

## User interface



Keep your process within its window of tolerance

Simplify the operator's daily tasks by offering a straightforward indication of the spray condition.

This is achieved through a colour-coded system:

- Spray conditions nominal
- Preventive maintenance required
- Spray conditions out of range

# earlier insight changes everything

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Learn more about the Accuraspray CS



"At PolyCSAM, we use the Accuraspray CS for monitoring the in-flight particle's velocity within our Cold Spray Additive Manufacturing process. The sensor has helped us identify changes in the CSAM system, as reflected by particle velocities. The Accuraspray CS is very sensitive to changes in the velocity of particles, which has a direct impact on the resultant coating/build-up. In our facility, it's a great addition for process monitoring and quality control."

**Fernanda Caio, VP Research Metal Additive Manufacturing Polycontrols**

accuraspray CS

Diagnostic intelligence and control for cold spray

**tecnar**

Our insight. Your productivity.

# Production-friendly cold spray sensor

Our goal is to help you achieve high-quality, consistent coatings with every run. To ensure this, spray conditions must be optimal at all times. That is exactly why we created the Accuraspray CS, a precise, reliable, easy-to-use, and affordable sensor.



## Work with the industry leader

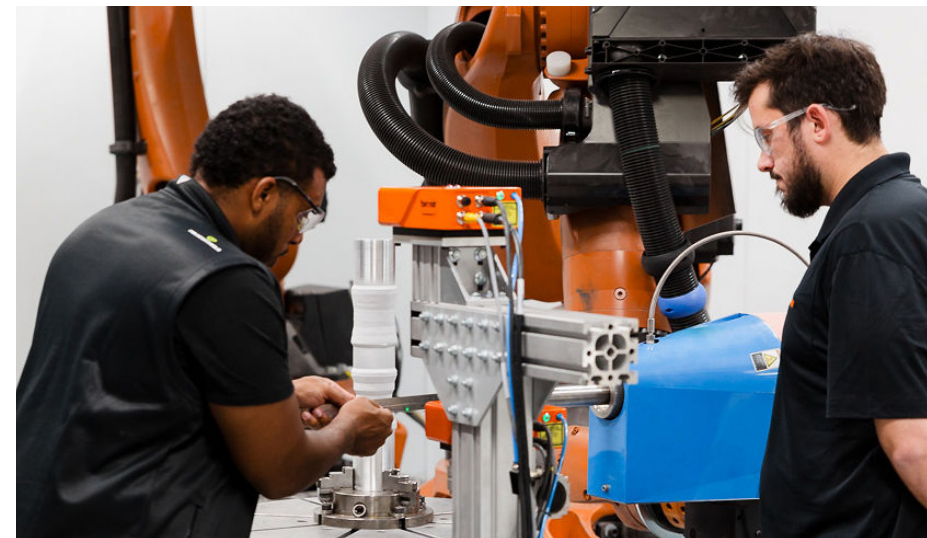
Tecnar is a global leader in delivering cutting-edge spray sensors to the shop floor. With over 1,000 sensor heads in operation daily across more than 25 countries, we are committed to driving innovation in the industry. From the start, we have invested heavily in R&D and in understanding our clients' needs. This dedication ensures our spray sensors consistently deliver the best performance for our customers.

## Why use our spray sensor?

Powder lot validation	Less operator dependency
Process IP archiving	Instant go/no-go tool
Optimized gun maintenance	Proactive problem resolution
Reduced coupon usage	Effortless process optimization
Reduced powder waste	Quick booth qualification
Minimized downtime	Efficient process development

## Industry-leading accuracy

Accuraspray's measurement principle is process-independent, ensuring reliable readings. Advanced filtering algorithms ensure measurement accuracy, while factory calibration traceable to NIST guarantees precision under real-world operating conditions.



@Polycontrols

## Expert support, every step of the way

Our dedicated team provides reliable, proactive solutions to keep your operations running smoothly. With deep expertise and a customer-first approach, we offer transparent service, detailed documentation, upgrades and preventive support to minimize downtime and maximize performance.

## Absolute repeatability

For this new generation of the product, we envisioned that the Accuraspray CS would spread the use of sensors for process parameters transfer, parameter development and process consistency to each and every booth in the world. We believe that building trust in the product's consistency is the key to democratizing the use of sensors.



## Industry 4.0 ready

The Accuraspray CS provides a web-based interface for easy access from any computer, allowing for full 4.0 booth integration via HTTP, external PLC or OPC UA.

## Install and set-up yourself

We deliver the unit with detailed documentation for installation and setup, plus a free remote training session. When it arrives, you will be fully capable of installing and using the equipment.

**NEW - OPTION**

## Tecnar HUB – Centralized process intelligence

The Tecnar HUB connects multiple data feeds from your spray operations into a smart, unified platform.

- Automatic process window definition
- Centralize and compare booth data
- Optimize maintenance and testing

## Technical specifications

Measurements	
Particle velocity range	10-1200 m/s (33-4000 ft/s) at 2% accuracy
Relative feed rate	Normalized a.u.
Substrate temperature pyrometer*	0-500°C (32-932°F)
Process stability	Automatic instability detection

Measurement area information	
Measurement area	Ø3.4 mm = 9 mm <sup>2</sup> (Ø0.13 in. = 0.014 in. <sup>2</sup> )
Working distance	200 mm (7.87 in.)

Laser characteristics	
Laser wavelength	940 nm
Nominal laser power	20 W
Nominal power density	15.7 W/cm <sup>2</sup>
Laser type	Class IV

Plant supplies	
Electrical requirements	120/230 VAC, Auto-Switch 50/60Hz 3/2A
Air supply	2.4 bar (35 psi)
Positioning bracket	Refer to mechanical drawing in manual

Dimensions and weight	
Sensor head	205 mm x 149 mm x 62 mm (8.1 in. x 5.8 in. x 2.4 in.) 3.2 kg (7.1 lb)
Controller	400 mm x 400 mm x 200 mm (15.7 in. x 15.7 in. x 7.9 in.) 13.9 kg (30.6 lb)
HMI	238 mm x 110 mm x 126 mm (9.4 in. x 4.3 in. x 5 in.) 1.8 kg (4 lb)
Total weight	18.9 kg (41.7 lb)

\* Optional