# TENDER SPECIFICATION OF SUBMERGED ARC WELDING MACHINE

- 1. Name of the Equipment. Submerged Arc Welding Machine (Capacity: 630-800 Amps).
- 2. Purpose. To be used for high deposition rates & deep penetration of flat weld.
- 3. Quantity. 01 (One) in number complete set.
- 4. Manufacturer, Principal Supplier & Local Supplier. Name and full address to be mentioned.

1.	Manufacturer	To be mentioned
2.	Principal Supplier	To be mentioned
3.	Local Supplier	To be mentioned

- 5. Year of Manufacture. 2024 or later. The items should be brand new and original.
- 6. <u>Country of Origin</u>. USA, UK, EU Countries, Canada, Japan, Australia, South Korea, Turkiye (Turkey) and New Zealand.
- 7. <u>Manufacturing Country</u>. USA, UK, EU Countries, Canada, Japan, Australia, South Korea, Turkiye (Turkey) and New Zealand.
- 8. <u>Certificate/Document of Authentication</u>. The local supplier must provide following certificate(s)/ document(s) with the offer/quotation of item(s) as regard to the genuineness of source and item(s) in order to establish chain of links from the original source to supply:
  - a. One certificate/document by the manufacturer in favour of the supplier (in case of manufacturer as direct source).
  - b. Two certificates/documents, one by the manufacturer to authorized agent and other by the authorized agent to supplier (in case of authorized agent as immediate source).
  - c. Three certificates/documents, first one by the manufacturer to authorized agent, second one by authorized agent to sub-agent and third one by sub-agent to supplier (in case sub-agent as immediate source). If the supplier is unable to obtain the first certificate (by manufacturer to authorized agent), then it has to produce relevant document to prove agency-ship of its claimed agent of the recognized manufacturer.
- 9. <u>Standard</u>. The Submerged Arc Welding Machine is to be designed and constructed fulfilling the requirement of international standard. The standard to which the quoted Submerged Arc Welding Machine complies with is to be specified ((ISO or similar).).

#### 10. Ambient Condition.

1. Air Temperature +05°C to +50°C		+05°C to +50°C	
2.	Relative Humidity (RH)	Up to 95% (non-condensing) •	
3.	Location	Close to the sea shore	



## 11. Scope of Supply. The scope of supply is to include the followings:

- a. Main items (01 x Submerged Arc Welding Machine complete with all items necessary for immediate operation without the requirement of any other items (standard fittings/attachments, safety features, accessories etc as per paragraph 12 to 14).
- b. Optional items (as per paragraph 15).
- c. Special tools and Spare Parts (as per paragraph 16 and 17).
- d. Documents and certificates (as per paragraph 18 and 19).
- e. Test, trial & acceptance and Training (as per paragraph 20 and 21).
- f. Warranty (as per paragraph 22).
- g. Any other relevant issue (if any).

## 12. <u>Technical Specification</u>.

1.	Туре		To be mentioned
2.	Model		To be mentioned
3.	Maker		To be mentioned
4.	Wire diameters, Steel		1.6-4.0 mm
5.	Max wire feed speed		Not less than 9 mtr/min
6.	Flux hopper capacity		Not less than 6 ltr
7.	Permissible load 100%, A		To be mentioned
8.	Control voltage, V AC		To be mentioned
9.	Travel speed		0.1-1.7 mtr/min
10.	Linear slides stroke length		Not less than 90 mm
11.	Rotary slide setting angle		360°
12.	Power supply		380 V, 50 Hz, Three Phase
13.	Maximum load	100% duty cycle, A/V	630/44
		60% duty cycle, A/V	800/44
14.	Setting range, A/V		30/21 - 800/44
15.	Open circuit voltage		54 V
16.	Open circuit power		150 W
17.	Enclosure class		IP23 or more
18.	Dimensions		To be mentioned
19.	Weight		To be mentioned

- 13. <u>Safety Features</u>. Standard safety features in case of voltage fluctuation etc. are to be incorporated and mentioned.
- 14. <u>Standard Accessories</u>. Standard accessories must include all items and accessories, which are essential to operate the Submerged Arc Welding Machine, whether those are mentioned in this specification or not. A list of such items/accessories to be mentioned with the quotation. The accessories should be supplied free of cost. The list should include the followings:

Ser.	Description	Qty
1.	Guide wheel bogie	01 set
2.	Idling roller	01 set
3.	Guide bar	3 m
4.	V-guide wheel	01 set
5.	V-wheel track in steel	04 sets
6.	Loop for connection	01 set
7.	Laser lamp kit	01 set
8.	Control cable	50 m
9.	Flux Recovery Unit OPC	01 set
10.	Wire reel, plastic	01 (for 30 kg wire)
11.	Wire reel, steel	01 (for 30 kg wire)

- 15. Optional Items. A list of optional items which may be required for Submerged Arc Welding Machine, is to be provided. The price will not be added to the total price while evaluating the comparative price of the bidders.
- 16. <u>Special Tools</u>. 01 (One) set of special tools (if required) for carrying out maintenance of Submerged Arc Welding Machine is to be supplied **free of additional cost**.
- 17. <u>Spare Parts</u>. Following spare parts are to be supplied with the Submerged Arc Welding Machine. Prices of the spare parts are to be mentioned in the submitted quotation. The **price** will be added to the total price while evaluating the comparative price of the bidders.

