



**Mahatma Gandhi Institute for Rural Industrialisation
(MGIRI)**

(A National institute under the Ministry of MSME, Govt. Of India)
Maganwadi, Wardha – 442001, Maharashtra.
Phone - 07152-253512, Fax – 07152-240328, Website : www.mgiri.org

Application for services -01/2017-18

Invitation of sealed application to provide the services for design & development of gas kiln of pottery through CAD analysis. Charges for services should reach on or before 3.00 pm, 27th Nov 2017. Proposals will be opened at 3.30 pm on same day. Application fee Rs500/- (non-refundable) per application. Download application format to provide the services from www.mgiri.org.

Director

The proposed work for Design & Development of pottery kiln as follows:

- 1) To study the existing gas kiln for pottery.
- 2) To make the Mathematical CAD prototype of existing gas furnace of 35 kg to 40 kg.
- 3) To perform the finite element thermal analysis at temp. Range 550 to 1200 degree centigrade.
- 4) To suggest the possible modifications for best energy efficiency of the present model like modification of exhaust system, loading platform, etc.
- 5) Fabrication and testing of prototype at MGIRI by RC&E staff based on the available design inputs.
- 6) Comparison of practical data available through prototype of pottery gas kiln with analysed design.
- 7) To design the new prototype of gas furnace of more than 200 kg and within 500 kg for the range of temperate 550 to 1200 degree centigrade.
- 8) To perform the heat flow thermal analysis for different parameters like –
(a) Smoking; (b) Slow firing; (c) Fast firing.
- 9) To perform the transient thermal analysis after baking to cool down the baked Terra-Cotta products.
- 10) Submission of detail design for fabrication of prototype.
- 11) Fabrication and testing of prototype at MGIRI by RC&E staff based on the available design inputs.
- 12) Comparison of practical data available through prototype of pottery gas kiln with analysed design.
- 13) To optimize the new gas furnace design for proper uniform baking of all Terra-Cotta products with proper insulation with respect to less time duration for cooling.
- 14) Final fabrication, testing at MGIRI by RC&E staff and comparison of practical data available through final prototype of pottery gas kiln with final analysed design.
- 15) Submission of final report with detail design inputs.

Terms and conditions –

1. Last date for submitting the application is 3 pm, 27th Nov 2017. Application fee is Rs500/- should be deposited through cheque. Without application fee the application will be rejected.
2. The individual person / firm should be technically qualified on CAD design analysis.
3. Desirable experiences in CAD design analysis and knowledge of designing of furnaces/ kiln.
4. The work order will be issued after successful completing the task of preliminary stage the design analysis and suggestion for further improvements of existing.
5. Time limit for preliminary stage is fifteen days.
6. If the service provider is failed to submit the said report within fifteen day then the next chance will be provided to the next service provider/agency.
7. Final report must be submitted before 10th March 2017.

Application proforma for services No.1 /2017-18

S No	Particulars	To be filled up by the service provider
1	Name of the Agency	
2	Detailed office- Address of the Agency office Telephone Number, Fax Number Mobile Number. (Proof to be enclosed)	
3	Details of Application fee : i) Amount ii) Draft No iii) Date iv) Issuing Bank	
4	PAN Number (copy to be enclosed)	
5	CAD design experience	
6	List of CAD design project under taken (detail document will be submitted during after opening of tender)	

Work component

S No	Work component	Stages
1	To suggest the possible modifications for best energy efficiency of the present model like modification of exhaust system, loading platform, etc.	Preliminary stage
2	Successful comparison of practical data available through prototype of pottery gas kiln with analysed design.	Testing of first stage
3	Submission of detail design for fabrication of proposed prototype.	First stage
4	To optimize the new gas furnace design for proper uniform baking of all Terra-Cotta products with proper insulation with respect to less time duration for cooling.	Testing & verification of First stage
5	Submission of final report with detail design inputs.	Final Stage
	Total services charges	

Notes :

1. The above tabulation should be completely filled in all respect or else the application for services will be rejected outright.
2. Tool/equipment and the material required for fabrication and testing of kiln will be supplied by institute.
3. Time limit for the present work is five months and it may be extended on justified technical ground with prior approval with Director, MGIRI.

I have read all the terms and condition mentioned in the tender, from page no. to and these conditions are acceptable to me.

Date :

Yours sincerely,

(Name & Signature of the
Design engineer / firm)