## HIGH PRESSURE COLD SPRAY PROCESS INTEGRATION INTO A THERMAL SPRAY JOB SHOP

JOHN LINDEMAN AND CHARLES KAY

ASB INDUSTRIES, INC.

BARBERTON, OHIO USA



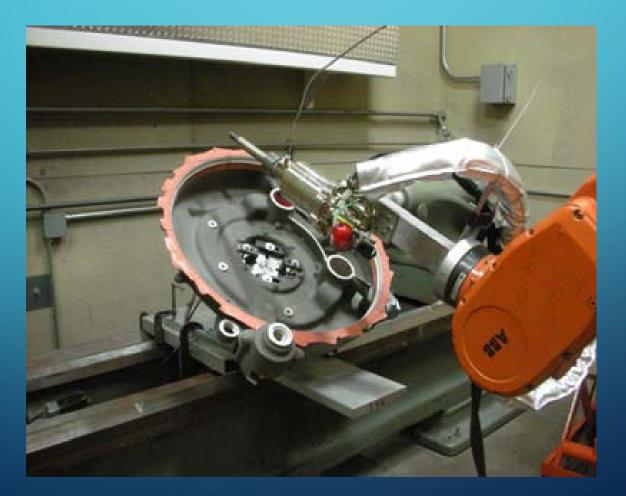
#### ASB INDUSTRIES-SINCE 1946 SURFACING TECHNOLOGIES & MACHINING

- Job Shop Focus on Thermal Spray and Machining/Grinding
- Cold Spray involvement beginning in 1991
- Many Relationships around the Globe
- High Pressure Cold Spray Applications
- Research & Development and Applications

# SURFACING TECHNOLOGIES AND MACHINING



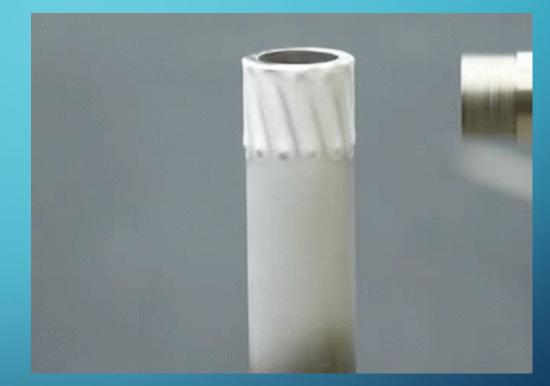
## ALUMINUM ON MAGNESIUM FAA REPAIR STATION 4SBR037C



#### ADDITIVE MANUFACTURING

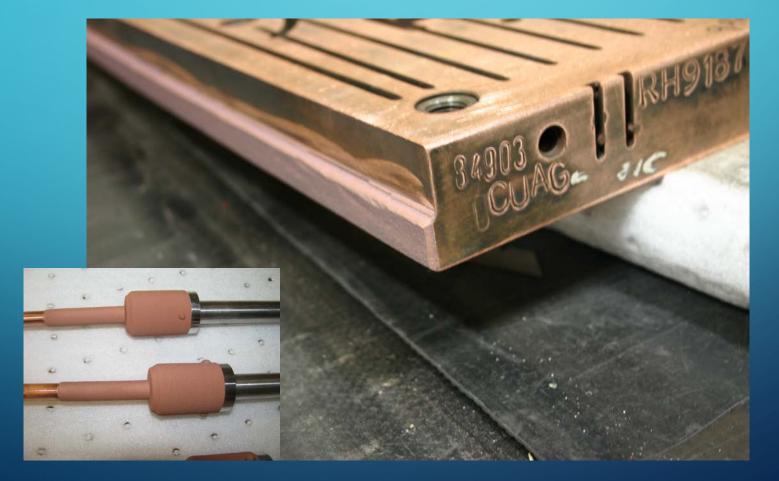
Shown is the ASB 2000-2 Portable Cold Spray System

- ASB has multiple R&D Projects from early years of Cold Spray
- "Hundreds" of NDA's



