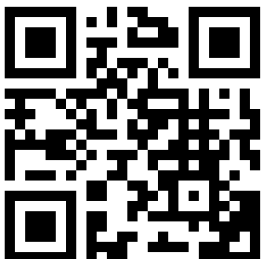
Since 2008, ACI Industriearmaturen GmbH has stood for German engineering excellence in process observation. As a certified manufacturer under PED 2014/68/EU and DIN EN ISO 9001:2015, we specialize in the design and production of vessel and flow sight glasses.

From the chemical industry to the energy supply sector – our custom-engineered solutions ensure top quality and safety for your demanding applications. Take advantage of our technical expertise and comprehensive service.

For us, quality is not an option – it is our standard. All components are manufactured exclusively from certified premium materials specifically developed for pressure-bearing systems.

This uncompromising quality strategy, combined with our certifications according to PED 2014/68/EU and DIN EN ISO 9001:2015, ensures maximum operational safety – even under the most challenging conditions.

**ACi is  
ISO 9001:2015  
certified.**



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