



DEPARTMENT OF THE NAVY
COMMANDER, MID-ATLANTIC REGIONAL MAINTENANCE CENTER
9170 SECOND STREET, SUITE 120
NORFOLK, VA 23511-2393

9110
Ser 221/1129
APR 03 2008

From: Mid-Atlantic Regional Maintenance Center
To: Thermal Spray Solutions, Inc.

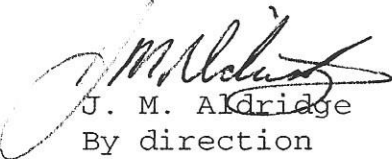
Subj: REQUEST FOR FACILITIES CERTIFICATION PER MIL-STD-1687A
AND APPROVAL OF THERMAL SPRAY PROCEDURES FOR ELECTRIC ARC
WIRE THERMAL SPRAY OF ALUMINUM CHROME IRON (ALCrFe), HIGH
VELOCITY OXY-FUEL (HVOF) TUNGSTEN CARBIDE CHROME (WCCr),
AND HVOF TUNGSTEN CARBIDE COBALT NICKEL (WCCoNi) ON
CARBON, LOW ALLOW, STAINLESS STEEL, AND CAST IRON
SUBSTRATE MATERIAL

Encl: (1) CDR, NAVSEASYS COM ltr 9110 Ser 05P/09B of 1 Apr 08

1. Enclosure (1) is forwarded approving facility certification within the limitations imposed by MIL-STD-1687A. Future periodic random evaluations will be conducted at your facility by an authorized NAVSEA representative to ensure continued specification compliance.

2. The requirements of this letter do not authorize any changes in the terms, condition, delivery schedule, price or amount of the subject contract or any other government contract. In the event you consider that these requirements represent a change for which you are entitled to an equitable adjust, you are to comply with the requirements of the notification of change clause on the contract.

3. My point of contact in this matter is Philip DeSiano, Code 221, commercial 757-396-4001, extension 2128, e-mail philip.desiano@navy.mil or cell phone 757-651-4703.


J. M. Aldridge
By direction



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
1393 ISAAC HULL AVE SE
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO

9110
Ser 05P/098
01 Apr 2008

From: Commander, Naval Sea Systems Command
To: Thermal Spray Solutions Inc.
Via: Mid-Atlantic Regional Maintenance Center, (Attn: Mr. M. Aldridge, Quality Assurance Branch, Code 221)

Subj: REQUEST FOR FACILITIES CERTIFICATION PER MIL-STD 1687A AND APPROVAL OF THERMAL SPRAY PROCEDURES FOR ELECTRIC ARC WIRE THERMAL SPRAY OF ALUMINIUM CHROME IRON (ALCrFe), HIGH VELOCITY OXY-FUEL (HVOF) TUNGSTEN CARBIDE CHROME (WCCr), AND HVOF TUNGSTEN CARBIDE COBALT NICKEL (WCCoNi) ON CARBON, LOW ALLOW, STAINLESS STEEL, AND CAST IRON SUBSTRATE MATERIAL

Ref: (a) Thermal Spray Solutions Inc. letter dtd Feb 21, 2008 to Mid-Atlantic Regional Maintenance Center, Code 221, Quality Assurance Branch Manager, "Request for MIL-STD 1687A Certification"
(b) MIL-STD-1687A (SH) Department of Defense Manufacturing Process Standard, "Thermal Spray Processes for Naval Ship Machinery Applications," 11 February 1987.
(c) Forwarding letter from Mid-Atlantic Regional Maintenance Center (MARMC) to Commanding Officer, Naval Sea System Command (SEA 05), 4790, Ser 221/0656, Feb 26 2008. "THERMAL SPRAY SOLUTION REQUEST FOR CERTIFICATION PER MIL-STD-1687A

1. **Background:** In reference (a) Thermal Spray Solutions (TSS) Inc. requests its facilities to be certified to be in compliance with reference (b). Reference (a) also requests approval of specific thermal spray procedures for (1) electric arc wire thermal spray of Aluminum Chrome Iron, (2) High velocity Oxy-fuel (HVOF) thermal spray of Tungsten Carbide Chrome, and (3) HVOF of Tungsten Carbide Cobalt Nickel for Material Group: Carbon, Low Alloy, Stainless, and Cast Iron, (Section 4.3.4.1.1 of reference (b)).

2. **Mid-Atlantic Regional Maintenance Center (MARMC) Discussion:** MARMC reviewed the reference (a) request and has recommended approval of the request of TSS to be certified to perform the thermal spray work detailed in reference (a). The request for

Subj: REQUEST FOR FACILITIES CERTIFICATION PER MIL-STD 1687A AND APPROVAL OF THERMAL SPRAY PROCEDURES FOR ELECTRIC ARC WIRE THERMAL SPRAY OF ALUMINIUM CHROME IRON (ALCrFe), HIGH VELOCITY OXY-FUEL (HVOF) TUNGSTEN CARBIDE CHROME (WCCr), AND HVOF TUNGSTEN CARBIDE COBALT NICKEL (WCCoNi) ON CARBON, LOW ALLOW, STAINLESS STEEL, AND CAST IRON SUBSTRATE MATERIAL

certification in accordance with MIL-STD-1687A was forwarded to NAVSEA by reference (c).

3. Naval Surface Warfare Center Carderock Division (NSWCCD)

Discussion: NSWCCD Code 611 has reviewed the reference (a) request. NSWCCD reviewed the facilities audit and recommends the facility be certified for performing thermal spray coating on Navy ship parts within the limitations imposed by MIL-STD-1687A. This recommendation is predicated on the resolution of the discrepancies noted in enclosure (10) of reference (a). NSWCCD has also reviewed the qualification test data and recommends approval of the three thermal spray procedures outlined in reference (a).

4. NAVSEA Discussion: NAVSEA has reviewed the reference (a) request for facility certification in accordance with MIL-STD-1687A and the three thermal spray procedures requested in reference (a). The results of the facility audit and thermal spray qualification test data of reference (a) meet the requirements of reference (b).

5. NAVSEA Action: The request for facility certification is approved within the limitations imposed by MIL-STD-1687A. Future periodic random evaluations may be conducted at your facility by authorized NAVSEA representatives to ensure continued specification compliance in accordance with reference (b). The qualification test data for the three thermal spray procedures in reference (a) are approved in accordance with reference (b).

6. The NAVSEA point of contact is Mr. Richard J. Wong at 301 227-4969.

7. The requirements of this letter do not authorize any changes in the terms, conditions, delivery schedule, price or amount of the subject contract or any other government contract. In the event you consider that these requirements represent a change for which you are entitled to an equitable adjustment, you are

Subj: REQUEST FOR FACILITIES CERTIFICATION PER MIL-STD 1687A
AND APPROVAL OF THERMAL SPRAY PROCEDURES FOR ELECTRIC ARC
WIRE THERMAL SPRAY OF ALUMINIUM CHROME IRON (ALCrFe),
HIGH VELOCITY OXY-FUEL (HVOF) TUNGSTEN CARBIDE CHROME
(WCCr), AND HVOF TUNGSTEN CARBIDE COBALT NICKEL (WCCoNi)
ON CARBON, LOW ALLOW, STAINLESS STEEL, AND CAST IRON
SUBSTRATE MATERIAL

to comply with the requirements of the notification of change
clause on the contract.

8. Use of the thermal spray procedures shall be in accordance
with governing contract requirements.


J. A. MANUEL
By Direction

Copy to:
MARMC (P. DeSiano, code 221)
NSWCCD (J.J. DeLoach, code 611)
NSWCCD (R.J. Wong, code 611)