S No	Description	Qty	
1.	Contact Nozzles, 2.5 mm	15 pcs	
2.	Feed Rollers, 3.0 mm	2 pcs	
3.	Pressure Rollers, 3.2 mm	2 pcs	
4.	Contact tube, 4.0 mm	1 pc	
5.	Agglomerated fluoride-basic flux	200 kg	
6.	Copper-coated mild steel wire spool, wire dia-4.0 mm	200 kg	

- 18. <u>Documents</u>. Two (02) sets of following documents in English language are to be supplied with the Machine set:
  - a. Instruction manual including technical specification, installation, operation and maintenance.
  - b. Workshop level repair manual.
  - c. All drawings including general arrangement drawing.
  - d. Electrical diagram, fault finding flow chart etc.
  - e. Spare parts catalogue and its components.
  - f. Factory test certificate/performance certificate.



- 19. 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.
- 20. <u>Test, Trial and Acceptance</u>. The buyer will carry out test, trial and acceptance for the machine in presence of supplier's representative and if found satisfactory, an acceptance certificate will be signed jointly by the representative of supplier and the representative of buyer.
- 21. <u>Training</u>. The manufacturer's/supplier's installation engineer will provide operation and maintenance training in Bangladesh to 05 (Five) operators for 02 (Two) day after test, trial and commissioning of the Submerged Arc Welding Machine. Cost of training is to be borne by the supplier.
- 22. <u>Warranty</u>. Warranty for trouble free operation will be provided by the principal/ manufacturer for all the supplied items for a period of at least 12 months from the date of acceptance by the buyer. During the warranty period, if the machine remains non-operational for any action pending by the supplier, the warranty period will be automatically extended by the same period. The warranty should cover all parts and labour (including service engineer's cost) throughout the warranty period.

### 23. Shipment.

- a. The supplier will arrange shipment of all items to any sea/air port of Bangladesh.
- b. All items are to be delivered in sea-worthy packing to ensure safe transportation by sea/air.
- c. All packages are to have packing notes showing their contents in detail and all packages shall be marked with the name and address of the consignee and gross weight.
- d. The supplier will arrange transportation of all supplied items from respective sea/air port to NSD Chattogram.
- e. <u>Port of Shipment</u>. Any port of manufacturing country. In case of shipment through any port of manufacturer's authorized dealer, relevant manufacturer's certificate is to be provided as a proof of genuineness of the offered item.
- 24. <u>Delivery.</u> The items are to be delivered within **03 (Three) months** of signing the contract to the following address:

The Commanding Officer
Naval Stores Depot Chattogram
New Mooring, Chattogram, Bangladesh.

- 25. <u>Validity of Offer</u>. The offer should remain valid till **03 (Three) months** from the date of tender opening.
- 26. Price. Price is to be quoted without import duties.
- 27. <u>Terms of Payment</u>. 100% of Total Contract Price (TCP) will be paid in local currency as per existing rules after satisfactory test/ trial and acceptance by BN.
- 28. <u>Condition for Acceptance of Quotation</u>. Quotation has to have supporting documents (booklets, leaflet, catalogue, brochure etc) having detail particulars of the offered Submerged Arc Welding Machine. If detail information regarding specifications, maker's books and catalogues, spare parts, accessories, scope of supply, authentication certificate etc are not provided, the quotation will not be accepted.



A compliance statement fulfilling all the requirement of the tender is to be Compliance Statement. submitted with the offer for evaluation of the quotations. Merely stating 'Yes' or 'No' will not suffice, rather detailed description/information as required are to be provided. An incomplete compliance statement may contribute to the cancellation of the offer. If any clause of this specification is not commensurate with the offered Submerged Arc Welding Machine, the deviation has to be spelt out clearly.

#### Enclosure:

Figure of sample Submerged Arc Welding Machine - 01 (One) page.

AMGIR HOSSAIN

Commander BN Death Cheur H Hall Prigingering (C) Nateleadquarters Banani, Dhaka-1213

M SARWAR

Staff OMember S-2 Naval Haadquarters Banani, Direka-1213

14.08 KAISER MAHMUD Lt Comporteder BN Staff Officer (Plans-II) Navalettes BanaDate haka-1213

DNAI&S

Member Captain Brit.
Director of Naval Armament
Inspection and Supply
NHQ, Banani, Dhaka-1213

Member Date: 1848124 M IQBAL Captain BN Director of Naval Info & Tach

Naval Headquarters Benani, Dhaka-1213

A H M RAFIDUL ISLAM Commodor an Director of the man sing seering Naval Headquarters Banani, Dala: 1213

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