

## **TECHNICAL SPECIFICATION OF SOLDERING & DE-SOLDERING STATION**

1. **Name of the Equipment** : Soldering & De-Soldering Station.
2. **Installation Site** : Not Applicable.
3. **Purpose** : For Ready Stock.
4. **Quantity** : 01 (One) Set.
5. **Country of Origin** : To be mentioned.
6. **Manufacturing Country** : To be mentioned.
7. **Type** : To be mentioned.
8. **Brand** : To be mentioned.
9. **Model** : To be mentioned.
10. **Year of Manufacturing** : 2022 or Later.
11. **Manufacturer** : To be mentioned.
12. **Supplier Local Agent** : Not Applicable.
13. **Qualification of Bidder** : Not Applicable.
14. **Classification Standard** : The Soldering & De-Soldering Station along with associated accessories offered/supplied under the scope of the supply are to be designed, constructed/ manufactured and tested up to the requirement of IEEE/ IEC, IALA, IMO/ MIL-Standard and it shall comply other referenced international standards. The applicable classification standard(s) of the offered item is to be mentioned and should be well supported by the brochures/ certificates.
15. **Additional Feature Offered by Bidder** : The bidders may suggest and offer additional features for the Soldering & De-Soldering Station. In this case, Bidders have to explain the detailed advantage of that/ those features of the Soldering & De-Soldering Station.
16. **Acceptance/ Reaction of Bidder** : BN reserves the right to accept or reject any offer or to annul the tender process and reject all bids at any time prior to signing of the contract.
17. **Scope of Supply** : The scope of supply is as follows but not limited to:
  - a. 01 X Complete sets of Soldering & De-Soldering Station including associated accessories for immediate operation (As per paragraph 20 & 21).
  - b. Installation, Supervision, STW and Commissioning (as per paragraph 29, 30 & 42).
  - c. Test/ Trial and Acceptance (as per paragraph 36 & 44).
  - d. Fast moving spare parts and Tools (as option) (As per paragraph 32-35).
  - e. Training (As per paragraph 37, 38 & 39).
  - f. Software, Documentation and Certificate (As per paragraph 22, 23, 31, 45 & 46).
18. **General Features** : To be mentioned
19. **Environmental Condition and Other Standard:**

Ser	Parameter	Description
a.	Temperature	-15°C to +55°C
b.	Relative humidity	93% at +40°C



20. **Composition of Complete System** : 01 in number Soldering & De-Soldering Station with associated accessories will be supplied including test/ trial and commissioning as per the specifications enumerated in the subsequent paragraphs. The Soldering & De-Soldering Station will be complete with all standard accessories and attachments, ready in all respect for operation. The basic units will be as follows:

a.	I-CON VARIO 4- Electronic Station-(0ICV403A)
b.	i-Tool AIR S-Hot Air Unit-
c.	Chip Tool VARIO-De-Soldering Tweezers-(0460MDJ)
d.	X-Tool-De-Soldering Tool-(0720ENJ)

21. **Technical Specification** :

<b>a. I-CON VARIO 4- Electronic Station-(0ICV403A)</b>	
Power	500W
Voltage	230V, 50Hz
Vacuum	Max 700 mbar
Volume Of Air	2-20l/min
Temperature Range	150– 450 °C (50–550°C–iTool AIR S)
<b>b. i-Tool AIR S-Hot Air Unit-</b>	
Power	200W
Voltage	230V, 50Hz
Weight	90 g (without supply line)
Hot Air Tips Series	472
Temperature Range	50– 450 °C
Temperature Range	K-type
<b>c. Chip Tool VARIO-De-Soldering Tweezers-(0460MDJ)</b>	
Power	240W
Voltage	230V, 50Hz
Weight	75g (without supply line)
De-Soldering Tips/Heating Element Series	462
Temperature Range	150– 550 °C
<b>d. X-Tool-De-Soldering Tool-(0720ENJ)</b>	
Power	260W
Voltage	230V, 50Hz
Weight	240 g (without supply line)
De-Soldering Tips Series	722
Design	722

22. **Original Software and Backup Software:** Not Applicable.
23. **Interface Control Documents (ICD)** : The supplier shall provide necessary ICD (Interface Control Documents) and interface protocol during delivery/ installation of the item. The ICD and interface protocol will be utilized (in future) to integrate any sub-systems. The ICD will be tested and shown to the buyer's representative during installation.
24. **Waveguide and Cable** : To be mentioned.
25. **Cabinets** : All cabinets should be made of chromium plating or similar and painted sea water resistant aluminum to prevent corrosion.
26. **Integration/ Interfaces** :



27. **Interfacing/ Integration Responsibility**: Not Applicable.

28. **Ship's Power Supply** :

Ser	Parameter	Description
a.	Soldering & De-Soldering Station	220 VAC, 50 Hz

29. **Assessment for Installation** : The supplier should make pre-assessment for installation of whole system onboard at their own expenses.

30. **Installation Material** : All installation materials including shock mountings are to be provided by the manufacturer. Necessary assistance for Welding/ Cutting will be provided by the buyer.

31. **Installation Drawing** :

a. Following drawings are to be submitted for Buyer's approval four (04) months before starting the installation work onboard:

- (1) Layout drawing of equipment including working and maintenance space.
- (2) Electrical interconnection diagram of all equipment along with different provision of power supply connection (showing the position of circuit breaker, switches etc).
- (3) Cable diagram including cable type and cable grouping.
- (4) Diagram showing interface (mechanical and electrical) and data protocol among the ship systems

b. After approval, five (05) copies of each drawing (original copies) are to be submitted to the Buyer.

