[METRIC]
A-A-59368
17 March 1999

COMMERCIAL ITEM DESCRIPTION

SOLDERING/DESOLDERING, STATION

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. SCOPE. This commercial item description describes alternating current (ac) powered, bench mounted, conduction or convection, hand held, soldering/desoldering stations with equipment and accessories specified herein.

2. CLASSIFICATION. The soldering/desoldering stations shall be of the following types, grades, classes, and temperature ranges.

2.1 Type. Type is defined as the working side for the soldering/desoldering station. The types described herein are as follows:

Type I - Reflow
Type II - Thru-hole
Type III - Combination

2.2 Grade. Grade is defined as idle temperature stability of the soldering/desoldering station. The grades described herein are as follows:

Grade A - Idle temperature stability ± 2 degrees Celsius (°C)
Grade B - Idle temperature stability ± 5 °C

Beneficial comment, recommendations, deletions, clarifications, ect., and any data which may improve this document should be sent to: Defense Supply Center Richmond, ATTN.: DSCR-VBD, Richmond, VA 23297-5610

AMSC N/A FSC 3439

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

2.3 Class. Class is defined as the heating element on the soldering/desoldering station. The classes described herein are as follows:

Class 1 - Conduction
Class 2 - Convection
Class 3 - Combination

2.4 Temperature range. Temperature range is defined as the output temperature of the soldering/desoldering station. The classes described herein are as follows:

Temperature Range A - Standard - Temperatures from 230 °C through 425 °C
Temperature Range B - Low - Temperatures from 180 °C through 425 °C
Temperature Range C - High - Temperatures from 230 °C through 480 °C
Temperature Range D - Multi-purpose - Temperatures from 180 °C through 480 °C

3. SALIENT CHARACTERISTICS

3.1Design. The soldering/desoldering stations shall consist of a power unit and attachments as described herein. The soldering/desoldering stations shall not cause electrical overstress (EOS) damage to standard components during soldering or desoldering operations. When specified (see 7.4) the soldering/desoldering stations shall be compatible with electrostatic discharge (ESD) sensitive components.

3.1.1 Optional equipment. When specified (see 7.4), the soldering/desoldering stations shall include the following optional equipment.

3.1.1.1 Fume extraction. Stations with fume extraction capabilities shall evacuate solder fumes from tip working area. Filters, if required, shall be located for operator convenience during operation and replacement.

3.1.1.2 Preparation and repair capabilities. Unless otherwise specified (see 7.4), station equipped with preparation and repair capabilities shall perform the following functions.

3.1.1.2.1 Machining. Machining shall include hand or foot controls and shall be capable of milling, drilling, grinding, and abrasive cleaning of standard electronic equipment.

3.1.1.2.2 Thermal wire stripping. The preparation and repair system shall be capable of thermal removal of insulation from conductors without nicking the conductor.

3.1.1.2.3 Removing conformal coating. The preparation and repair system shall be capable of thermally removing conformal coating without damaging standard electronic components.

3.1.1.2.4 Localized heating. The preparation and repair system shall be capable of localized heating for surface mount removal and heating of multilayer boards without damaging standard electronic components.

3.2 Displays and indicators. The following subparagraphs list the minimum characteristics for a station's displays and indicators.

3.2.1 Temperature displays and indicators. When required for system operations or specified (see 7.4), temperature shall be displayed or indicated in degrees Celsius (°C).

3.2.2 Air pressure displays and indicators. When specified (see 7.4), stations with air capabilities shall have air pressure displays or indicators.

3.2.3 Vacuum displays and indicators. When specified (see 7.4), stations with vacuum capabilities shall have vacuum display or indicators.

3.3 Controls. All operator controls shall be located in a position convenient to the operator and in the operator's plain view.

3.4 Temperature range. Unless otherwise specified (see 7.4), temperature ranges are defined as follows. A soldering station's temperature range may encompass the minimum and maximum of a specified temperature range and still be classified as that specified range.

