



METALLIZING EQUIPMENT CO. PVT. LTD.
in collaboration with Tecnar

accuraspray 4.0

Great coatings, every run.

Thermal spray process sensor. Real-time measurement of particle temperature, velocity and plume behavior, so every coating is consistent and traceable.

650+

SENSOR HEADS IN DAILY USE WORLDWIDE

25+

COUNTRIES

±2%

PARTICLE VELOCITY ACCURACY

OVERVIEW

Get ready for thermal spray 4.0

Consistent, high-quality coatings depend on spray conditions being optimal at all times. Accuraspray 4.0 is a precise, reliable and affordable sensor that is easy to install, monitors all spray processes and brings built-in industrial intelligence to the shop floor.



MONITOR WHAT REALLY MATTERS

Particle temperature	Particle velocity	Process stability
Substrate temperature	Plume angle & width	Plume intensity

01

Be consistent every run

- Quicker spray parameter development
- Longer consumable lifetime
- Better coating reproducibility (Cpk and Ppk)

02

Spray more efficiently

- More accurate coating thickness forecasting
- Fewer test coupons required
- Greater deposit efficiency (DE)

03

One sensor, every process

- Wire-arc and flame spray
- Air plasma spray (APS)
- HVOF and HVAF
- Suspension plasma spray (SPS)

Operators can react and readjust before the process leaves its green window, in manual or automatic mode. The NIST-traceable sensor head characterizes all thermal spray processes, including suspensions.

Monitor anywhere, any time

A modern web-based interface with full SQL query capability and advanced reporting lets you follow spray booth productivity and consistency from anywhere.

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PERFORMANCE DATA

Technical specifications

MEASUREMENT RANGES

Particle temperature	1000°C and higher at 3% accuracy 1832°F and higher at 3% accuracy
Particle velocity	5 - 1200 m/s at 2% accuracy 16.3 - 3900 ft/s at 2% accuracy
Plume intensity and peak height	2% accuracy
Plume width & position	0.1 mm accuracy (0.004 in.)

MEASUREMENT VOLUME

CCD camera field of view	400 mm (15.7 in.)
Accuraspray measurement volume	3 x 25 x 10 mm = 750 mm ³ 0.12 x 0.98 x 0.39 in. = 0.046 in ³
Substrate temperature pyrometer	-18 to 538°C (0 to 1000°F)

PLANT SUPPLIES

Power requirements	120 - 240 VAC, 50-60 Hz, 5 A
Air supply	1.35 to 2 bar (20-30 psi), clean dry compressed air

DIMENSIONS

Sensor head	190 x 110 x 62 mm (7.5 x 4.3 x 2.5 in.)
Controller	230 x 230 x 100 mm (9 x 9 x 3.9 in.)



**Keep your process within
its window of tolerance**



**Become expert at
trending your process**

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Thanks to the Accuraspray, we have been able to achieve process Ppks over 1.5, even for very challenging coatings, such as thick, porous TBCs.

THE THERMAL SPRAY TEAM, GKN AEROSPACE SWEDEN

Earlier insight changes everything.

ABOUT MEC

Metallizing Equipment Co. Pvt. Ltd.

MEC manufactures and services thermal spray, flame spray and arc spray systems, with spares, consumables, surface preparation and shot peening equipment. Operating since 1967 from ISO 9001 and CE-certified facilities at Basni and Boranada, Jodhpur, MEC delivers turnkey projects, robotic and CNC-integrated systems, coating services (plasma, HVOF, arc spray) and thermal spray training. Its in-house R&D is recognized by the Department of Scientific & Industrial Research, Govt. of India, and it holds AS9100 certification for thermal spray coatings.

WHY ACCURASPRAY 4.0 WITH MEC

- Local sales, application know-how and support from an established Indian thermal spray specialist
- Sensor-based process control that complements MEC plasma, HVOF and arc spray systems
- Free remote training and detailed documentation with every unit

Tecnar references: Chromalloy, General Electric, GKN Aerospace, Mitsubishi Heavy Industries, Oerlikon Metco, Pratt & Whitney, Progressive Surface, Rolls-Royce, Siemens.

CONTACT

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