



## YOUR BENEFITS:

- ✓ **Excellent image quality:** Sharp and high-contrast images without size distortion thanks to telecentric technology in transmitted light
- ✓ **High-performance analysis:** Fast and precise particle detection for any particle shape and strong overlap thanks to AI-based image analysis algorithm
- ✓ **Plug & Measure:** Start your measurement immediately without time-consuming calibration thanks to software adjustment with synthetic image data.
- ✓ **Process access:** Inline measurement for challenging, previously inaccessible process conditions thanks to constructive innovations such as a variable measuring gap and precautions against turbidity and droplet wetting

IPS



**Inline Process Solutions GmbH**  
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<https://inline-process.solutions>

\* Do you develop and build plants for the chemical and pharmaceutical industry and want to reduce uncertainties in the design of your equipment?  
Do you want to reduce the time-to-market for your products?  
Or would you like to implement new technologies in your products?

Then you should contact Inline Process Solutions! **Our inline sensor technology combines precise optical image-based measurements with AI-driven image analysis.**

SAVE **25 %\***  
IN YOUR DEVELOPMENT  
TIME.



IPS

turn process data  
to value



## INLINE PROCESS SOLUTIONS (IPS) IS A YOUNG TECH START-UP FROM KAISERSLAUTERN.

Our team combines many years of experience in the construction of optical image-based sensors and the development of AI algorithms for particle detection.

Our mission is to generate process data in production units and use it to shape the intelligent production of tomorrow.

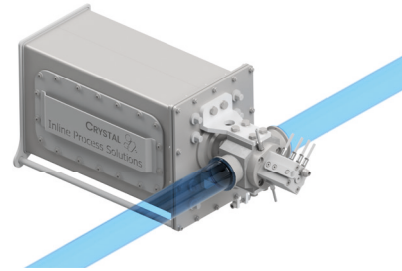
The values that are particularly important to us are precision, innovation, reliability, esteem and sustainability.



### OUR SOLUTIONS

## ARIMOS CRYSTAL

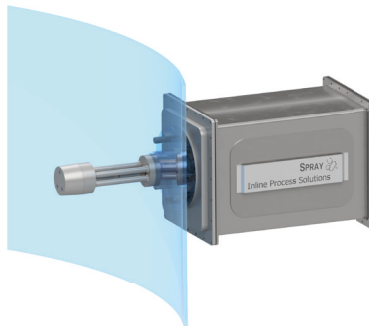
Our inline sensor technology for crystallization processes in pipes:



Adjustable measuring gap allows varying measuring volume which increases measuring accuracy at high dispersion rates, prevents blocking, and facilitates cleaning.

## ARIMOS SPRAY

Our inline sensor technology for small droplets and spray-like entrainment in columns or vessels:



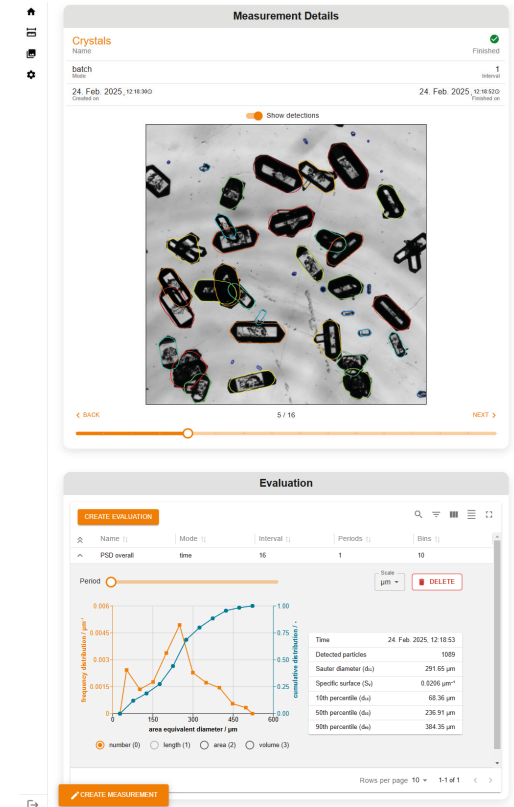
Precautions against turbidity and droplet wetting on the glasses enable long measuring times in gas flows with high liquid loads.

Process conditions in which our sensors can be used:

	CRYSTAL	SPRAY
Temperature / °C	-30 up to +100	0 up to +121
Pressure / bar (a)	1.0 up to 5.0	0.1 up to 4.0
Media-contacting material	1.4404, NBR, sapphire glass	1.4404, FKM, borosilicate
Range micro / $\mu\text{m}$	(7) 10 up to 280 (790)	(9) 14 up to 427 (1,088)
Range meso / $\mu\text{m}$	(15) 23 up to 1,120 (3,170)	(27) 42 up to 853 (2,176)

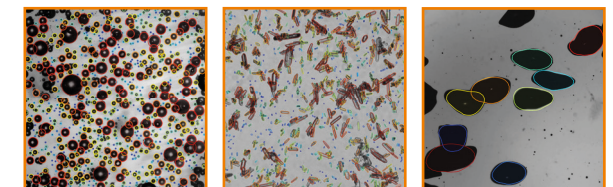
## ARIMOS ANALYZE

Our AI-based analysis and control software:



Tailored software training for the specific use case enables precise particle detection, even with complex shapes and significant overlap. The analysis allows real-time data evaluation.

Images of our sensor technology:



droplets

crystals

bubbles

The key to this extraordinary analysis performance lies in the targeted training of the AI with high-quality and error-free image data.