3.4.1 Standard temperature range. The soldering station's operating temperature shall be adjustable from 230 °C through 425 °C, with an accuracy of ±15 °C for conduction soldering/desoldering and ±25 °C for convection soldering/desoldering.

3.4.2 Low temperature range. The soldering station's operating temperature shall be adjustable from 180 °C through 425 °C, with an accuracy ±15 °C for conduction soldering/desoldering and ±25 °C for convection soldering/desoldering.

3.4.3 High temperature range. The soldering station's operating temperature shall be adjustable from 230 °C through 480 °C, with an accuracy ±15 °C for conduction soldering/desoldering and ±50 °C for convection soldering/desoldering.

3.4.4 Multi-purpose temperature range. The soldering station's operating temperature shall be adjustable from 180 °C through 480 °C, with an accuracy ±15 °C for conduction soldering/desoldering and ±25 °C for convection soldering/desoldering.

3.5 Vacuum. Vacuum pressure when required shall be such that solder removed by desoldering will not flow, splash or migrate to other locations.

3.6 Air flow. Airflow volume when required shall be such that soldering and desoldering can be

performed at a rate of three operations per 5 minutes.

3.7 Power requirements. Unless otherwise specified (see 7.4), the station power requirements shall be 120 Vac at 60 Hz single phase. Power cord shall be either 2-wire polarized or 3-wire grounding type.

3.8 Solder handpiece. Unless otherwise specified (see 7.4), stations shall have one handpiece. When multiple handpieces are specified each shall be separately controlled allowing simultaneous operation.

3.9 Nameplate. A nameplate shall be securely attached to each machine. Unless otherwise specified (see 7.4), the nameplate shall contain the information listed below.

a. Nomenclature
b. Manufacture's name
c. Machine model number
d. Power inputs (volts, total amps, phase, frequency, hertz)
e. Short circuit/over current rating
f. Contract numbers
g. National stock number
h. Date of manufacture

4. REGULATORY REQUIREMENTS

4.1 Recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4.2 Environmental protection. During the manufacture of this soldering/desoldering station, materials hazardous to the ecological systems and as prohibited by the federal, state or local statutes in effect on the date of the contract shall not be used and shall not be emitted.