32. **Test Equipment/ Special Equipment** : Not Applicable.

33. **Standard Accessories** : Standard Accessories must include every item and accessories, which are essential to make the Soldering & De-Soldering Station completely operational, whether those are mentioned in the specification or not. A list of such items/ accessories is to be provided with the quotation.

34. **Optional Accessories** : Optional accessories (if any) are to be separately quoted, mentioning their usages.

35. **Fast Moving Spare Parts** : Original Equipment Manufacturer (OEM) recommended fast moving spares for 03 years trouble free operation are to be quoted showing item wise price as an option

36. **Factory Acceptance Test** : Not Applicable.

37. **Training at Manufacturer Premises** : Not Applicable.

38. **Training Contents** : Not Applicable.

39. **Local Training** : Not Applicable.

40. **Shipment and Delivery** : To be mentioned.

41. **Port of Shipment** : To be mentioned.

42. **Installation, Supervision, STW and Commissioning** :

- a. A qualified Manufacturer's / Supplier representative is also to be presented at the installation site to supervise setting work.



- b. Cost of installation and setting work are to be quoted separately.
- c. The supplier's representative will ensure satisfactory tests, trial and functioning/commissioning of the equipment at purchaser's premises.

43. **Lead Time** : To be mentioned.

44. **Test, Trial and Acceptance** : On completion of satisfactory test/ trial and commissioning, an acceptance certificate will be provided by BN. It is to be noted that test/trial is to be completed within 03 months from the date of receive of the equipment at Naval Stores Depot, Chattogram.

45. **Certificate and Reports** : Following certificates and reports are to be provided in English for the Soldering & De-Soldering Station set including associated equipment/ accessories during delivery:

- a. Type approval certificates of classification society.
- b. Quality assurance certificates for the Soldering & De-Soldering Station and their associated equipment and instruments in regard to its manufacturer and performance is to be provided.
- c. Factory Test Certificates.
- d. Guarantee and warranty certificates.

46. **Documentation** : The following documents (03 sets each) is to be provided in English including all text in illustrations, drawings and circuit diagrams at free of cost during delivery:

a. **Technical and Maintenance Manuals**. The technical manual shall contain descriptions based on figures, diagrams and tables. The system description should cover the following information:

- (1) System functionality with detail description.
- (2) Functional build-up of the system and its sub units.
- (3) The interfaces, protocol and adaptation to external systems and equipment.
- (4) Necessary block diagrams and circuit analysis to be given for easy understanding of the system.
- (5) Detailed message implementation and message interaction.
- (6) Fault finding and remedial actions up to the second level of maintenance.
- (7) OEM manual of each subsystem.
- (8) Standard Maintenance Schedule (Daily, weekly, monthly & yearly) documents.
- (9) Manual and documents on alignment, calibration, testing, tuning and software based system check etc of Soldering & De-Soldering Station.

b. **Operator's Manual**. The operator's manual shall cover:

- (1) Basic information and overview of the Soldering & De-Soldering Station with block and necessary diagrams.
- (2) Operating procedures.
- (3) System setup and operation.
- (4) Description of all operation modes and menus with explanations.

c. **Spares Manual**. The spares manual shall cover:

- (1) Parts Identification List (PIL).
- (2) List of spare parts.
- (3) List of replaceable units/ spares with their time interval.

47. **Quality Assurance Certificate** : Quality Assurance Certificate in respect of the associated equipment in regards to its manufacturing and performance is to be provided at the time of delivery of the items.



48. **Brochure/ Booklet** : Two sets of original brochures / booklets in English having detail technical information about the quoted Soldering & De-Soldering Station are to be provided along with the quotation for evaluation/ assessment.
49. **User List** : To be mentioned.
50. **Warranty** :  
a. Minimum 12 (Twelve) Months warranty for trouble free operation is to be provided by the supplier/ manufacturer for the item from the date of acceptance by the buyer. If any component of the supplied items becomes defective during the warranty period, the warranty shall be extended automatically (for relevant component) for the period of the subject component remains defective.  
b. For warranty repair/ replacement, the supplier will collect the defective item from NSD, Chittagong/ NSSD, Dhaka (as applicable) and re-supply the same to collecting place after warranty repair or for replacement within 90 (ninety) days from the date of defect at no cost to the purchaser.
51. **Guarantee** : The supplier is to give guarantee of continued supply of spares for at least 10 years at a reasonable price.
52. **Validity** : To be mentioned.
53. **Terms of Payment** : To be mentioned.
54. **Price** : Price of the each element of the total offer is to be shown separately (e.g. price of the main items, additional and optional items, Installation and Integration, Training, Warranty/ Guarantee etc) and the grand total of the foreign currency to be shown on the original offer submitted by the supplier.
55. **Ship Visit and System Study** : Prospective bidder may visit the installation site (Chattogram Naval area) to estimate installation materials and works involved in installation works before submission of tender to avoid any difficulties/ confusion after placing order. Similarly, a system study is to be carried out onboard after signing the contract covering all technical details and list of works that is to be carried out. In this regard, the system study report is to be submitted to naval headquarters for further approval within two months of signing the contract.
56. **Compliance Statement** : A compliance statement fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. Stating mere 'Yes or No' will not suffice and detailed evidences with description/ information, brochures/ booklet, drawing and diagram as required is to be given. An incomplete compliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with the offered Radar system, the deviation has to be spelt out clearly.