

# Low-pressure cold spray systems

The better way to restore metal parts and add functional coatings



With Titomic's leading low-pressure cold spray systems, it's never been easier, faster or more profitable to restore and coat metals and temperature-sensitive materials like glass, ceramics and plastics.

Unlock the limitless possibilities of cold spray technology for your factory floor – with more up-time and lower costs.



Spray metal within 10 seconds



Rapid material build-up



No need to pre-treat



Directly machinable



Manual and automated spraying



Easy to move between worksites



Full colour touchscreen control



TAKE A CLOSER LOOK

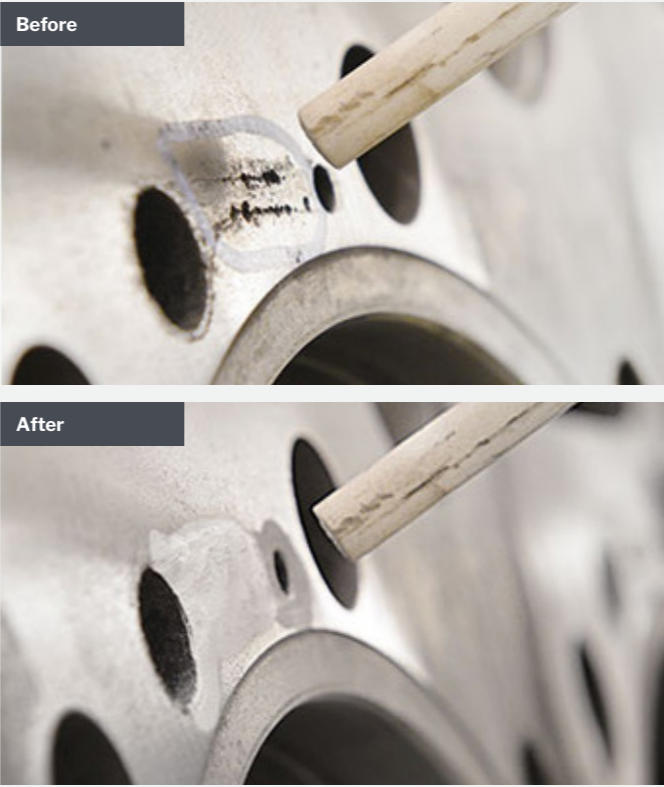
Cold spray technology

Cold spray is an additive manufacturing technology that uses supersonic gas to accelerate metal particles and build up strong layers of specialty metals - without any unwanted heat effects.

Titomic's cutting-edge technology brings together kinetic energy, supersonic speeds and low temperatures to rapidly and reliably coat and repair parts.

By spraying metal particles in this way, you can create coatings with superior thickness, adhesion, density, conductivity and corrosion resistance.

- Low process temperature prevents part deformation, structural changes, mechanical and thermal stresses
- Localised spraying jet provides greater accuracy
- Restores thin wall parts where other methods fail
- High adhesion: 30-60 MPa
- Low porosity: < 1 %



Specifications

System	D523
Powderfeeders (PB-45)	2
Power connection	230V AC 50/60 Hz
Power	3.3 KW
Temperature settings	Variable 20 – 600°C
Parameter logging (temperature, pressure and flow)	Yes
Closed loop integration	Yes (optional)
Spray parameter library	Yes
Carrier gas: Air/N2	Yes
Gas requirement	6 bar/400L/min
Mix air / N2	Yes (optional)
Particle velocity	-600 m/sec
Spray rate	-30 gr/min
Air/N2 pressure control/ regulating	Yes
Full colour HMI touchscreen	Yes
Bus or ethernet/IP connections	Yes
Recommended for industrial robot applications	Yes
Weight and dimensions	43kg / 550 x 1420 x 266mm



See what's possible

Whether you're working with metals, glass, ceramics or plastics, our low-pressure cold spray systems unlock a wide variety of applications:

- ✓ Prevent and repair corrosive damage and defects in cylinder parts
- ✓ Repair bearing seats
- ✓ Repair forms and patterns for casting plastic, glass and metal
- ✓ Hermetically seal radiators and air conditioning systems
- ✓ Add electrical conductive layers to materials
- ✓ Additive manufacturing and more

Materials

A wide range of metals can be processed.

These include:

Aluminium	Babbitt
Zinc	Gold
Copper	Silver
Tin	Platinum
Nickel	Inconel 625 (He)

With problem solving in our DNA, we can recommend the right materials for the best possible outcome.



## Integrated spray booths

Titomic's turnkey integrated spray booth (ISB) systems bring together low-pressure cold spray, handling and dust extraction, and can be customised to your specific needs.

### D523 low-pressure cold spray system

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Robotics or linear system

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Remote access for service

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Data logging

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Closed-loop cold spray

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Integrated dust suction system

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Automated parts loading and unloading

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Compatible with different powder feeders

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## Consumables & more

We can also supply cold spray consumables like metal powder, nozzles, spare parts and on-site training.

Ready to see what  
low-pressure cold spray  
technology can do for you?

Let's talk.

