



Ver. 2.1

- Integrated Non-Pressurized Feeder
- Quick Powder Changeover



Cold Spray Systems

The next generation of practical cold spray.



PX & EPX Cold Spray Systems

CenterLine's SST™ Division provides a complete range of Cold Spray equipment solutions designed for manual and robotic applications in portable and stationary designs. Our systems are compact, easily transportable and maneuverable to spray on site.

The **PX system** incorporates improvements to the proven first generation Series P systems. The PX is ideal for spraying the full range of commercial powders and powder blends available from CenterLine.

The **EPX system** is an upgrade to the Series EP and now comes with an integrated powder feed system. It is designed to cold spray at higher pressures for harder materials with a greater deposition efficiency. The EPX is ideal for spraying aluminum alloys, nickel and nickel alloys.



PX & EPX Systems

EPX System

Technical Specifications

	PX System			EPX System	
	PX Cabinet	Manual Spray Gun	Automatic Spray Gun	EPX Cabinet	Automatic Spray Gun
Pressure Range	100-250 psi (7-17.2 bar)			100-500 psi (7-35 bar)	
Temperature Range	Ambient to 550° C			Ambient to 650° C	
Weight	78 kg (172 lbs)	2 kg (4.5 lbs)	2.2 kg (5 lbs)	87.5 kg (193 lbs)	22.7 kg (50 lbs)
Dimensions	570 mm x 510 mm x 1120 mm (23″x 20″ x 44″)	400 mm x 100 mm x 210 mm (15.75″ x 4.0″ x 8.25″)	510 mm x 95 mm x 190 mm (20.0″ x 3.75″ x 7.5″)	686 mm x 559 mm x 1118 mm (27″ x 22″ x 44″)	356 mm x 140 mm x 762 mm (14" x 5.5" x 30")
Power Requirements	240 VAC			480 VAC	
Powder Feed Rate	6 to 120 g/min			6 to 120 g/min	

Contact CenterLine for detailed specifications or any additional technical information required.

practical cold spray coatings

Introducing the Latest Iteration of SST[™] Cold Spray Systems

Enhancements	PX System	EPX System
New main gas Dome Regulator - pilot operated, high flow, low droop. Allows improved spray operation at lower gas supply pressures.		•
Maximum allowable spray temperature increased from 550° C to 650° C.		•
Additional supply pressure transducer.		
One (1) transducer senses supply pressure. One (1) transducer senses spray pressure downstream of the main spray valve.	•	•
Three (3) calibration slots for different guns.	•	•
Updated software.	•	•

Additional system features:

- Spray nozzle orifice is not a consumable; two part UltiLife™ and UltiFlow™ nozzle technology provides long life and anti-clogging capabilities.
- Calibration kit available to verify temperature and pressure operating parameters.
- Depending on model, warm up time to stable temperature is 60 to 90 seconds.
- Non-pressurized design is practical, simpler and more reliable.
- Extended consumable service life.
- Reduced nozzle consumable cost per lbs. sprayed.

Feeders - PX and EPX Systems

- Non-pressurized feeder is non-clogging, and requires reduced maintenance.
- Powder feed consistency is independent of powder fill levels for dependable application performance.
- Feeders can easily be removed and refilled in a ventilated area.
- Less than 10 minutes needed for powder changeover.
- Feeder swap within 5 minutes to optimize run-time.
- Powder volume capacity 1000 ml per feeder, 2 feeders per machine.
- Powder feed rates up to 120 g/min compared to 80 g/min for previous design (using A0050 Aluminum powder).

Manual and Automatic Spray Guns



Manual Spray Gun



PX Robotic Spray Gun



Powder Feed Canisters



UltiLife[™] KN Series Nozzle



EPX Robotic Spray Gun

What is Cold Spray?

Cold Spray is a solid state metal coatings technology that enables users to restore and rebuild worn, corroded or damaged metal and a variety of composite surfaces. Cold Spray is applied without significant heat input into the parts and with little to no masking/ preparation requirements.

Choose SST Cold Spray to apply extremely machinable, high density, metal coatings to protect, repair, restore, refinish and recoat your high value manufactured products.

Applications for PX and EPX Systems

- Corrosion Mitigation/Protection
- Dimensional Restoration/Additive Manufacturing
- Casting Repair
- Mold & Die Repair/Remanufacturing
- Metallization of Ceramics and Polymers
- Electrical Busbars on Glass
- High Thermal/Electrical Conductivity Coatings

Coated Parts





supersonicspray.com

practical cold spray coatings

Accessories

SST™ supplies a wide assortment of system accessories for our cold spray systems. Some accessory options are shown below. For complete information, visit the website.

Powders

We offer standard and custom blended powders formulated for a variety of applications such as fabrication, corrosion protection, sealing, and surface cleaning applications. All of our powders have been selected to have the right combination of particle size, shape, and purity for our SST[™] cold spray equipment.



Calibration Kit

Our Calibration Kit enables users to calibrate SST[™] equipment temperature and pressure controls. Calibration capabilities are for pressures ranging from 7 to 35 bar (100 to 500 psi) and temperatures up to 650 °C.



UltiLife[™] and UltiFlow[™] KN **Series Modular Nozzles**

These unique and practical nozzle designs provide a choice to coat pure or hard/abrasive materials.



Spray Booths

CenterLine can supply a variety of spray booths including openfaced, cabinet or drive-in styles to satisfy any application condition or isolation requirements.





Visit our website at supersonicspray.com to learn more, or contact us to discuss your metal coating needs.

CENTERED ON SOLUTIONS

HEAD OFFICE: CenterLine (Windsor) Ltd. 415 Morton Drive Windsor, Ontario, Canada N9J 3T8

TELEPHONE Head Office 519-734-8464 519-734-6560 Service 519-734-0080

TOLL-FREE 800-820-6977 800-771-6172 800-268-8184

EMAIL

info@cntrline.com sales@cntrline.com service@cntrline.com



Visit our website to obtain detailed contact information for each of CenterLine's operations.

Sales

Website: cntrline.com