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CSIR-CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE
वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् / Council of Scientific & Industrial Research
दुर्गापुर / Durgapur - 713 209

Dated: 10th April 2020

INVITATION FOR EXPRESSION OF INTEREST (Eoi)

Subject: Seeking expression of interest from Interested MSMEs/Companies/Businesses for assisting CSIR-CMERI, Durgapur in developing Anti-COVID 19 Technologies

CSIR-CMERI, Durgapur, is a constituent laboratory of the Council of Scientific and Industrial Research, an autonomous body under the Ministry of Science & Technology, Government of India. Even after tackling the COVID-19 menace, the Nation will be very much in need of Basic Infrastructure to bounce back to normality. International Standard products should be developed locally and the nation should be ready to face any eventuality as the situation and the Nation might demand. CSIR-CMERI, Durgapur, has designed and developed the following Anti-COVID 19 technologies:

Sl. No.	Product Name	Nodal Person Name	Contact Number
1.	Mechanical Ventilator	Dr. Anupam Sinha	9434649952
2.	Disinfectant Walkway		
	Pneumatic Variant Disinfection Walkway	Dr. Malay Karmakar	9434391046
	Hydraulic Variant Disinfection Walkway	Dr. S.R. Debbarma	9434029494
3.	Tractor Driven Road Sanitizer Unit	Dr. Palash Maji	9832780145

The details of the above listed products are elaborated in the Enclosure.

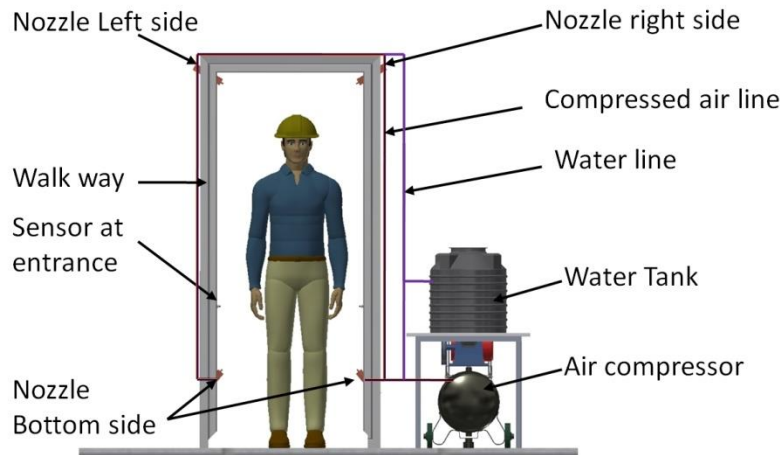
Interested Parties/Companies/MSMEs/Businesses/Industries are invited for the i) Supply of Machine Parts ii) Fabrication of Components as per drawing of CSIR-CMERI. Interested Parties/Organizations may submit detailed proposal to the above mentioned Nodal Contact Person for individual products.

Yours truly,

Prof.(Dr.) Harish Hirani
Director, CSIR-CMERI

Stationary Pneumatically Operated Disinfection Walkway Unit

The schematic diagram of the disinfection walkway unit is shown below.



Schematic View

The following manpower may be invited for fabrication and installation of the system.

Disinfectant Walkway:

The disinfectant walkway is to be made by the acrylic transparent sheets fixed with aluminum frames. The roof will be made of non-metallic corrugated sheet.

- Aluminum Glaze section (2.5 inch x 1.5 inch)
- Acrylic sheet: 4 mm thickness
- Corrugated sheet for roof

Manpower required: Fabricator having experience in cutting and fixing of aluminum and acrylic sheets to make the housing and installation of the same.

Proximity sensor: There is one sensor to detect the person while entering into the walkway

Manpower required: Having experience in electronic control circuit related to solenoid valve operation with sensor.

Pneumatic system: The system comprises of compressor, solenoid valve, pipings and fittings and spray nozzles. The system pressure is maintained in the range 6-8 bar for operating the spray nozzles.

Manpower required: Should have experience in working in pneumatic system, For spray nozzles, the required person should have experience in copper cutting and brazing/fixing of low diameter copper pipes

Chemical storage system: Storage tank(s) with supporting stands: 200 L capacity for 1000 persons (approx).

Manpower required: Should have experience in working in water pipe lines and should have experience in making supporting platform for storage systems

Tractor operated road disinfection system

Tractor and water tank will be provided by the Client. After that the fabrication and integration procedures to be followed, as below:

1. Integration of Pump and its drive from Tractor PTO:
 - i. Fabrication of spray pump mounting base with MS Angles and Plates having belt tension adjustment option.
 - ii. Fixing of pump on mounting base
 - iii. Connection of belt pulley drive between tractor PTO and Pump Shaft

2. Integration of Piping system with water tank:
 - i. Fabrication of 3 sets of SS pipe line of total length of 6 m having 12 nozzles on it.
 - ii. Fabrication of header unit with four numbers of ball valves and SS pipes
 - iii. Integration of above pipe line and header unit with water tank.
 - iv. Connection of flexible hoses for suction line, delivery line and bypass line
 - v. Connection of two sets of hand spray lines in combination of nozzles, hand held unit and flexible PVC pipes.