



PX & EPX

Ver. 2.0

- 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



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.

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.
- Quick change adapter design for ease of nozzle positioning and exchange.
- 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



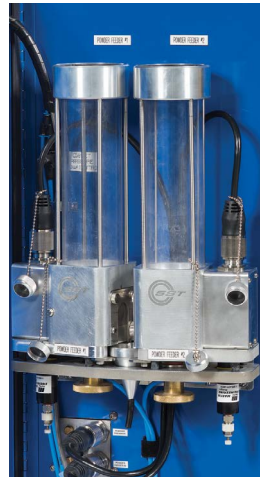
Manual Spray Gun



PX Robotic Spray Gun



EPX Robotic Spray Gun



Powder Feed Canisters



UltiLife™ KN Series Nozzle

What is Cold Spray?

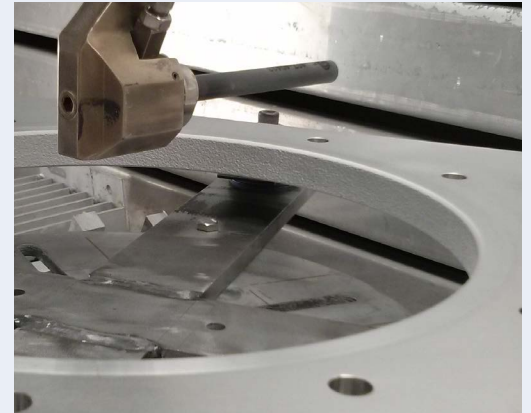
Cold Spray is a solid state metal coatings technology that enables users to restore and rebuild worn, corroded or damaged metal and a variety of composite surfaces. Cold Spray is applied without significant heat input into the parts and with little to no masking/preparation requirements.

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
- Casting Repair
- Mold & Die Repair/Re-manufacturing
- Metallization of Ceramics
- Nano-structured Materials

Coated Parts



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 open-faced, cabinet or drive-in styles to satisfy any application condition or isolation requirements.



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

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Website: www.cntrline.com

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