

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 4.0



"Thanks to the Accuraspray, we have been able to achieve process Ppk's over 1.5– even for very challenging coatings, such as thick, porous TBCs sprayed using new advanced gun concepts. The Accuraspray has also proven invaluable for process parameter development, for establishing tolerance windows, for troubleshooting and, finally, as a go/no go instrument."

The Thermal Spray Team
GKN Aerospace Sweden

accuraspray 4.0

Diagnostic intelligence and control for **thermal spray**

tecnar

Our insight. Your productivity.

Production-friendly thermal 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 4.0, 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 testing | Easy parameter transfer |
| 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.



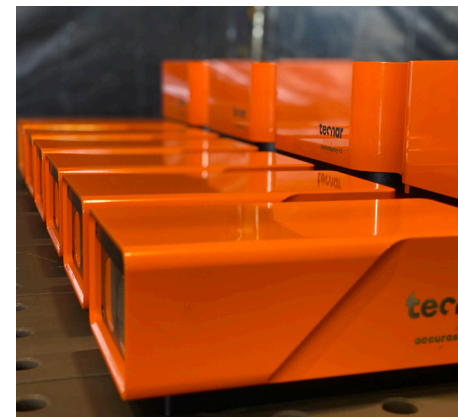
@Polycontrols

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, free upgrades and preventive support to minimize downtime and maximize performance.

Absolute repeatability

For this new generation of the product, we envisioned that the Accuraspray 4.0 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.



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

Industry 4.0 ready

The Accuraspray 4.0 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.

Go for the universal solution

The Accuraspray 4.0 sensor, calibrated with NIST-traceable standards, can characterize all thermal spray processes, including suspensions.

- Wire-Arc Spray
- Flame Spray
- Air Plasma Spray (APS)
- High Velocity Oxy-Fuel Spray (HVOF)
- High Velocity Air-Fuel Spray (HVAF)
- Suspension Plasma Spray (SPS)
- Vacuum Plasma Spray (VPS)
- Low-Pressure Plasma Spray (LPPS)
- Plasma Transferred Wire-Arc (PTWA)

Technical specifications

| Measurements | |
|---|---|
| Particle temperature range | ≥1000°C (≥1832°F) at 3% accuracy |
| Particle velocity range | 5-1200 m/s (15-4000 ft/s) at 2% accuracy |
| Plume intensity | 5% accuracy |
| Plume width and position | ±0.6 mm (±0.02 in.) accuracy |
| Plume angle | 0.2 degree accuracy |
| Process stability | Automatic instability detection |
| Substrate temperature pyrometer* | 0-500°C (32-932°F) |
| Measurement area information | |
| Working distance | 200 mm (7.87 in.) |
| Temperature and velocity measurement area with cylindrical lens (default) | 3.4 mm x 25 mm = 85 mm ² (0.13 in. x 1 in. = 0.13 in. ²) |
| Temperature and velocity measurement area without cylindrical lens | Ø3.4 mm = 9 mm ² (Ø0.13 in. = 0.014 in. ²) |
| CMOS camera field of view | 450 mm (17.7 in.) |

| Plant supplies | |
|-------------------------|---|
| Electrical requirements | 120-230 VAC, Auto-Switch 50/60Hz 1.5/1.5A |
| Air supply | 1.35 to 2 bar (20 to 30 psi) |
| Positioning bracket | Refer to mechanical drawing in manual |

| Dimensions and weight | |
|-----------------------|---|
| Sensor head | 190 mm X 110 mm X 62 mm (7.5 in. x 4.3 in. x 2.5 in.) 1.8 kg (4 lb) |
| Controller | 230 mm X 230 mm X 102 mm (9 in. x 9 in. x 3.9 in.) 5.6 kg (12 lb) |
| Total weight | 7.4 kg (16 lb) |



* Optional