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### HIGH TEMPERATURE CAST MOLD PLATE EROSION & CORROSION WEAR

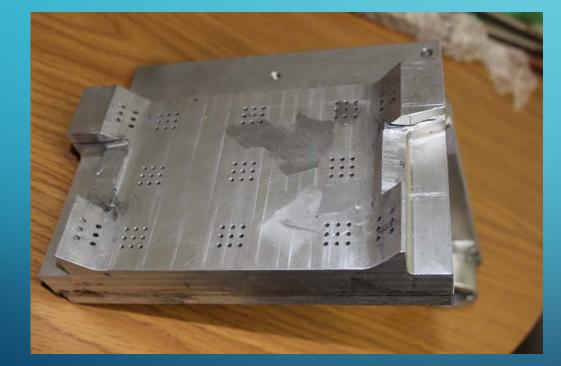


#### AIRCRAFT DOOR REFURBISHMENT PURE ALUMINUM REPAIR AFTER WELDING



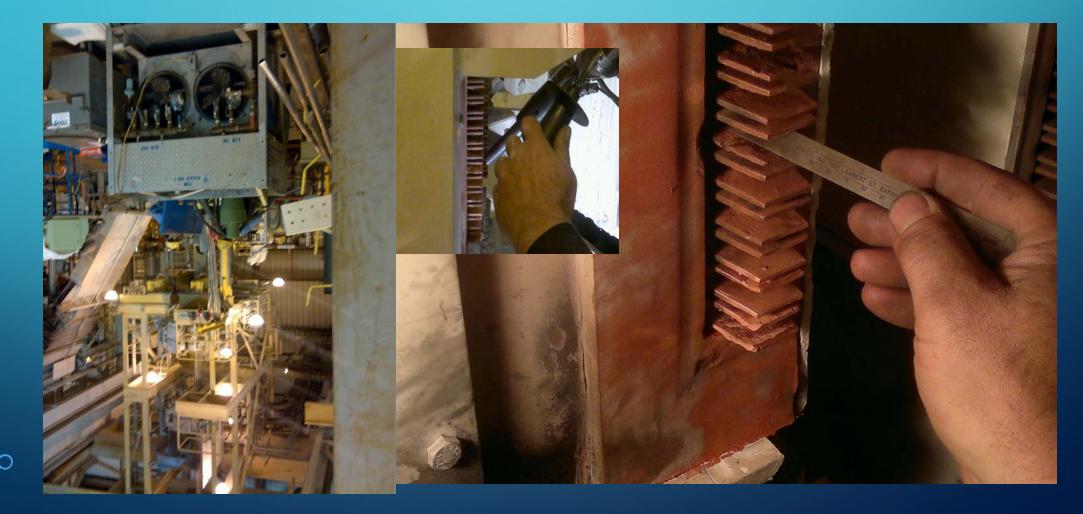


#### **COIL STRAPPING EQUIPMENT** ALUMINUM REPAIR AND HVOF CARBIDE WITH HAND POLISHING



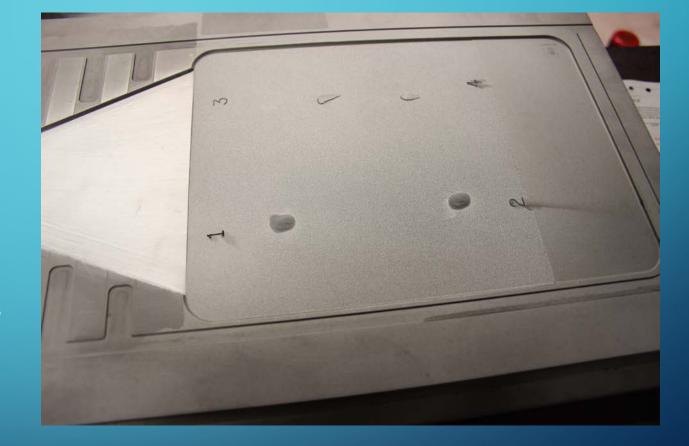


### ON-SITE REPAIR OF BUS BAR ARC EROSION REPAIR



## ALUMINUM QC10 MOLD REPAIR

- Hand Held System for Mold Shop
- No Preheating prior to spraying
- Pure Aluminum using the High Pressure Process allows part longevity during retexturing process



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#### **COLD SPRAY JOB SHOP CAPABILITIES**



## NITROGEN & HELIUM CAPABILITIES



### 2000-2 PORTABLE HIGH PRESSURE POWDER FEEDER AND CONTROL UNIT



### HIGH PRESSURE PORTABILITY IN THE FIELD



## **IMPACT INNOVATIONS 5/11 SYSTEM**



HIGH PRESSURE COLD SPRAY: PRINCIPLES AND APPLICATIONS

- Science and Applications
- High Pressure Cold Spray Focus

New Publication By ASM International with Co-Editors: Dr. J. Karthikeyan and Mr. Charles M Kay Expected Publication by end of 2015



ASB Industries 1031 Barberton Ohio USA

www.asbindustries.com