5. QUALITY ASSURANCE PROVISIONS

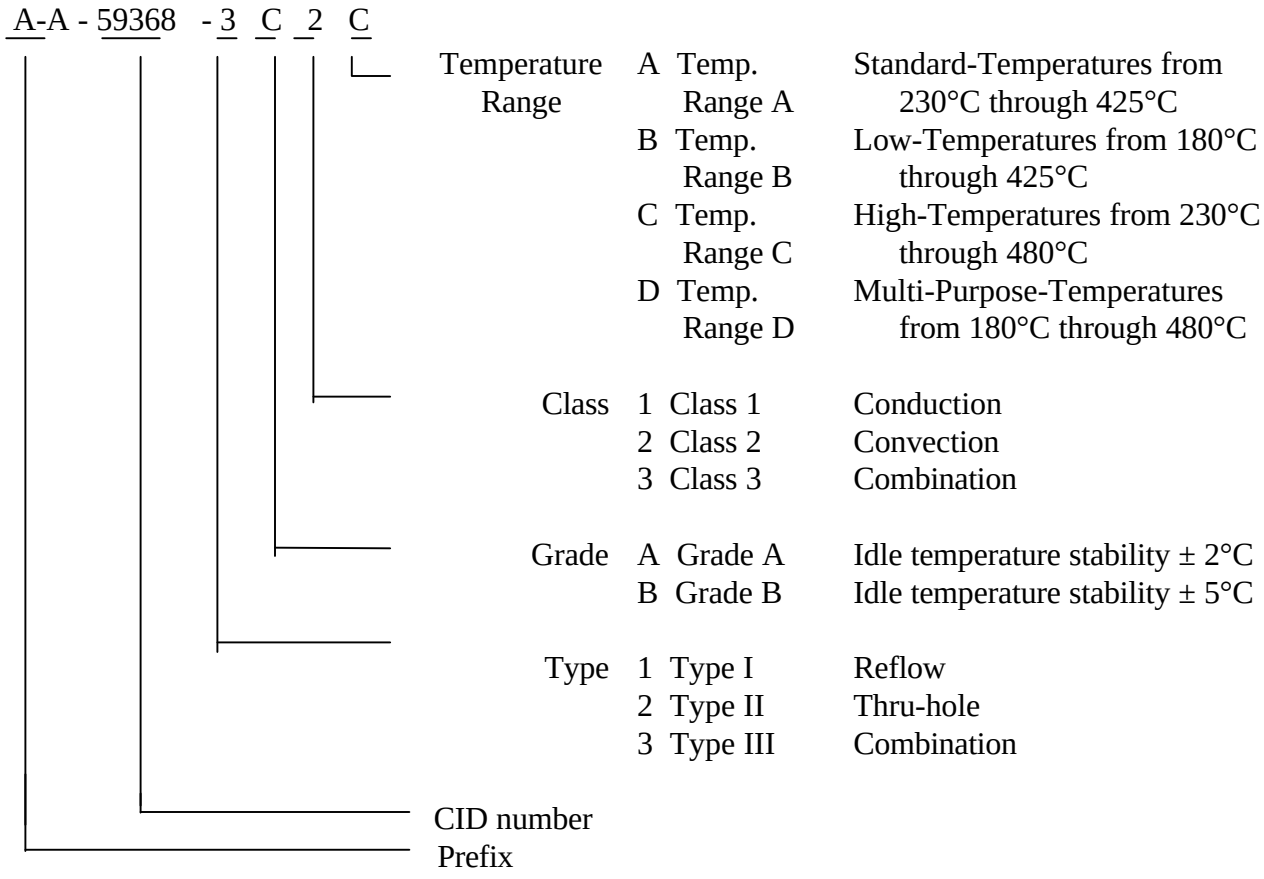
5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description and shall conform to the drawings, specifications, standards and quality assurance practices of the manufacturer and also shall be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.

7. NOTES

7.1 Part identification number (PIN). The following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor.

This is an example of the part numbering system for CID A-A-59368.



7.2 National stock number (NSN). The following NSN correspond to this CID. The list is not indicative of all possible NSNs associated with this document.

NSN	PIN
3439-01-374-9173	3A3D
3439-01-379-7874	3A1C
3439-01-269-5494	3A3D
3439-01-377-7760	3A3D

7.3 Intended use. Soldering/desoldering stations covered by this commercial item description are for use in electronics production sites, repair facilities, maintenance shops and training activities.

7.4 Ordering data. Purchasers should select the preferred options and include the following information in the order.

a. Title, number, and date of this specification.
b. Type, grade, class and temperature range required. (see 2.)
c. ESD compatible, if required. (see 3.1)
d. Fume extraction, if required. (see 3.1.1)
e. Preparation and repair system, if required. (see 3.1.1)
f. Preparation and repair system, if different. (see 3.1.1.2)
g. Air pressure display and indicators, if required (see 3.2.2)
h. Vacuum display and indicators, if required (see 3.2.3)
i. Temperature range, if different (see 3.4)
j. Power requirements if different. (see 3.7)
k. Soldering handpiece, if different. (see 3.8)
l. Name plate data, if different (see 3.9)
m. Preservation, packing, and marking as required. (see 6.)

7.5 Referenced documents.

7.5.1 FED-STD-376, Preferred Metric Units for General Use by the Federal Government, is available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094, Telephone 800-225-3842.

7.5.2 The Federal Acquisition Regulation (FAR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

MILITARY INTERESTS:

Custodians
Army - AL
Navy – SH
Air Force - 99

Reviewers
Air Force - 84

CIVIL AGENCY COORDINATION ACTIVITY:
GSA - FSS

PREPARING ACTIVITY
DLA - GS
(Project 3439-0900)