



# PRACTICAL COLD SPRAY COATINGS

*With Cold Spray, you can instantly spray aluminum, zinc, copper, brass & more.*

*Low Pressure Gas Dynamic Spray (Cold Spray) technology achieves a true mechanical bond through kinetic energy. No electrical charges, bonding agents or molten materials are used to join particles. Choose Cold Spray to easily and effectively apply metal coatings to worn, corroded or damaged components without excessive heat or stress.*

### *Applications Include:*

- Corrosion Mitigation/Protection
- Dimensional Restoration
- Casting Repair
- Mould & Die Repair/Re-Manufacturing
- Metallization of Ceramics
- Nano-structured Materials

### *With Cold Spray, your applications enjoy:*

- No metallurgical transformations, phase change or grain growth
- No heat affected zone in the substrate
- No thermally induced distortion
- No oxidation, low oxide content
- High electrical and thermal conductivity
- High density – low porosity (<0.5 %)
- Strain hardening
- No detrimental residual stresses
- Thick coatings, free forms
- Minimum surface preparation
- No masking



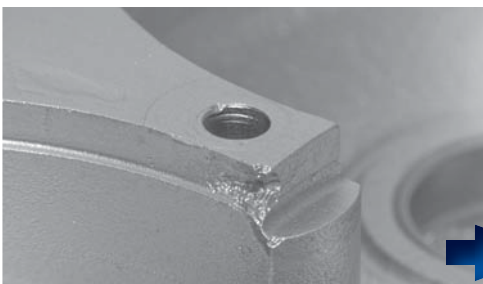
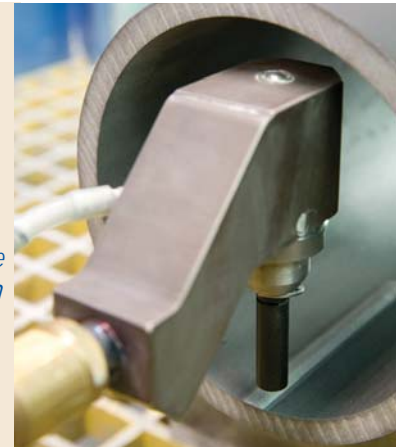
*CenterLine offers a wide variety of powder blends.*



*Cold spray technology is approved by US Department of Defense under the MIL-STD-3021 standard.*

*CenterLine offers a variety of cold spray solutions to satisfy applications ranging from manual to fully automated needs.*

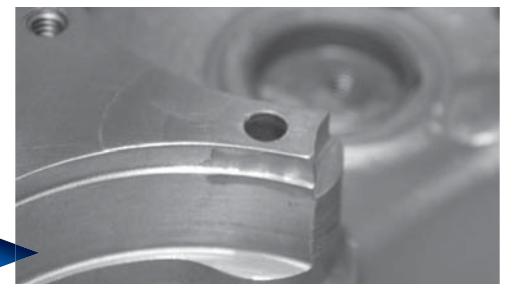
*Shown: Custom nozzle for small ID application needs.*



**1. Damage**  
*Clean damaged area.  
Prep with built-in abrasive blast.*



**2. Spray**  
*Quickly coat.  
Fill damaged areas as much as one inch.*



**3. Metal Finish**  
*Surface is immediately ready to be machined,  
ground, drilled or tapped.*



CenterLine (Windsor) Limited  
Supersonic Spray Technologies Division  
655 Morton Dr., Windsor, ON N9J 3T9  
Toll free: 800-268-8330, Tel: 519-734-8330, email: info@cntrline.com  
www.supersonicspray.com

# PRACTICAL COLD SPRAY COATINGS

## Range of Equipment



Portable

Robotic

Cabinet

Custom Integrated Systems

CenterLine's Supersonic Spray Technologies Division offers a wide array of products and services aimed at satisfying cold spray applications and enabling users to realize the full benefits of this cutting edge technology.

Among the products and services offered, CenterLine supplies:

### Application Development

- Custom Powder and Coating Development
- Process Development
- Custom Equipment Design
- Metallurgical Analysis
- Full R&D Support
- Cold Spray Consulting Services

### Job Shop Services

- Surface Preparation, Spraying & Finishing
- Development of Specifications
- Machining Services
- Engineering Support
- Emergency Production Support
- Prototype Part & Process Development

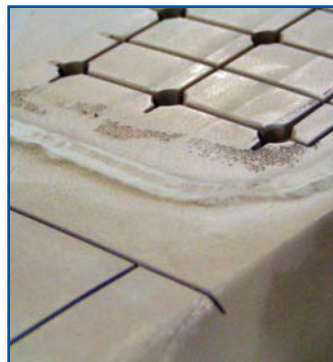
### Field Service Support

- On-site Spraying
- Equipment Selection
- Demonstrations
- Consignment Equipment
- Contractor Services
- Training

## Applications



Casting Repair



Mold Repair



Dimensional Restoration



Corrosion Mitigation/Repair

Contact CenterLine today to discuss your cold spray metal coating needs.



Copyright © 2010, CenterLine (Windsor) Limited

CenterLine (Windsor) Limited  
Supersonic Spray Technologies Division  
655 Morton Dr., Windsor, ON N9J 3T9  
Toll free: 800-268-8330, Tel: 519-734-8330, email: [info@cntrline.com](mailto:info@cntrline.com)  
[www.supersonicspray.com](http://www.supersonicspray.com)

SST-FL-PR-1.0.0-0310

Printed in Canada