

KERALA AGRICULTURAL UNIVERSITY AROMATIC AND MEDICINAL PLANTS RESEARCH STATION

Odakkali, Asamannoor P.O., Ernakulam District, Kerala, India, PIN-683 549 Tel. (0484) 2658221; E-mail: amprs@kau.in; Website: http://amprs.kau.in

No. A/1220/21 Dated 28.07.2025

TENDER NOTICE

Sealed tenders are invited for replacing old steam condenser of distillation unit in the research farm with new steam condenser.

DESCRIPTION OF WORK

Two steam distillation units of 500 litre volume are installed in the research farm for bulk distillation of the aromatic plants especially lemon grass. The common tubular condenser in use for these two distillation units requires replacement

MAIN UNITS TO BE SUPPLIED			
Stainless steel 304 Condenser: Length 1200 mm x OD: 350 mm with minimum 48 tubes	1		
SS 304 flexible hose with Flange Pipe Connector (with length and inner diameter			
suitable for the existing distillation chamber outlet)			

TECHNICAL PARAMETERS OF THE PROPOSED CONDENSER

Туре	Shell and tube condenser
	(Two-pass Multi tubular horizontal)
Make of all materials used	SS 304
Finishing	Mirror finishing
Coolant	Water
Flow configuration	Counter current
Design pressure	$2-4 \text{ kg/cm}^2$
Resistance temperature	120°C
Heat transfer area	2-3 m ²
Condenser shell	
Shell outer diameter	350 mm
Shell thickness	3mm
No of baffles	3
Baffle arrangement	Vertical
Condenser Tube – Two pass design on tube side	
Tube diameter	25 mm
Tube thickness	18 guage
Tube length	1200 mm
No of tubes	48
Tube pitch	37-40 mm
No of tube plates	2
Thickness of tube plate	6 mm
No of end caps	2
Length of the end cap	5 inch
Barrel Nipple 6" length	
Steam inlet diameter	2.5-3 inch
2. Condensate outlet diameter	1 inch

3. Cooling water inlet/ outlet connection diameter (2 numbers)	1.5 – 2 inch
Gaskets as per requirement	PTFE
cleaning door with 1" angle	2 Nos

> The tenderer may visit the site if needed

INSTALLATION AND DEMONSTRATION

The condenser should be installed in the same position of the existing condenser. The steam inlet pipe of the existing distillation chamber lid should fit without any leakage into the inlet position of the condenser. All works connected with the installation should be undertaken by the supplier. A test run should be conducted to demonstrate satisfactory performance after loading the chamber with lemongrass.

COST OF TENDER FORMS

Particulars		Original (Rs.)
Supplies costing abo	ve	0.2% of the quoted amount rounded to the nearest multiple of 100,
Rs.1,00,000/- and upto		subject to a minimum of Rs.400 and maximum of Rs.1500+18%
Rs.10 Lakhs		GST as applicable

Last date of Receipt of Tender : 06.08.2025; 03:00 pm Date and Time of opening of Tender : 06.08.2025; 03:30 pm

THE TENDER DOCUMENTS AND CONDITIONS

- 1. The tender form may be downloaded from the following web link in the Internet: http://www.kau.in/tenders.
- 2. Sealed cover containing the tender should be superscribed "*Tender for condenser*" and should be addressed to the 'Professor and Head, Aromatic & Medicinal Plants Research Station, Odakkali, Pin-683549, Asamannoor P.O., Ernakulam District, Kerala State'.
- 3. Each tender should be accompanied by Tender fee (0.2 %) and Earnest Money Deposit (EMD) of 1% of the total rupee equivalent cost of the equipment offered (subject to a minimum of Rs.1500/-) by way of **two Demand Drafts separately** for tender fee and EMD drawn in favour of 'The Professor and Head, Aromatic & Medicinal Plants Research Station, Odakkali, Pin-683549, Asamannoor P.O., Ernakulam District, Kerala State'. payable at State Bank of India, Odakkali Branch (Code-SBIN0070519). Those claiming exemptions on payment of EMD should attach all relevant supporting documents, failing which the claim shall not be admitted.
- 4. Agreement on Kerala Stamp paper for **Rs. 200/-**must be enclosed. The form of agreement can be downloaded from the website http://www.kau.in/tenders under the Related Documents section.
- 5. Price quoted should be inclusive of all charges, taxes etc.
- 6. Tenders received late or incomplete in any respect will be summarily rejected without notice and the decision of the undersigned on such matters will be final.
- 7. The successful tenderer will have to execute an agreement and remit a **security deposit** @ 5% of the value of the articles ordered, drawn as a DD or fixed deposit receipt.
- 8. The item should be supplied, installed and demonstrated at **Aromatic & Medicinal Plants Research Station, Odakkali**.

- 9. Payment will be released only after satisfactory test running of the unit. No advance payments will be made.
- 10. Details of warranty, after-sales service offered on expiry of normal warranty period etc. should be specified. The condenser should have a minimum warranty of 1.5 years, including replacement of damaged parts
- 11. The undersigned reserves the authority to accept or reject any or all the tenders without assigning any reason.
- 12. The decision of the undersigned in finalizing the tenders shall be final and binding.
- 13. The supply, erection, and satisfactory demonstration should be completed under the supervision of the undersigned before 30-08-25.
- 14. All conditions of Kerala government tenders are applicable in this case also. Further information can be obtained from the website http://www.kau.in/tenders or the office of Professor and Head, Aromatic & Medicinal Plants Research Station, Odakkali Pin-683549, Asamannoor P.O., Ernakulam District, Kerala State.

(Sd/-) PROFESSOR & HEAD

A sketch of the required condenser is given below. Visit the distillation unit of the farm for more details.

Sketch of the unit

