

# **Automatic Steam Quality Monitor**

Model: AKS-ZQJC-4.0

### Apply:

For industries with strict requirements of steam quality, like pharmaceutical and tobacco manufacturers, hospitals and healthcare facilities.

# **Reference Standards:**

- EN285
- HTM2010
- China YY/T1612-2008

#### **Parameters Tested:**

- Steam superheat
- Steam dryness
- Steam non-condensable gas content(NCGs)

# Features :

- Fully automatic measuring, replacing manual process.
- Simultaneous monitoring of steam dryness, superheat and non-condensable gas content.
- Movable for multi-point detection and easy to install.
- High precision, safety and reliability, in compliance with Europe and China standards.
- Measuring data can be stored and traced back.
- Test reports can be printed out.
- Remote monitoring and service.







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# **Monitoring Interfaces:**

					Steam Pres.:	MPa	2	020-08-11 10:25:
Steam Pres.:	0.39	MPa	Weighing Tank Steam-in:	ON	Steam Temp.:	°C		
Steam Temp.:	103.5	°C	Weighing Tank Exhaust:	OFF				
Weighing Tank Temp.:	55.5	°C	Cooling Tank Steam-in:	OFF		Superheat:	°C	V Done
Weighing Tank:	980.5	g	Condensate Tank Exhaust:	OFF	O			
Condensate Tank T.:	26.9	°C	Weighing Tank Water-in:	OFF		Dryness:	%	OTesting
Non-GC Diff. P.:	0	Pa	Cooling Tank Condensate Valve:	ON		Non-condensed:	%	II Pause
			Non-GC Tank Exhaust:	ON		Non-condensed.	10	
			Weighing Tank Stirring Motor:	OFF				
	¢°c	alibrat	e CReturn		► s	tart 📕 Stop	Rec	ord OSetup

# Automatic Measuring Compared with Manual Process:

Manual measuring cannot achieve best practices due to its time consuming, lack of accuracy and safety risk.

However, automatic steam quality monitors bring effective new opportunities for monitoring steam, via performing accurate trend analysis. In order to ensure the consistency of steam quality monitoring, the monitor adopts a portable design, it can be easily moved and installed in multiple positions on the steam pipeline. Users will be able to control the steam consumption more accurately, and invest in returns through improved efficiency, reliability and safety.



# Why Need to Measure Steam Quality?

Strict requirements for steam quality are clearly stated in following standards.

- EN285-2006
- · GB8599-2008 large steam sterilizer,
- · EN13060-2004 small steam sterilizer,
- · HTM2010 Health Technical Specification 2010 edition (UK),
- · PDA Technical Report No.48 Technical Guidelines for Injectables Association 48 (USA)

EN285 standard specifies requirements for steam quality and test methods under the operation of large sterilizer. It is mainly applicable to the sterilization of medical devices and accessories, and it is also for pharmaceutical enterprises:

- 1.The maximum superheat of steam measured at atmospheric pressure is 25  $^{\circ}\mathrm{C}$  ;
- 2. The steam dryness for sterilization of metal load is >0.95, and non-metal load is >0.9;
- 3. The max. non-condensing gas contents(NCGs) shall not exceed 3.5% of the steam condensation water.



# **Clean Steam for Sterilization Effect:**

1. Clean steam sterilization has no residue, does not pollute the environment, does not damage the surface of the product, and is easy to control. It is widely used in the central sterile supply department (CSSD) of the hospital.

2. The steam is in direct contact with the sterilizing loads, releasing latent heat, and maintaining corresponding sterilization temperature and pressure for a certain period of time to achieve effect of killing microorganisms.

3. Only using sterilization steam that meets requirements of the regulations can achieve clean steam sterilization, ensure sterile distribution, and patient safety.

